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Austerity, health payments and economic well-being

Katri Aaltonen

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University of Turku

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INVEST Research Flagship Centre
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Supervised by

Professor Jani Erola
University of Turku

Docent Maria Vaalavuo
Finnish Institute for Health and Welfare

Reviewed by

Associate Professor
Rense Nieuwenhuis
Swedish Institute for Social Research
Stockholm University

Professor Jan Paul Heisig
WZB Berlin Social Science Center
Freie Universität Berlin

Opponent

Associate Professor
Rense Nieuwenhuis
Swedish Institute for Social Research
Stockholm University

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To Sumu who napped through the process but insisted I take breaks.

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ABSTRACT

This dissertation explores the relationship between health-related payments and household economic well-being through the theoretical framework of decommodification. Particular attention is given to medicines, which are a major contributor to healthcare-induced financial hardship. The focus is on Finland during the period 2011–2020, a time characterised by welfare state restructuring and a pronounced emphasis on austerity.

The four sub-studies applied legislative microsimulation and Finnish administrative register data alongside multinomial and binary logistic regression, linear probability models, and both Finnish and European population survey datasets.

According to the microsimulation, health payment increases had negligible effects on relative poverty in 2011–2015. Between 2015 and 2019, health payment policies intensified the adverse effects of tax-benefit changes. Subjective experiences suggest that austerity coincided with a worsening relative position of chronically ill and people outside the labour market. Negative experiences with health payments were common, affecting people across all age and income groups. While payments were disproportionately borne by older adults, financial hardship was most concentrated among working-age individuals outside the labour market. Compared to Denmark, the Netherlands, Norway, and Sweden, the financial burdens from medicines and healthcare was more prevalent in Finland.

The results provide support for the understanding that recommodification undermines both the economic well-being of households and equal access to healthcare. Methodologically, the triangulation of subjective, objective and comparative perspectives provided new insights into the phenomenon. From a policy perspective, the results shed light on peoples' experiences and attitudes during a time of austerity and are envisaged to contribute to societal debates on the legitimacy and sharing of market risk between society and the individual.

KEYWORDS: Austerity; Cost sharing; Decommodification; Economic well-being; Equity; Fees and charges; Healthcare; Living conditions; Medicines

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TIIVISTELMÄ

Väitöskirja käsittelee terveysmenojen ja kotitalouksien taloudellisen hyvinvoinnin välistä suhdetta dekommodifikaation teoreettisen viitekehyksen kautta. Lääkkeet ovat keskeinen terveydenhuoltoon liittyvän taloudellisen ahdingon ajuri ja siksi keskiössä. Osatutkimukset keskittyvät Suomeen vuosina 2011–2020, jolloin hyvinvointivaltion muutosta määritti enenevässä määrin talouskuria korostava politiikka.

Neljässä osatutkimuksessa käytettiin suomalaisia rekisteriaineistoja ja lainsäädännön mikrosimulointimenetelmää, multinomiaalista ja binaarista logistista regressiota ja lineaarista todennäköisyysmallia sekä suomalaisia ja eurooppalaista väestökyselyaineistoa.

Simulointitulosten perusteella terveysmenojen korotusten vaikutukset köyhyysriskiin olivat vähäisiä vuosina 2011–2015. Vuosina 2015–2019 ne myötävaikuttivat köyhyysriskin ja köyhyyskuilun kasvuun. Subjektiivisten kokemusten perusteella etenkin pitkäaikaissairaiden ja työmarkkinoiden ulkopuolella olevien suhteellinen asema heikkeni entisestään säästötoimien aikaan. Terveydenhuollon menojen rasitetta koettiin yleisesti läpi ikä- ja tulojakauman. Maksut painottuivat ikääntyneisiin, mutta rahan puutteen vuoksi terveydenhuollosta ja ruuasta tinkiminen keskittyi työikäisiin työmarkkinoiden ulkopuolella. Terveydenhuoltoon liittyvä taloudellinen rasite oli yleisempää Suomessa kuin Tanskassa, Alankomaissa, Norjassa ja Ruotsissa.

Tulokset tukevat käsitystä siitä, että rekommodifikaatio heikentää kotitalouksien taloudellista hyvinvointia ja terveydenhuollon yhdenvertaista saatavuutta. Subjektiivisen, objektiivisen ja vertailevan näkökulman triangulaatio tarjosi uuden näkökulman aiheeseen. Politiikkanäkökulmasta tulokset valottavat ihmisten kokemuksia ja asenteita Suomessa talouskurin aikana, mikä voi hyödyttää yhteiskunnallista keskustelua legitimiteetistä ja markkinariskin jakamisesta yhteiskunnan ja yksilön välillä.

ASIASANAT: Asiakasmaksut, Dekommodifikaatio, Elinolot, Lääkkeet, Omavastuut, Taloudellinen hyvinvointi, Talouskuri, Terveydenhuolto, Yhdenvertaisuus

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To my wonderful colleagues and friends across different institutions: thank you for your support, insights, and for making the work feel less like work.

Finally, to my family and close ones, with a promise: I will not write a third one.

Helsinki, 29th September 2025

Katri Aaltonen

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List of Original Publications

This dissertation is based on the following original publications, which are referred to in the text by their Roman numerals:

I Aaltonen, K., Tervola, J., Heino, P. Analysing the Effects of Healthcare Payment Policies on Poverty: A Microsimulation Study with Real-World Healthcare Data. International Journal of Microsimulation, 2023; 16(1): 89–107.
https://doi.org/10.34196/ijm.00276

II Aaltonen, K. Austerity, economic hardship and access to medications: a repeated cross-sectional population survey study, 2013–2020. Journal of Epidemiology and Community Health, 2023; 77: 160–167.
https://doi.org/10.1136/jech-2022-219706

III Aaltonen, K., Vaalavuo, M. Financial burden of medicines in five Northern European countries: A decommodification perspective. Social Science & Medicine, 2024; 347:116799.
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IV Aaltonen, K., Niemelä, M. & Prix, I. Citizens' opinions and experiences related to costs and reimbursements for medications in times of retrenchment: cross-sectional population surveys in 2015 and 2017. International Journal for Equity in Health, 2022; 21: 33.
https://doi.org/10.1186/s12939-022-01631-6

1 Introduction

Because of the social gradient of health, people with higher healthcare need tend to have a lower ability to pay for care. In health policy literature, the 'inverse care law' argument suggests that the more a healthcare system is marketised, the more it generates inequality (Tudor Hart, 1971; Marmot, 2018). Economic literature emphasises need for regulation in healthcare markets because of market failures, inefficiencies and inequities (Arrow, 1963; Watts & Segal, 2009).

In social science literature, the phenomenon has been conceptualised as decommodification, which refers to the strength of welfare state institutions to emancipate individuals from the labour market, that is, to render an acceptable standard of living a matter of right (Esping-Andersen, 1990, p. 37). In the healthcare, it has been used in the context of the state's role in regulating how healthcare is organised and in institutions' role in regulating access (Bambra, 2005b; Reibling, 2010). In relation to access, focus has been on services, where access to a general practitioner (GP) is deemed of particular importance as it represents the first entry point (Reibling, et al., 2019).

This dissertation focuses on the interplay between health payments and households' economic well-being. Economic well-being refers to the ability to acquire goods and services (OECD, 2013). Health payments refer to out-of-pocket payments made by users directly to healthcare providers at point of use for goods and services. Generally, out-of-pocket payments include cost-sharing (user charge, co-payment, patient fee, etc.) of partially covered goods and services, full costs (market price) of non-covered goods and services, and informal payments, though the latter have a negligible role in Finnish and other Nordic country settings (Waitzberg, et al., 2024).

Health payments tend to be a regressive form of financing and can undermine access to healthcare even in *de jure* universal systems, by making access to (covered) healthcare *de facto* conditional on the ability to pay (WHO Regional Office for Europe, 2023; Waitzberg, et al., 2024). Even small payments may act as a barrier for the lowest income households (Norris, et al., 2023). Theoretically, gaps in coverage manifest in two main ways: people forgo needed care and experience unmet needs, or they use unaffordable care and experience financial hardship as a consequence

(impoverishment, forgoing other necessities, borrowing money) (WHO Regional Office for Europe, 2023). In comprehensive welfare states, gaps in coverage may spill over to other forms of social security (Rättö & Aaltonen, 2021).

Welfare states have been shaped by periods of expansion and contraction (Farnswort & Irving, 2021). Restructuring in post-industrial welfare states has been characterised by pressures for austerity on the one hand and enduring popular support on the other (Pierson, 2001). In this dissertation, the concept of austerity is used to contextualise the political environment following the 2008 financial crisis. Austerity responses aimed at reducing public debt in response to the crisis were largely grounded in laissez-faire-economic theory advocating self-corrective market mechanisms and opposing government interventions (Helgason, 2019b).

Austerity is a slippery concept that has carried different connotations over time (Greve, 2020; Farnswort & Irving, 2021; Pierson, 2001; Blyth, 2013). It could also be questioned whether and when austerity has actually taken place, since European countries continue to spend considerable shares of their gross domestic product (GDP) on compensatory social policies despite decades of 'permanent austerity' (Farnswort & Irving, 2021; Starke, 2021). Here, austerity is primarily understood as a powerful political narrative, one marked by efforts to reduce the role of the state and advance market mechanisms through deregulation and privatisation, justified by technocratic claims of fiscal necessity. Accordingly, austerity policies may not always be reflected in reduced social spending; instead, they can manifest through diminished redistribution and rising inequality (Helgason, 2019b).

Since 2008, austerity has been accompanied by efficiency-driven reforms rooted in social investment logic and populist rhetoric endorsing welfare chauvinism (Farnswort & Irving, 2021; Blum & Kuhlmann, 2021; Rovira Kaltwasser & Zanotti, 2021; Béland & Waddan, 2021). The suggested consequences include decreasing redistribution and increasing inequality, increasing the precarity of workers, the castigation of benefit recipients, and undermining the effectiveness of public services (Farnswort & Irving, 2021; Helgason, 2019b).

Market-liberal ideas have driven European health systems towards marketisation and privatisation as well (Schrecker & Bambra, 2015; Tynkkynen, et al., 2018). The growing role of private pathways is likely to increase the role of ability to pay and social status in access to care (Lapidus, 2022; Martinussen & Rydland, 2022; Immergut & Schneider, 2020). After 2008, healthcare retrenchment, or recommodification, in the form of coverage restrictions was common and typically implemented by imposing or increasing health payments to patients and other users (Vogler, et al., 2016; Thomson, et al., 2015).

In Finland, out-of-pocket health payments have long had an important role in healthcare financing (Kokkinen, et al., 2015). Relatively generous and comprehensive income protection schemes and last-resort social assistance have

supported households' financial security. After the 2008 crisis, the universal welfare state seemed to cushion the effects on households, and large changes according to poverty indicators were not observed (Kangas, 2019). However, throughout the 2010s, incremental cuts to social benefits, index freezes, and increases in health payments were implemented. Alongside these, many public services were eaten up by expanding private for-profit alternatives (Kangas, 2019). While the consequences may have been small for the majority of the population, little is known about their cumulative effects. Given the social gradient of health, it is likely that the impacts concentrated among households that were already under financial strain.

Reducing government expenditure and fiscal deficits remains a key political priority. Evidence on the consequences of austerity is therefore highly relevant, and the need for robust methods to estimate policy effects persists. In the light of concurrent crisis and slow economic growth, even the wealthiest countries are forced to rethink and revise their social contracts. The appropriate distribution of market risk is ultimately a political question reconciling conflicting values, ideas and interests. However, evidence is needed in determining the balance between contradicting policy objectives and calibrating the allocation of societal resources while ensuring legitimacy.

This dissertation contributes to the debate with four research articles each examining the implications of health payments on households' economic well-being using different data and measures. A triangulation of perspectives provides a more nuanced understanding than any one perspective alone and increases the robustness of the findings. The focus on medicines contributes to the decommodification and economic well-being literature, in which their costs have rarely been focused. Methodologically, the studies apply existing datasets and provide new insights on their strengths and limitations. As a policy contribution, the studies examine previous policies and test methods for *ex ante* evaluations.

The dissertation consists of two main parts: a summary and the original publications. Chapter 2 discusses the conceptualisations and theoretic approaches and summarises the key gaps in previous literature. Chapter 3 outlines the design, data and methods. Chapter 4 presents the results reported in the articles, the conclusions of which are further discussed in Chapter 5 together with the limitations and implications for future research and policy.

Note: Language editing support was provided by Microsoft Copilot, an AI tool. All final content and interpretations are the responsibility of the author.

2 Conceptualisation and previous studies

This chapter discusses the theories and concepts that underpin the research and summarises key literature relevant to the topic. The literature reviewed originates predominantly from comparative welfare state and healthcare policy literature, and marrying perspectives from the two fields is the cross-cutting aim of this chapter.

First, the chapter describes the theoretical framework: the decommodification concept and its applications in welfare state literature and the healthcare setting. This concept is chosen as it focuses on the distribution of market risk and conceptualises social protection as a gradient. It allows consideration of both the burden of health payments and the social benefits that increase households' ability to pay, which together condition their economic well-being and access to care. Accordingly, the ways in which the market risk is distributed has differential consequences in terms of these outcomes.

Second, the concept of austerity is defined, with a brief overview of the political history of austerity and welfare retrenchment in post–World War II Europe. Within this context, recommodification is understood as the reverse process of decommodification, conceptualising the withdrawal of previously achieved levels of social protection. Third, the chapter summarises and discusses the methodological approaches available for measuring households' economic well-being and financial protection in healthcare, separately and together. Fourth, the chapter positions these themes into the Finnish context. Finally, relevant gaps in the literature are identified.

2.1 Decommodification

Historically, the recognition of social rights led to a loosening of workers' commodity status in modern welfare states. Decommodification refers to the extent to which individuals are emancipated from the labour market through welfare state institutions, that is, the extent to which people's livelihood is rendered a social right of citizenship (Esping-Andersen, 1990; Scruggs & Allan, 2006).

The analysis of decommodification and the resulting typology of welfare state regimes went beyond comparing welfare state expenditures to capture the variation

in the types of welfare provided. While the empiric applications of decommodification concept largely emerged following Esping-Andersen's (1990) seminal work 'Three Worlds of Welfare Capitalism', its theoretical roots were established earlier by others, particularly Marshall (1950) and Titmuss (1958).

Esping-Andersen conceptualised three ideal types of welfare states: liberal (modest benefits based on needs-test, strong encouragement of private welfare schemes), corporatist (generous benefits tied to class and status, with low redistribution), and social-democrat (universalistic, equal benefits for all regardless of class and status).

Empirical analyses of the resemblance of countries to these ideal types and criticism thereof contributed to a large body of research referred to as regime literature. The proposed typologies and empirical analyses have been re-examined, re-tested and modified and new typologies and ideal types constructed (Kangas, 1994; Scruggs & Allan, 2006; Scruggs & Tafoya, 2022; Castles & Mitchell, 1993; Svallfors, 1997; Arts & Gelissen, 2002; Bonoli, 1997; Ferrera, 1996). In a wider context, decommodification has been proposed to encompass any political, cultural or social process that reduces the influence of the market on an individual's life (Vail, 2010).

2.1.1 Measurement of social rights

Studies aiming to quantify welfare state generosity emerged in the 1970s and used expenditure data for that purpose, mainly social spending as the share of GDP (Lohmann & Zagel, 2018; Stephens, 2021). Given limitations in examining the distribution of differing structures of social spending within and across countries, the subsequent approach aimed to measure social rights more directly by translating legislation and regulations into quantitative indicators (Lohmann & Zagel, 2018; Stephens, 2021).

Although earlier studies exist, the first project that systematically collected institutional data longitudinally was the Social Citizenship Indicator Program (SCIP). It was initiated in the early 1980s at Stockholm University by Walter Korpi, with initial input from Esping-Andersen, and later co-directed by Joakim Palme (Korpi, 2010; Stephens, 2021). Esping-Andersen's (1990) decommodification methodology applied cross-sectional 1980s SCIP data and operationalised the concept based on the institutional features of three cash benefit schemes: pensions, sickness insurance and unemployment benefits. The degree of decommodification was generalised across types of benefits by using indices capturing the rate of income replacement, eligibility for benefits and the range of entitlements.

The SCIP encompasses data dating back to the 1930s, but it was discontinued in 2005. Extensions have been published as the Social Insurance Entitlements Dataset

(SIED), which is part of the Social Policy Indicators (SPIN) database. SPIN currently encompasses 10 datasets with hundreds of variables on the institutional structure of social protection schemes from up to 40 countries (Nelson, et al., 2020; Stephens, 2021).

Before the SCIP data were made publicly available, several other scholars had initiated similar institutional data collections (Stephens, 2021). A replication of Esping-Andersen's original decommodification index calculation by Lyle Scruggs and colleagues revealed discrepancies and led to the proposal of a revised version of the methodology, referred to as the benefit generosity index (Scruggs & Allan, 2006). The underlying data were published as the Comparative Welfare Entitlements Dataset (CWED) in 2004, which has now been updated several times (CWED2, and the Comparative Welfare Entitlements Project, CWEP) (Scruggs, et al., 2017; Scruggs, 2022). A recent comparison using the original 1980s replication results with latest (2018) CWEP data found high variation over time (Scruggs & Tafoya, 2022). In particular, the divide between countries most resembling social-democrat and corporatist ideal types had become even less clear.

Regardless of the exact method of conceptualising the social rights of citizenship, the body of evidence supports that social rights have significantly impacted poverty, inequality, and redistribution, all of which are considered important outcomes of the welfare states (see Stephens (2021) for a review).

Other databases that have collected institutional data on the various welfare state policies and entitlements include Organisation for Economic Co-operation and Development (OECD) indicators on, e.g., individual benefits and wages and family benefits, and the CSB's (Centre for Social Policy Herman Deleeck at the University of Antwerp) Minimum Income Protection Indicators (CSB-MIPI) (Van Mechelen, et al., 2011; Nelson, et al., 2020; Lohmann & Zagel, 2018). Their approach is to calculate benefit packages in a broad variety of family constellations (or model families). The development of tax-benefit microsimulation models has allowed more detailed examination of the effects of benefits and taxes on household incomes beyond model families (Sutherland & Figari, 2013; Moisio, et al., 2016; Bargain, et al., 2017).

2.1.2 Decommodification and health

The effects of decommodification and welfare state generosity on health outcomes have been widely studied. The evidence suggests that health differences do not seem to consistently follow the regime theory (Brennenstuhl, et al., 2012; Bergqvist, et al., 2013; Kim, 2019). The level of social or health spending is important; however, spending is not alone a sufficient condition for population life expectancy and health to increase (Bergqvist, et al., 2013; Kangas, 2010). The institutional structure that

defines how and to what extent inequalities are addressed also matters (Bergqvist, et al., 2013; Beckfield, et al., 2015).

The generosity and universality of different forms of welfare provision have been linked to beneficial effects on population health (Bergqvist, et al., 2013; Kangas, 2010; Muntaner, et al., 2011). However, the mechanisms conditioning health inequalities seem more complex, and causal complexity challenges establishing causal inference (Hillier-Brown, et al., 2019; Kelly-Irving, et al., 2023; Thomson, et al., 2018; Mackenbach, 2020).

The evidence also suggests that similar outcomes can be achieved in more than one way. Differences in average population health outcomes between the rich Western/Northern European countries tend to be small and not consistently associated with a specific regime regardless of the regime theory applied (Bergqvist, et al., 2013). Countries vary in their relative emphasis on transfers in cash and in kind (Bambra, 2005a), and the different forms have complementary effects. The tax system affects redistribution beyond public spending, and the private sector has an important role in the provision of social support in many countries (Adema, et al., 2014).

All in all, decommodification and welfare state generosity are relatively robustly associated with population health outcomes. This is because welfare states moderate how determinants of health are distributed, and the extent to which these determinants are associated with health, by influencing the broad distribution of money, power and resources (Dahlgren & Whitehead, 2021). For instance, universal access to quality healthcare could mitigate the association between income and health.

With regard to the topic of the current thesis, it is important to distinguish that the causal mechanisms between welfare state efforts and health outcomes extend beyond healthcare (Sen, 2008). In other words, the institutional structures of health systems do not seem to be major determinants of population health (whether level or distribution). Instead, the overall quality of government and the design of democracy seem to matter more (Wendt, 2022). Accordingly, intermediate outcomes such as access are commonly applied in comparing equality in healthcare (Ramos, et al., 2019).

2.1.3 Decommodification of healthcare

Analogously to the social rights perspective, health is considered a human right and thereof is argued to follow a right to healthcare (Gruskin, et al., 2007). Access to public goods and services as a social right of citizenship was already incorporated with Marshall's (1950) definition. Early considerations that linked healthcare with Esping-Andersen's welfare state framework included Moran's (1992) definition of

health-care states. However, Moran argued that instead of focusing on a state's capacity to assure healthcare access as a right, important explanatory issues revolved around the role of the state in the healthcare sector. Thus, his definition for a healthcare state was 'the part of any state concerned with regulating access to, financing, and organising the delivery of health care to the population.'

Healthcare was also brought to the welfare state debates through criticism of the regime literature. This criticism argued that all policy areas of a country may not have similar characteristics; instead, different regimes may exist within the same welfare state's policy fields or over time (Kasza, 2002; Bambra, 2005a; Bambra, 2007; Rice, 2013). The focus on cash transfers was criticised for disregarding that welfare states pursue similar goals by delivering education, healthcare and social services (Bambra, 2007; Bambra, 2005a).

Decommodification in healthcare was initially conceptualised by Clare Bambra (2005b) in terms of how one's access to healthcare depends on one's market position, and how independent a country's healthcare provision is from the market. The empiric healthcare decommodification index was constructed to reflect the role of the private sector in financing, provision and coverage, using the private health expenditure share of GDP, the share of private hospital beds, and the share of the population covered by the public healthcare system.

Reibling (2010) argued that decommodification should reflect the dimensions of access as defined by institutional regulations rather than the public-private mix dimensions applied in comparative healthcare system typologies. In line with Esping-Andersen's logic, she constructed indicators that represented gatekeeping (to represent conditions), user charges (disincentives), number of health personnel and medical equipment (benefit level), and the population covered (universality). Building from this and other earlier work (Wendt, 2009), Reibling and colleagues (2019) operationalised social rights in healthcare with an index that combined indicators of requirement to register with a GP, the GP referral dependence of specialist access, and GP visit cost-sharing.

Other criticism of the social citizenship approach included its inability to account for differences in the composition of populations (Maquet, et al., 2016). Accordingly, Israel and Spannagel (2019) applied Bambra's decommodification index measuring, however, coverage in terms of effective rather than potential beneficiaries. Effective coverage was measured using subjective unmet needs for health examination. This approach may have limited applicability in terms of examining the effects of policy on outcomes, however, because of the covariation between dependent and independent variables attributable to policy indicators being constructed using outcomes.

In health policy literature, conceptualisations closely resembling decommodification include those concerned with healthcare access. Access is

perceived to mediate a health system's effects on health; hence, it is one determinant in the complex puzzle of health inequalities (Farrants, et al., 2017). Access is a multifaceted concept encompassing several dimensions that include but are not limited to acceptability, availability, accessibility, and affordability (Levesque, et al., 2013). Analogously to decommodification, dimensions of access have been conceptualized as breadth (population coverage), scope (what healthcare is covered by the basic package) and depth (the share of costs subsidised and out-of-pocket payments for essential care) (OECD, 2010).

Dimensions of access also reflect health systems' intrinsic goals besides health: protecting people against the costs of illness (fairness in financing) and meeting their legitimate expectations (responsiveness) (WHO, 2000). Fairness in financing means that quality healthcare can be accessed without financial hardship by all who need it. Responsiveness includes both proximal and distal components: addressing individuals' legitimate expectations, upholding their rights and shaping their perceptions of encounters, as well as institutional aspects, such as prioritisation principles (Mirzoev & Kane, 2017).

Both aspects are also important to people who do not currently need healthcare, as people want to believe that they will get quality care in time of need (Wendt, et al., 2010; Missinne, et al., 2013). Health system performance refers to the extent to which intrinsic goals are achieved, with available resources. In terms of health and responsiveness, both level and distribution matter; that is, it is deemed preferable to achieve more health and more responsiveness, as it is preferred that both be distributed more equally. However, for financing, spending is limited by resource scarcity, and higher spending does not necessarily lead to better outcomes. Thus, distribution is the main area of interest (WHO, 2000).

Despite the conceptualisations from different disciplinary fields, institutional quantitative data that would reflect the social rights aspects of healthcare have not yet been collected systematically and longitudinally (Stephens, 2021, p. 709). Various collections exist, but they lack harmonisation, and important functions such as medical products are often missing (Waitzberg, et al., 2024b; Waitzberg, et al., 2024c). For example, Eurostat and OECD databases include numerous variables related to healthcare spending, financing, organising, provision, human resources, performance, and quality. The European Commission's MISSOC (Mutual Information System on Social Protection) network has collected qualitative descriptions of health system features, including dimensions of access (European Commission, 2025). Mainly qualitative country reports, monitoring reports, and comparisons are also collected and published by the European Observatory on Health Systems and Policies (2025).

Decommodification of medicines

Medicines are the most common healthcare intervention and crucial in treating many acute and chronic illnesses, which are increasingly prevalent given population ageing (Busse, et al., 2010). They represent a significant proportion of health system spending, and are a key driver of healthcare-induced financial hardship and catastrophic or impoverishing health spending among patients and households, even in rich European countries (WHO Regional Office for Europe, 2023). In a comparison of 40 European countries, less than half of the countries applied user charges for primacy care visits, but all applied at least some co-payments for medicines (WHO Regional Office for Europe, 2023).

Theoretic conceptualisations of decommodification of medicines were not identified. A distinct conceptual asymmetry arises when considering the decommodification of consumption items that are commodities by definition. However, as previously described in the context of housing decommodification (Marcinkiewicz, 2023), medicines can simultaneously function as both commodities and social rights. Medicines are provided through market mechanisms; however, these markets are typically regulated by the state, and they are not primarily directed to individual consumers, but at institutional healthcare providers and third-party payers. In European settings, patient payments related to medicines, or healthcare services, are therefore not primarily determined by market principles, but rather by the regulatory framework governing healthcare coverage.

Regarding decommodification, differences as regards healthcare services nevertheless arise. Provision is highly dependent on the market since medicines are produced and marketed by private companies operating in a global market. Governments and third-party payers employ a wide array of policies to regulate prices and contain expenditures, which in turn influence availability, access, clinical decision-making and patient's freedom to choose (Wettermark, et al., 2009; Morgan & Xiang, 2022; Vogler, et al., 2019; Vogler, et al., 2022). Coverage policies shape access since prices in an unregulated market can be notably expensive, even for individuals with relatively high incomes (Iyengar, et al., 2016; White & Corwin, 2022). While time constraints and waiting lists are less important in regulating access to medicines, cost-sharing is widely used to prevent moral hazard and to disincentivise and steer use. Moreover, medicines can be self-administered, but access to prescription medicines is conditional to access to prescribers and their prescribing autonomy.

Aggregate consumption and sales statistics have limited applicability in assessing access to medicines or their appropriate use, since both under- and overuse can be harmful and inefficient (Busfield, 2015; Masnoon, et al., 2017). Thus, decommodification could be understood also to occur through mechanisms that discourage the prescribing and purchasing of healthcare goods and services that lack

clinical justification. In Europe, direct-to-consumer advertising of prescription pharmaceuticals is prohibited; however, non-prescription medicines (as well as other products with health claims) are widely advertised and the marketing of prescription medicines to consumers occurs through, for example, internet pages offering health information, disease awareness campaigns, and advertisements of help-seeking that encourage visiting a doctor for more information about the treatment options (Alves, et al., 2019).

Institutional longitudinal quantitative data on pharmaceutical policies are scarcely available. The OECD and Eurostat publish expenditure statistics as part of healthcare statistics; however, they relate only to the retail sector and have limited comparability, because the share of pharmaceuticals financed through hospital budgets varies greatly across countries (Morgan & Xiang, 2022). This limitation also applies to the OECD pharmaceutical sales statistics, which are also reported by a limited number of countries. Pharmaceutical sales data are comprehensively and longitudinally collected by commercial companies (e.g., IQVIA); however, the costs of their data and analyses make it seldom possible to use them in research conducted by non-commercial institutions.

Cross-sectionally collected qualitative and quantitative data have been published in, e.g., international and country-level reports produced by the EU, OECD, WHO Europe and the network of the WHO Collaborating Centre for Pharmaceutical Pricing and Reimbursement Policies (Vogler, et al., 2019; Jacobzone, 2000; Panteli, et al., 2016; Vogler, et al., 2018; Kanavos, et al., 2011). The accumulated data have already been used to produce a large body of comparative research on pharmaceutical policies in different countries, with foci on, e.g., prices, available products, co-payment schemes and generics uptake. Nevertheless, only a few research articles have evaluated macro-level processes and outcomes together, and they have done so descriptively rather than analytically (Vogler, et al., 2015; Morgan & Lee, 2017; Schoen, et al., 2010).

2.2 Recommodification, austerity and retrenchment

2.2.1 From the Golden Age to neo-austerity

Contemporary welfare states are shaped by periods of expansion and contraction (Farnswort & Irving, 2021). After World War II, universal social rights and social justice perspectives characterised reform in Western European welfare states, and their normative foundations were laid during this expansionary ‘Golden Age’ (Moran, 1992; Nullmeier & Kaufman, 2021). The phase following the 1973 oil crisis was characterised by restructuring and retrenchment (Blum & Kuhlmann, 2021). Globalisation and societal change giving rise to so-called ‘new’ social risks increased

tensions between societies' social and economic priorities. Equity and efficiency trade-offs became a prominent argument in welfare state debates (Hemerijk & Ronchi, 2021). Looming external and internal challenges included economic globalisation, population ageing, and mass migration (Rovira Kaltwasser & Zanotti, 2021).

In the 1980s and 1990s, welfare state restructuring was influenced by market-liberal ideas that promoted privatisation, limited regulation, and government having as small a role as possible in 'interfering' with markets (e.g., Thatcherism in the UK and Reaganomics in the USA) (Béland, 2007; Stiglitz, 2024). Subsequently, restructuring occurred through the expansion of policies addressing the new social risks (e.g., having care responsibilities, reconciling family and work, being unemployed long term, or 'working poor') and shifting interest from what was perceived as old, passive, compensatory social protection towards new, activating, and market-attuned social investments (Vaalavuo, 2013; Ronchi, 2018; Bonoli, 2005).

Social investment has also been a key idea shaping the European Union's social dimension since the 2000 Lisbon Strategy (Ronchi, 2018; Blum & Kuhlmann, 2021). Social investment policies are characterised by investment in the development and efficient use of human capital (Blum & Kuhlmann, 2021). These shifts have been associated with decreasing generosity in income support and increasing poverty among unemployed and workless households (Cantillon, 2011). Nevertheless, European welfare states continued to spend substantial sums on the 'old' compensatory entitlements (Vaalavuo, 2013; Ronchi, 2018). Welfare states also remained highly popular; thus, restructuring seems to have occurred mainly through the renegotiation of social contracts and restructuring, rather than dismantling.

Austerity

There is no one definition for austerity, or for the linked concept of retrenchment, although both have been widely used in literature referencing policy decisions to cut back welfare state benefits and entitlements in order to address crises and challenges faced by welfare states (Greve, 2020).

Pierson (2001) conceptualised the framework of the politics of reform in the context of 'permanent austerity.' He distinguished restructuring into three dimensions: recommodification, cost containment and recalibration. Recommodification is a reversal of decommodification, that is, a withdrawal of previously extended social welfare, which makes individuals more dependent on their market position (Pierson, 2001; Farrants, et al., 2016; Farrants & Bambra, 2018; Farrants, et al., 2017; Lain, et al., 2013). This may occur through cuts in benefits,

tightening eligibility criteria, or restricting alternatives to labour market participation (Pierson, 2001).

Cost containment is the defining characteristic of austerity; it is understood as a fight against spending *per se* (Pierson, 2001). Austerity reforms are thus those that are primarily concerned with levels of government spending and/or pursuing reduction of debts or deficits. This is also a key characteristic of later austerity definitions, such as Blyth's (Blyth, 2013, p. 2) 'form of voluntary deflation in which the economy adjusts through the reduction of wages, prices, and public spending to restore competitiveness, which is (supposedly) best achieved by cutting the state's budget, debts and deficits'.

Recalibration occurs through the rationalisation, update, and modernisation of policies to adapt to societal change to and external circumstances (Pierson, 2001). The key difference from the other dimensions is that recalibration is not primarily aimed at creating budget savings; instead, the purpose may be, for example, restoring the original role of the policy, updating it to respond to new social needs, or increasing its efficiency or responsiveness.

Pierson (2001) argued that differences in popular support and the levels and types of economic pressures across the welfare state clusters, examined in terms of Esping-Andersen's ideal types, have generated distinct reform trajectories. In countries most resembling the liberal type, key divides are argued to occur between neoliberal retrenchment and compensatory solutions, making recommodification and cost containment most prominent. In conservative type countries, the divides lie between cost containment and recalibration in the form of updates of old policies to respond to new risks and demands. In social-democratic type countries, the focus is on cost containment and recalibration which mainly takes the form of rationalisation such as performance enhancement.

The 'neo-austerity' following the 2008 economic crisis has been characterised by its political dissociation from ideology, in which the aims of shrinking the state are masked by technical economic 'no alternative' arguments (Farnswort & Irving, 2021). Neo-austerity draws from the framing of Thatcherism and Reaganomics in the 1980s blaming social policies for increasing debt and hence making welfare states unaffordable in the long run, for which making states 'leaner', through deregulation and privileging of markets is the proposed solution (Farnswort & Irving, 2021). Given the evidence against these arguments, the success of these ideas seems to lie in politics (Blyth, 2013; Farnswort & Irving, 2021; Starke, 2021).

(Neo-)austerity is argued to have contributed to ideological market-liberal goals for more residual welfare states, supported by the switch of the welfare state narrative from social improvement to social investment (Farnswort & Irving, 2021). Austerity and social investment policies share the aims of economic efficiency and

growth; however, they contradict in terms of the spending that social investment policies require for the development of human capital (Blum & Kuhlmann, 2021).

Overall, the loose concept of austerity draws together economic, political and ideological views (Farnswort & Irving, 2021). Defined as 'conscious policy decision to cut back cash benefits and services guaranteed – but not necessarily directly provided – by the state', austerity has rather been targeted to individual social rights than aggregate expenditures (Starke, 2021). Therefore, if examining macro-level spending alone, it may be questionable whether and when austerity has taken place (Farnswort & Irving, 2021; Starke, 2021). The claimed consequences include increasing the precarity of workers, the castigation of benefit recipients, undermining the effectiveness of public services through cuts in expenditure, decreasing public confidence in public services, and political instability in previously stable democracies (Farnswort & Irving, 2021).

Austerity and populism

Welfare state restructuring has also been importantly influenced by populism, which often interacts with austerity either through austerity giving rise to populism or populism driving austerity (Blum & Kuhlmann, 2021). Populism can be defined as an idea or a type of discourse or framing opposing the 'pure people', who are authentically identified and represented by only the populist, and the 'corrupt elite,' and typically appears together with other ideologies (Rovira Kaltwasser & Zanotti, 2021; Béland & Waddan, 2021). 'Elites' typically include mainstream parties, upper classes, news media, intellectuals, and/or the European Union (Rinaldi & Bekker, 2021). European populist party stance on welfare state have been classified into inclusionary and exclusionary, with the former more commonly promoted by radical left-wing parties relying on socialist ideas and the latter by radical right-wing parties adopting nativist and authoritarian ideas (Rinaldi & Bekker, 2021; Rovira Kaltwasser & Zanotti, 2021).

Variants of populist parties in Europe have been further characterised as welfare-hostile, welfare-friendly, and, in recent decades, increasingly welfare-ambiguous (Blum & Kuhlmann, 2021). Ambiguous positions include welfare chauvinism, which promotes cutting back on the welfare of specific population groups deemed undeserving, most commonly immigrants; however, at the same time, the same party may support generous benefits, or selective expansion, targeted to 'their own' or to other subgroups deemed more deserving.

The ambiguity of the positions of most populist parties towards social policy is increased by the fact that parties may change their stance over time or once in office and that they may engage in 'position blurring' to attract voters (Blum & Kuhlmann, 2021). Thus, (neo-) populism is characterised by a mix of ideologies, identities, and

social classes and by the ability both to criticise almost any societal phenomena through their ideological frame and to create new political dichotomies (Turtiainen & Kokkonen, 2020). Welfare states may not be criticised *per se*; however, their commitment to, e.g., democratic values, human rights, multiculturalism, or international cooperation are perceived as threats to 'the common people' (Turtiainen & Kokkonen, 2020).

Austerity in Europe after the 2008 financial crisis

A global financial crisis initiated by a crash in the U.S. housing and stock markets spread to Europe in 2008. It was followed by an economic crisis, due to which GDP fell in all European countries in 2009, together with rapidly rising unemployment rates (Karanikolos, et al., 2013). In the second phase, the Eurozone sovereign debt crisis initiated in Greece in 2010 and spread to Ireland, Italy, Portugal and Spain (Salo, 2017). This Great Recession is described as the largest hit since the Great Depression of the 1930s (Ólafsson, et al., 2019).

Policy responses to financial crisis can be broadly distinguished into two main alternative approaches, drawing from economic theory (Helgason, 2019b). First, Keynesian economics emphasises the government's role in crises through stimulus mechanisms to activate the economy and reduce unemployment. Second, 'laissez-faire'-economics advocate self-corrective market mechanisms and oppose government interventions, thus, providing the background for debt-reducing austerity.

The European Union responded to the crisis initially with austerity, which thereafter became an important but contested policy approach in many European countries (De la Porte & Natali, 2018; Béland & Waddan, 2021). In countries that needed bailout loans, austerity measures including notable cuts to and reforms of the public sector were imposed as a precondition by the European Commission, European Central Bank and International Monetary Fund, 'the Troika' (Karanikolos, et al., 2013).

The punitive nature of the preconditions has been attributed to a political climate in which European member states were divided into unwilling creditors and debtors blamed for excessive public sector growth (Salo, 2017). In a 'hegemony of austerity.' many other countries adopted strict retrenchment policies voluntarily to avoid accumulating debt (Blyth, 2013; Ólafsson, et al., 2019; Farnswort & Irving, 2021; Autto & Törrönen, 2019; McKee, et al., 2012).

Deficit reduction was the main goal of austerity in Europe, and this goal was primarily sought with budget cuts rather than tax increases, as the former were perceived as less harmful to economic growth (Stuckler, et al., 2017; Paulus, et al., 2017). The extent to which households were affected by the crisis depended on the

depth and persistence of the crisis, the government's response (stimulus or austerity), and on the characteristics, comprehensiveness and generosity of the welfare state in place (Ólafsson, et al., 2019).

In retrospect, countries that opted for fiscal stimulus instead of austerity (e.g., Germany and the USA), recovered from the economic crisis more quickly (Karanikolos, et al., 2013; McKee, et al., 2012). In the UK, the initial recovery was halted after austerity measures were imposed in 2010 (McKee, et al., 2012). Moreover, harsh austerity tended to be regressive, to affect predominantly the poor, and thus to widen social inequalities (Stuckler, et al., 2017). Cuts in public wages and transfers seemed more likely to affect demand than tax increases, because of their effects on liquidity-constrained households (Paulus, et al., 2017).

The initial responses in Europe were later criticised for the disregard of their effects on public health. An example is the focus of Directorate-General for Health and Consumer Protection of the European Commission (DG Sante) on advising health ministries on budget cuts despite its responsibility to evaluate EU policies' impacts on health (Karanikolos, et al., 2013).

2.2.2 Healthcare retrenchment

In parallel with other welfare state developments, most Western European countries had by the 1980s established comprehensive healthcare systems, with (near-) universal coverage and progressive financing through taxes (e.g., Nordic countries, the UK), or mandatory social insurance contributions (e.g., Germany, France). Even countries considered liberal based on their relatively modest welfare state entitlements (e.g., the UK, Australia and New Zealand) established comprehensive, universal healthcare systems. The United States remains an exception with its lack of universal coverage, despite high spending on healthcare.

The expansion phase in healthcare seemed to continue in Europe well beyond the end of the 'Golden Age' of the welfare state (Rothgang, 2021). Growth in absolute and relative health expenditures have been explained by rising incomes/wealth driving demand and expectations, technological change, health insurance, and changes in population age structure and health (Willemé & Dumont, 2015; Marino & Lorenzoni, 2019).

Further explanations for healthcare spending growth include 'Baumol's disease', meaning that the costs of personal services increase despite the lack of increased productivity, and 'Sisyphus syndrome', meaning that successful healthcare results in people staying alive and needing further healthcare (Colombier, 2017; Zweifel, et al., 2005). Moreover, technological innovation in the health field has had the tendency to produce increasingly complex products, the regulatory demands of

which drive towards higher sophistication and quality rather than lower production costs (Marino & Lorenzoni, 2019).

Attempts to contain health spending through controls, quotas, and budgets have been implemented in many European countries since the 1970s (Abel-Smith & Mossialos, 1994; Dixon & Poteliakhoff, 2012). In the 1980s, health technology assessment (HTA) emerged as a prominent approach to containing costs, and funding modes shifted from fee-for-service towards activity-based schemes in hospitals and capitation in outpatient care (Abel-Smith & Mossialos, 1994; Dixon & Poteliakhoff, 2012).

In the 1990s, concerns over rising health expenditures became the main driver of healthcare reform (Saltman & Figueiras, 1997). Many reforms were inspired by ideas supporting market-based policy instruments (also called New Public Management, NPM) that encouraged the creation of internal healthcare markets (Abel-Smith & Mossialos, 1994; Enthoven, 1986). Debates concerned the role of the state and markets and the optimal locus of power being central or local governments (principle of subsidiarity) or non-governmental bodies (Saltman & Bankauskaite, 2006; Dixon & Poteliakhoff, 2012). The reforms were characterised by decentralisation, privatisation (sold as promoting patient choice), and a decreased public share of financing (Harrington & Pollock, 1998; Diderichsen, 1999; Dixon & Poteliakhoff, 2012; Saltman & Bankauskaite, 2006).

The ideas of social investment have since become increasingly prominent in healthcare policy. The Tallinn Charter: Health Systems for Health and Wealth, signed at the WHO European Ministerial conference on health systems in 2008, emphasised the broader involvement of health systems in promoting health and wealth and framed investment in health as an investment in future human development, social well-being and wealth (WHO Regional Office for Europe, 2008). The high costs of new health technologies have been justified by their value to society through the prolonged working ability, longer life expectancy, and improved quality of life of recipients (OECD, 2017). As has been claimed for education, better health is argued to increase society's human capital stock. After the COVID-19 pandemic, investment in health is framed as a way to bolster economic growth and increase the resilience of societies against external threats (Morgan & James, 2022).

Growing healthcare costs and the pursuit of efficiency, together with neoliberal ideas, have steered health system reform towards privatisation and marketisation, often combined with goals of retrenchment (Tynkkynen, et al., 2018; Schrecker & Bambra, 2015). As a consequence, even systems that traditionally relied heavily on public provision have opened up to competition from private providers and private insurance (Tynkkynen, et al., 2018). As all European health systems have incorporated aspects of marketisation, the relevant dividing lines may not lie

between public and private or competition and regulation. Instead, the extent to which their combination results in gaps of coverage and protection might distinguish them (WHO Regional Office for Europe, 2023; Martinussen & Rydland, 2022).

Privatisation and cost-sharing have been claimed to prevent moral hazard and act as a means of accommodating individual preferences and preserving freedom of choice, for example when used to disincentivise the use of less cost-effective or valuable options or to unburden public systems (Drummond & Towse, 2012; Kullberg, et al., 2019; Kullberg, et al., 2022). Nevertheless, the provision of private pathways also amplifies the influence of social status and affluence in determining who gains access, under what conditions, and to which care, thus shaping the implicit prioritisation and promoting social dualism even in systems deemed universal (Lapidus, 2022; Martinussen & Rydland, 2022; Immergut & Schneider, 2020).

This may have implications for universalism, as including broader groups often raises service quality and standards, thereby also benefiting the worst off (Lundberg, et al., 2016). It also enhances programme sustainability by increasing public support and willingness to fund them through taxes. In Finland, for instance, public trust in healthcare and the school system has decreased markedly in recent years (Halonen, et al., 2025).

A closely linked argument on the 'commercial determinants of health' is that market-liberal ideas and increasingly powerful global corporations have led to a system where corporations' power and wealth increase while individuals, state actors and societal stakeholders are impoverished and disempowered from paying the externalised costs (Gilmore, et al., 2023). While this criticism mainly concerns threats to public health and the environment, such as from unhealthy commodities and fossil fuels, similar pathways have been described in relation to widening inequalities from the privatisation of public services (Diderichsen, et al., 2021).

2.2.3 Retrenchment, healthcare access, and health

Theoretically, economic crises can affect health through two main mechanisms. Stuckler et al. (2017) distinguished the social risk effect from the healthcare effect. The prior refers to the negative impact of economic crisis on the distribution of social determinants of health, for instance through increasing unemployment, homelessness, and poverty, and the simultaneous cuts in the benefits that mitigate their negative effects on health. The latter refers to cuts in the supply of healthcare services, healthcare coverage restrictions and reduced healthcare access.

Thomson et al. (2015) conceptualised a similar although more complex framework incorporating non-linearities and highlighting proneness to vicious cycles. The main mechanisms of the framework are the reduced financial security of households and reduced government resources. Unemployment and falling incomes,

potentially together with increased out-of-pocket costs, decrease households' financial security, reflected as stress, strain and health-damaging behaviours. These mechanisms increase healthcare needs as they decrease access and are exacerbated by a reduction in government resources that manifests as lower coverage, reduced capacity and/or lower quality of care. Health effects may therefore be caused by the crisis itself, the policy responses to the crisis, or both.

A set of studies has examined recommodification in England and Sweden by measuring changes in health and healthcare access inequality between the employed and unemployed and according to the level of education. The comparisons showed that the gap in self-reported health between the employed and unemployed grew between 1991 and 2011 in both countries, and the growth was larger in Sweden, which also experienced more recommodification (Farrants, et al., 2016). Overall, small health improvements were observed during recessions for working-age women but not for men, which led to growth in educational health inequalities in both countries; however, for different reasons (Copeland, et al., 2015). In England, the health among the women with the highest level of education improved, whereas a decline was observed for the lowest educated. In Sweden, health improved among all; however, this improvement was largest for the most educated (Copeland, et al., 2015).

In Sweden in 1980−2011, reductions in the replacement rate of unemployment benefits coincided with increasing gap in self-assessed health by labour market position, whereas educational inequalities among the retired population remained stable despite reductions in the replacement rate of pensions (Farrants & Bambra, 2018). Inequality in doctor visits by education remained relatively stable over time despite increasing cost-sharing, which, according to the authors, suggests relatively strong protection of vulnerable groups against increasing costs (Farrants, et al., 2017; Farrants & Bambra, 2018).

Following the 2008 crisis, austerity was particularly pronounced in countries that implemented measures promoted by the Troika. Nevertheless, many other European countries also voluntarily implemented reforms that reduced healthcare coverage and service levels. Shifting healthcare costs to patients and users was a common policy to draw savings and tackle cost growth, possibly because it was politically easy and straightforward to implement (Vogler, et al., 2016; Thomson, et al., 2015). At the same time, cuts in cash transfers and rising unemployment decreased households' ability to pay.

The correlation between GDP and population health is well established, in terms of both GDP increase within countries over very long periods and cross-sectionally between high- and low-income countries (Kangas, 2010; Naghavi, et al., 2021). Evidence on the health effects of recessions is mixed, with empirical studies finding

both health deterioration and improvement depending on the outcomes and settings examined (Bambra, et al., 2015; Parmar, et al., 2016).

For example, Stuckler et al. (2009) examined 26 EU countries between 1970 and 2007 and found increasing unemployment rates being associated with increases in all-cause mortality and for cause of death, increases in suicides and alcohol-abuse related deaths and decreases in deaths from traffic accidents. Countries varied in terms of the extent to which mortality followed economic downturns, for example, increasing investment in active labour market policies was associated with a decreasing effect on suicides. Nordic countries stand out because their economic crises in the 1980s and 1990s did not seem to coincide with deteriorating health outcomes, which was attributed to their strong social protection systems (Bambra, et al., 2015; Stuckler, et al., 2009).

Studies examining the health effects of the crisis after 2008 in Europe have in most cases not distinguished between the effects of the crisis itself and policy responses to it. Greece has been in particular focus because of the intensity of the crisis and the harshness of austerity. The combination of rapidly increasing unemployment, salary decreases, and large cuts in services (e.g., an approximately 30% cut in the healthcare budget between 2011 and 2012), increased co-payments, and shortages of medicines and other medical supplies, are likely contributors to the observed coinciding negative trends in public health (Ifanti, et al., 2013).

Moreover, as health insurance in Greece was often conditional to employment, people who lost their jobs often also lost comprehensive health coverage, as did their family members (Karanikolos & Kentikelenis, 2016). The coinciding social and health patterns include increased poverty, homelessness, violent crimes, divorces, mental illness, HIV infections among drug users, and suicide rates, the re-emergence of malaria, marked slowdown in the declining trend in amenable mortality, and a reversal of declining trends in infant mortality (Ifanti, et al., 2013; Branas, et al., 2015; Economou, et al., 2016; Economou, et al., 2015; Karanikolos & Kentikelenis, 2016; Zilidis, et al., 2020; Kubrin, et al., 2022).

Similar patterns have been described in Europe more widely (Rajmil, et al., 2020; Chang, et al., 2013; Parmar, et al., 2016). One study used cyclically adjusted primary balance to capture the intensity of austerity, and found some evidence for negative effects of austerity independent of the crisis on perinatal and social determinants of children's health outcomes (Rajmil, et al., 2018).

2.2.4 Retrenchment and public opinions

Pierson (1996, p. 8) suggested that welfare expansion and retrenchment have fundamental differences: while politicians can openly claim credit for expansion, retrenchment usually needs to be hidden through blame avoidance strategies to

decrease the risk of electoral punishment. Accordingly, a broad spectrum of blame avoidance strategies have been described in the literature, including the manipulation of procedures (e.g., delegation of decision-making vertically or horizontally, indexation), perceptions (e.g., obfuscation, blaming another actor, convincing voters of the need for the reform) and payoffs (e.g., dispersion and delaying of the effects, concentrating losses on groups that are politically weak or perceived as undeserving) (Vis, 2017).

However, policy feedback mechanisms seem conditional rather than automatic (Vis, 2017; Starke, 2021). Voters in many countries seem conflicted between their support for the welfare state and concerns over economic sustainability, and some are more interested in issues other than social policy altogether (Starke, 2021). Economic and moral fears and insecurity are commonly deployed in debates for and against austerity (Autto, et al., 2022). Retrenchment may also occur in several other ways that make it less obvious to voters. Examples include policymakers doing nothing to account for societal changes (policy drift) or weakening funding for social welfare programmes or social support groups in the long run (systemic retrenchment) (Starke, 2021).

Furthermore, blame-generating strategies have been described in the context of European austerity (Béland & Waddan, 2021). Besides blaming the political parties in office for their unpopular decisions, these strategies have been used to promote welfare chauvinism through making specific population groups, namely immigrants, the culprits for austerity (Béland & Waddan, 2021).

In practice, reductions in public provision appears to generate policy feedback to some political parties and in some circumstances, at least if it is recent, large and transparent enough, and voters have a viable alternative to vote for (Giger, 2011; Naumann, 2014; Vis, 2017; Kumlin & Haugsgjerd, 2017; Lindbom, 2014). However, retrenchment in all policy areas does not represent an equal electoral risk, and the risk may vary by party. Parties committed to generous welfare states (e.g., social democrats) face electoral risk after recommodification (Arndt, 2013, pp. 183-200). Conservative/religious and liberal parties may even gain votes after saving measures (credit-claiming) (Starke, 2021; Vis, 2017; Giger & Nelson, 2011; Schumacher, et al., 2013).

Ill health, together with old age, are considered life-course risks. Policies addressing health-related risks tend to be more widely supported across the political spectrum than policies addressing labour market risks (Jensen, 2012; Vis, 2017). Support for healthcare and pensions also seems stable over time and less dependent on individual circumstances than support for unemployment benefits (Roosma, 2021; Naumann, 2014). A suggested explanation is that life-course risks are less linked with one's position in the income distribution, and thus, a 'median voter' is likely to be in favour of generosity (Tromborg, 2014; Jensen, 2012). The old and the

sick are also generally perceived as more deserving than many other beneficiary groups, in particular the unemployed (Van Oorschot & Roosma, 2017; Meuleman, et al., 2020; Petersen, et al., 2011).

The 'exclusionary welfarism' particularly associated with the populist radical right-wing parties in Western Europe also draw from the deservingness heuristic and is envisaged as contributing to increasing dualism (Chueri, 2022; Jessoula, et al., 2021). Regarding healthcare, chauvinistic claims seem more common in countries with tax-based systems, whereas in insurance-based systems criticism rather concerns those who do not contribute financially (Rinaldi & Bekker, 2021).

Public opinions and legitimacy

Public opinions and attitudes play a key role in shaping the legitimacy of decision-making in democratic governance (Kangas, et al., 2022). Legitimacy is built on political trust, functioning as 'the glue that keeps the system together and the oil that lubricates the policy machine' (Van Der Meer & Zmerli, 2017). Legitimacy concerns the justifications for exercising authority, for example, societal acceptance or normative validity (Schmelzle & Stollenwerk, 2018). Thus, it contributes to answering questions of democratic sustainability.

In social sciences, legitimacy is mainly examined in terms of the perceptions, beliefs and attitudes of the people (those governed) about political institutions, that is, how legitimate people think the institutions are, regardless of whether they actually are (Schmelzle & Stollenwerk, 2018). Legitimacy may also be understood in a normative sense, referrings to whether these institutions, in fact, enjoy the right to rule in relation to the law. These perspectives are *input* legitimising mechanisms (Schmidt, 2012). By contrast, *throughput* and *output* legitimacy refer to the quality of a governance process and to the extent to which the outcomes reflect the system's underlying values (Schmidt, 2012).

The various legitimising mechanisms are expected to interact in virtuous and vicious cycles (Schmelzle & Stollenwerk, 2018; Schmidt, 2012; Haugsgjerd & Kumlin, 2020). Political (input) legitimacy stems from trust and is influenced by policies' credibility and perceived fairness (Kangas, et al., 2022; Van Der Meer & Zmerli, 2017). Credibility represents how the public perceives the long-term sustainability of the system and the adequacy of the benefits provided. Perceived fairness, in turn, reflects how individuals feel that the system treats them and others.

Thus, the inability of a system to provide the expected level of benefits and services to citizens could lead to a reciprocal downward spiral of inadequate performance fuelling distrust, leading to pessimistic expectations (Haugsgjerd & Kumlin, 2020). High trust, conversely, may decrease resistance to reform, even

among those for whom it is disadvantageous, and increase resilience in times of crisis. For example, the importance of trust as a political resource was widely acknowledged during the COVID-19 pandemic, when higher political trust was linked with better compliance with authorities' recommendations (Devine, et al., 2023). Conversely, the inability of the healthcare system to care for all may have weakened citizen's trust in healthcare (Wendt, 2022).

2.3 Economic well-being

Economic well-being (or material living conditions) refers to a household's consumption possibilities and command over resources and is acknowledged an important dimension of human well-being (OECD, 2013). The literature in this field has roots in poverty measurement and social indicators research (Townsend, 1954; Veenhoven, 2002). Health policy literature perspectives on financial protection complement the assessment by addressing out-of-pocket payments that fall outside the scope of most measurements of economic well-being. A wealth of indicators addressing these dimensions are used in research and policy benchmarking nationally and internationally. This section presents commonly used indicators and their strengths and weaknesses as well as key studies related to the period following the 2008 financial crisis.

2.3.1 Measuring poverty

Battling poverty and redistributing income are among the key welfare state tasks, and, while the extent to which equity is sought differs, related outcomes are widely studied and monitored as measures of welfare state performance (Saunders, 2021). There is no one definition of poverty; instead, poverty may reflect different understandings of human needs and well-being (Saltkjel & Malmberg-Heimonen, 2019; Saunders, 2021). In terms of policymaking, solutions can be broadly divided into residual, which aim addressing basic needs, or redistributive, which focus on enhancing living standards (Saltkjel & Malmberg-Heimonen, 2019). Related concepts of absolute and relative poverty reflect the differences in what is meant by poverty in the global context, where the most deprived people cannot meet basic needs, and in the affluent welfare state context, where absolute poverty is mostly eradicated but people still have inequal possibilities of achieving a socially acceptable standard of living.

The latter shares theoretical origins with the regime literature discussed before (Saunders, 2021; Saltkjel & Malmberg-Heimonen, 2019). However, where the focus of the social right of citizenship -approach is on measuring the policies themselves, studies on poverty and income distribution apply an outcomes perspective, that is,

they use a specific outcome such as poverty risk rate to measure potential outcomes of policy (Lohmann & Zagel, 2018). A limitation of this approach is that it is seldom possible to establish causality between specific policies and the observed outcomes. However, it may be advantageous in capturing the various ways in which welfare states pursue their aims.

In Europe, poverty reduction is one of the three EU social targets for 2030 set by the EU employment and social affairs ministers as part of the European Pillar of Social Rights Action Plan (European Commission, 2021). In the EU, poverty is measured as the share of people at risk of poverty or social exclusion (AROPE), which incorporates three definitions (Eurostat, 2025): 1) an objective poverty-line approach based on the calculation of disposable equivalised incomes and their distribution in relation to a threshold set at 60% below national median; 2) a subjective living standards approach that relies on surveys of households' ability to afford specific items (e.g., rent, heating, a holiday, unexpected expenses) deemed necessary for an adequate standard of living; and, 3) household's work intensity, calculated based on the actual and potential working time of working-age household members. None of these measurements incorporates payments for healthcare.

2.3.2 Disposable income, transfers in cash and in kind

Economic well-being is largely shaped by a household's disposable cash income; however, comprehensive understanding of economic well-being requires a multi-dimensional approach that also considers consumption and wealth (UNECE, 2011; OECD, 2013). Approaches applying disposable incomes commonly apply the income concept deriving from the recommendations of international expert groups, particularly the so-called Canberra Group Handbook on Household Income Statistics (UNECE, 2011).

These approaches, nevertheless, disregard social transfers in kind, that is, 'goods and services provided by government and non-profit institutions that benefit individuals but are provided free or at subsidised prices', which also support households' (economic) well-being. It is widely acknowledged that differences in the relative emphasis countries place on transfers in cash and in kind may contribute to inadequate understanding of income distribution and redistribution between and within countries (UNECE, 2011; Vaalavuo, 2020; Verbist, et al., 2012; Stiglitz, et al., 2009).

However, determining exactly how in-kind transfers affect poverty or income distribution is not methodologically straightforward, regardless of whether their value is examined in terms of actual consumption or insurance value. As regards healthcare, a key challenge is accounting from differences in need. For example, counterintuitively, people with worse health could appear better off than their

healthier counterparts because of the healthcare they use (UNECE, 2011; Verbist, et al., 2012; Vaalavuo, 2020; Saunders, 2021).

Regardless of the estimation method in-kind transfers tend to be progressive; thus, they have an important redistributive effect resulting in lower income inequality (Verbist, et al., 2012; Vaalavuo, 2013; Causa & Hermansen, 2017; Aaberge, et al., 2019). Redistribution does not, however, necessarily occur across the income spectrum, as in-kind transfers tend to have other purposes.

For healthcare services, redistribution occurs between the healthy and the sick. A recent analysis examined the distribution of public social- and healthcare services among older people in Finland (Vaalavuo, 2020). In-kind transfers, estimated based on the production costs of realised use, were skewed towards the lower income quintiles. However, service use is heavily concentrated in a small minority with highest health needs; thus, in-kind transfers are far from equally distributed within income quintiles.

2.3.3 Financial protection in healthcare

Financial protection in healthcare is a core dimension of health system performance and an important feature of ensuring affordable access to healthcare for everyone, that is, universal health coverage (UHC). UHC is a key global policy goal, the commitment to which is included in, e.g., the Tallinn Charter on Health Systems for Health and Wealth (WHO Regional Office for Europe, 2008), the United Nations Sustainable Development Goals (United Nations, 2025), the EU Pillar of Social Rights (European Commission, 2021), and the WHO European Programme of Work (WHO Regional Office for Europe, 2021).

Theoretically, financial protection can be undermined by gaps in coverage, that manifest as unmet needs and/or financial hardship (WHO Regional Office for Europe, 2023). Out-of-pocket payments for healthcare goods and services can act as a barrier to access, or they can cause financial hardship to those using healthcare. People may be forced to prioritise between healthcare and other necessities, e.g., electricity, heating or food (Piette, et al., 2006; Heisler, et al., 2005). Thus, lacking financial protection can deepen poverty, exacerbate inequality and threaten individuals' health and well-being (WHO Regional Office for Europe, 2023).

European countries vary in their share of healthcare financing through out-of-pocket payments. In 2017, the average share was 16%, with variation from 45% in Cyprus to 10% in France. Finland (19%) places slightly above the EU average and higher that other Nordic countries (14%–16%) (Eurostat, 2024). With regard to overall health expenditures, out-of-pocket shares of financing are small in European settings. Nevertheless, these payments tend to end up being targeted by need. Given the socioeconomic gradient of health, they are disproportionately borne by

households with lower resources (Waitzberg, et al., 2024; Luyten & Tubeuf, 2025; Wagstaff & van Doorslaer, 1992). A Finnish analysis showed that in relation to the value of the services, the direct costs to users were small (Vaalavuo, 2020). Nevertheless, in the lowest income quintile, health payments were notable in totalling 9% the disposable income.

Catastrophic and impoverishing health spending

Objective methods aiming to measure financial protection can be considered applications of the poverty-line methodology. They measure households' out-of-pocket health spending as a proportion of their disposable income (or consumption), as a measure of equity in financing (WHO Regional Office for Europe, 2023; Wagstaff & Eozenou, 2014; Yerramilli, et al., 2018). Indicators relying on this method further include socially determined thresholds in order to define impoverishing or catastrophic health spending.

Impoverishing health spending is calculated against a pre-defined poverty line, often also considering further impoverishment among households who are already poor before accounting for health spending (Yerramilli, et al., 2018; Wagstaff & Eozenou, 2014). Catastrophic health spending indicators measure out-of-pocket payments in relation to a household's ability to pay, with a pre-defined threshold (typically 10%−40%) representing catastrophic spending (Xu, et al., 2003; Yerramilli, et al., 2018). Catastrophic health spending is included as an indicator in the monitoring of UN Sustainable Development Goal 3.8., achieving UHC for all (United Nations, 2025).

In Finland, estimates of catastrophic health spending have been calculated using linked register data and the standard WHO method applying household budget survey data. Based on register data, 1% of the population faced catastrophic health expenditures (over 40% of income) in 2015 (Hetemaa, et al., 2018). The estimate using the WHO method was 3.8% in 2016 (over 40% of income), which was higher than in other Nordic countries and mainly driven by outpatient medicines, outpatient medical care and dental care (Tervola, et al., 2021).

The difference between the estimates is likely influenced by methodological differences and the limitations of each dataset. Register data are highly reliable; however, they disregard payments for care that is not covered by the schemes that administrative registers represent. Gaps related to inadequate coverage thus may go unnoticed. In the Finnish setting, over-the-counter medicines and eye-glasses are examples of non-covered healthcare goods (Tervola, et al., 2021).

Household budget survey data in turn encompass all types of spending but are inaccurate at the household level. In Finland, data on healthcare service payments and, e.g., eye-glasses, are collected for 3 month periods. For medicines, 2 week

collection periods apply, and this consumption is multiplied by 26 to get the annual consumption estimate (Statistics Finland, 2018). Consumption calculated based on short collection periods is intended for use at a group level only; however, catastrophic spending is calculated at the household level. Prescription medicines are in Finland typically dispensed for 3 months at a time, and an annual ceiling limits spending after a specific threshold is reached. Thus, many households seem to spend nothing on medicines, while the ones that happen to make a single costly purchase during the collection period end up having greatly overestimated annual consumption in the data.

A further limitation of the methods is accounting for realised consumption only. Households that forgo medical needs because of costs or other reasons do not appear to have experienced financial hardship. Furthermore, the applied thresholds are chosen for global comparison and catastrophic spending tends to be rare in well-resourced welfare states. In comprehensive social security settings, relevant implications include spill-over effects across schemes and resulting incentive traps. In Finland, last-resort social assistance can cover the health payments of low- or no-income families. Increases in medicine co-payments are shown to increase the need for last-resort social assistance to pay for medicines (Rättö & Aaltonen, 2021). Overall, health payments account for approximately 8% of total social assistance expenditure (Korpela, et al., 2025).

Unmet healthcare needs and financial burden

Living standards studies in the healthcare context include surveys of unmet healthcare needs: asking people if they have forgone needed healthcare due to financial or other reasons. Other subjective measures used in national and international surveys include the subjective financial burden of healthcare.

Subjective unmet need has been conceptualised as the difference between services received and those deemed needed to appropriately care for the defined health problems, that is, the absence of any/sufficient/appropriate care (Allin, et al., 2010; Carr & Wolfe, 1979). Some unmet need is likely to be acceptable, due to resource scarcity; thus, of interest is examining whether systematic, inequitable differences exist (Allin, et al., 2010).

Subjective measures cannot distinguish between needs, expectations and preferences. They can also be demand-driven, and there may be differences across countries in (perceived) needs and unmet needs, expectations, and/or cultural factors related to reporting (perceived) needs (Ramos, et al., 2019). However, subjective measures can be even more sensitive in capturing care needs than clinical assessment, which can be hampered by poor communication if the patient and doctor have a different socioeconomic or ethnic background (Allin, et al., 2010).

Differences in framing and defining the question also affect the results and limit the comparability of surveys (Allin, et al., 2010).

In European comparative settings, two main datasets exist with recent and comprehensive data: the EU statistics on income and living conditions (EU-SILC) and the European Health Interview Survey (EHIS) (OECD, 2020). EU-SILC has been collected annually since 2004, and it includes longitudinal data on individuals observed over 4-year periods. EHIS has been collected from a wide sample of European countries twice, in 2014 and 2019–2020.

These surveys have some methodological differences, and their results are reported using different denominators: EU-SILC reports unmet needs as a share of the entire population, whereas EHIS reports them as a share of people with needs. Accordingly, the level of unmet needs tends to be considerably higher across countries based on EHIS (OECD, 2020; Guidi & Ingleby, 2023). A number of other differences also challenge the comparability of the surveys (OECD, 2020). EU-SILC considers medical and dental care and EHIS any type of care, and it asks specifically about medical and dental care, mental health care and prescribed medicines. EU-SILC allows stating only one main reason for care forgone, whereas EHIS allows choosing several reasons. EU-SILC asks reasons only from respondents who indicate care forgone, whereas EHIS asks reason-specific questions from all. EU-SILC asks only about care forgone, but EHIS also considers care that has been delayed.

Financial burden in the context of serious illness has been defined in different ways, including perceived financial strain and stress mechanisms, or distinguished into material and psychological financial burden, the combination of which is expected to negatively impact, e.g., quality of life (Lee & Cagle, 2022; Jones, et al., 2020). No conceptualisations were identified for the subjective financial burden of healthcare in heterogeneous population samples.

An EU-SILC 2017 *ad hoc* module (administered as part of the development of EU-SILC's health module) included questions on the financial burden of medical care, dental care, and medicines (Demarest & Charafeddine, 2022). Financial burden was defined as excluding unmet needs. Thus far these variables have been scarcely applied in research (Vojvodic, et al., 2022). These questions were re-administered in 2021.

2.3.4 Financial crisis and economic well-being

In the European welfare states, the impacts of the financial crisis on households' economic well-being were to a varying degree mitigated by the existing welfare state institutions; however, the policy responses of governments were also important contributors. The explanatory framework of Ólafsson et al. (2019) identifies the

crisis itself (depth and persistence), the welfare regime (initial capacity, generosity) and policy responses (stimulus or austerity) as key factors that in combination determined welfare outcomes (financial hardship, unemployment, inequality).

In their comparison of over 30 countries, Ólafsson et al. (2019) compared these determinants and the outcomes of the 2008 recession with data until 2016. The outcomes assessed were unemployment, poverty risk rate and a composite measure of financial hardship encompassing objective income poverty and subjective measures of material deprivation and difficulty making ends meet (based on EU-SILC).

Countries that faced a deeper crisis (measured by GDP developments) experienced higher increases in unemployment (Ólafsson & Stefánsson, 2019). However, politics and other conditions also mattered, since for example Iceland experienced much smaller increases, and the UK and USA larger increases, than would have been expected based on their GDP contraction. Furthermore, some countries (including the Baltics and Ireland) experienced quick recoveries, whereas in others (including the Mediterranean), unemployment rates remained at high levels until 2016. Findings on inequality (measured by the Gini index) and relative poverty rates largely mirrored those related to unemployment.

Financial hardship increased overall in Europe, and this increase was largest for people at the lower end of the income distribution, who also had the highest level before the crisis, and they experienced the slowest recovery. The unemployed, those foreign-born and disability pensioners were among the groups most affected, whereas among people aged 65 years or over, financial hardship decreased. By welfare state regime, financial hardship levels tended to be and remain smallest in the Nordic countries, followed by Continental countries. The UK and Ireland had even higher initial rates and relatively high increases. Mediterranean, Baltic and Eastern European countries had the highest rates and many countries witnessed very large increases in financial hardship.

In general, increases in financial hardship tended to be larger and/or longer-lasting in countries with a deeper crisis, less generous welfare states, higher pre-crisis debt levels, and/or the harshest austerity measures (Ólafsson, et al., 2019). Among countries with notable (3% or more) and similar level of GDP contraction, countries with less advanced welfare states or that applied harsh austerity measures had larger increases in financial hardship than those with more advanced welfare states or that did not implement harsh austerity. Among countries with a less than 3% GDP contraction, the trends were reversed.

Overall, the findings provided support for the variability in the outcomes beyond crisis depth and thus highlighted how institutional settings interacted with the policies implemented. Financial hardship increases were particularly large in countries that had to comply with the conditions imposed by the Troika, whereas

countries that were able to apply social protection measures were able to cushion the negative effects.

Cash transfers and unmet healthcare needs

The complementarities of cash transfers and unmet needs for medical care have been studied in three European comparative studies.

Reeves et al. (2017) used CWED generosity scores and EU-SILC microdata from 16 European countries from 2004–2010 to determine whether more generous pension benefits were associated with lower levels of unmet need among older adults. This was indeed the case in countries with a high share of healthcare out-of-pocket financing but not in countries with a low out-of-pocket share; pension generosity mitigated the negative effects of out-of-pocket on access. Similarly, Madureira-Lima et al. (2018) examined the associations between the replacement rate of unemployment benefits (derived from Eurostat aggregate data) and unmet needs in 2008–2010 across 25 European countries. In countries with a lower out-of-pocket share and a higher replacement rate, the effect of becoming unemployed on reporting unmet needs was weaker.

Israel (2016) examined the associations of macro-level social protection variables of benefits (aggregated from EU-SILC data) with unmet needs for medical care due to cost. Among the benefits examined, social assistance was significantly associated with lower unmet needs.

Associations have also been examined regarding the extent to which publicly provided or subsidised healthcare goods and services improve households' (economic) well-being. Israel and Spannagel (2019) found associations between material deprivation rates and differences in the decommodification of healthcare across European countries. Hence, from the perspective of access, benefit generosity and health payments are 'two sides of the same coin' (Israel, 2016). Heavily subsidised healthcare services protect households from poverty, and generous cash transfers increase households' ability to pay and thus protect them from the negative effects of patient payments (Israel, 2016; Madureira-Lima, et al., 2018; Reeves, et al., 2017; Vaalavuo, 2020).

2.4 Finnish setting

2.4.1 Austerity and retrenchment in Finland after 2008

Finland was among the European countries that entered the 2008 financial crisis with relatively low debt and with a comprehensive social security system (including

automatic stabilisers) buffering the initial effects (Helgason, 2019a). In comparison to other European countries, Finland experienced a moderate contraction in GDP but very slow progression from the depth of the crisis – however, with little change in the standard of living, slightly decreased income inequality and relative poverty, and a smaller increase (2007–2013) in unemployment than would have been anticipated based on depth of the crisis (Ólafsson & Stefánsson, 2019; Helgason, 2019b; Ólafsson, et al., 2019). Finland, belonging to the Eurozone, could not, however, benefit from a floating currency like Sweden.

Finland had experienced a particularly deep economic recession in the 1990s as a consequence of a credit bubble following liberalisation of the banking sector and the financial markets, coinciding with a dramatic decrease in exports after the collapse of the Soviet Union and increasing interest rates (Kangas, 2019). In the following decade, economic growth was strong, with income and wealth increases particularly among the top decile. At the same time, long-term unemployment remained high due to technological change that affected the labour market, which together with cuts to social benefits contributed to rapidly growing income inequality, increases in poverty rates and children living in poverty (Kangas, 2019; Saari & Tynkkynen, 2019).

In 2008, the economic crisis was perceived as temporal turbulence that would have a limited impact on Finland (Salo, 2017). After an initial decline in 2009, GDP grew slightly again in 2011; however, growth remained weak throughout the early 2010s, reflecting a decline in exports due to the global economic downturn and the Western embargo against Russia, a downturn in the Information and Communication Technology (ICT) sector, the collapse of Nokia, and low domestic demand due to rising unemployment, low income growth and weak confidence in the economy (Kangas, 2019).

In addition, Finland faced major demographic changes: an ageing population and workforce due to rising life expectancy and a falling total fertility rate (Saari & Tynkkynen, 2019). Together, these developments contributed to increasing social spending and public debt, the threat of which was exacerbated by estimated growth in the 'sustainability deficit,' which was actively used in the policy debate to justify austerity measures (Kangas, 2019).

During the term of prime ministers (PMs) Vanhanen/Kiviniemi (2007–2011), the cabinet consisted of the Centre Party, the Conservatives, the Greens, and the Swedish People's Party. The government pursued a social security reform intended to fortify basic income security and move towards a basic income system (Kangas, 2019). A broad-based committee for reforming social protection was set up to prepare an overall reform of social protection (Committee for Reforming Social Protection (SATA Committee), 2009). Most of the suggested changes were not implemented because of the opposition of the social partners; however, the

government significantly raised the level of the minimum pension by introducing the guarantee pension (effective since 2011) (Kangas, 2019).

The following government of PMs Katainen/Stubb (2011–2015) consisted of a 'rainbow coalition' of the Conservatives, the Social Democratic Party, the Greens, the Left Alliance, the Swedish People's Party, and the Christian Democrats. Their programme included elements of austerity, such as plans to curb public expenditures and reduce debt; however, the rhetoric resonated even more strongly with the ideas of social investment (e.g., 'paid work is the best remedy against poverty') (Nygård, et al., 2019). Moreover, the government programme included aims to reduce poverty, inequality, and social exclusion and to improve social security (The Finnish Institute for Health and Welfare, 2015). Nevertheless, the wide political spectrum and the financial crisis heavily influenced the government's work (Kangas, 2019). In 2013, a large reform package was agreed on to address public deficit (Saari & Tynkkynen, 2019). The Left Alliance left the government in 2014 because it disagreed with the government's decision to lower corporate tax and austerity measures more broadly (Kangas, 2019).

Austerity rhetoric became dominant in Finland relatively late. The winners of the 2015 parliamentary elections were the three (right-centre-wing) parties that promised to cut public spending the most in order to stop incurring public debt and promote economic growth (Autto, et al., 2022; Saari & Tynkkynen, 2019; Nygård, et al., 2019). The measures and justifications broadly reflected international trends: cuts in social spending and labour costs, and a state made leaner by reducing bureaucracy and regulation (Blyth, 2013; Autto, et al., 2022).

The government of PM Sipilä (2015–2019), consisting of the Centre party, the Conservatives, and the True Finns, aimed to achieve its goals with an austerity-influenced set of measures including cuts in public services and cash transfers, increasing competitiveness through, for example, salary freezes and longer working hours, and increasing the conditionality of benefits (Autto & Törrönen, 2019; Kangas, 2019). The government also aimed for structural social and healthcare reform and for completion of a pension reform. In healthcare, the aims included opening up services to private competition and allowing freedom-to-choose options; however, the reform's failure eventually led to the resignation of the government.

The government argued for austerity by, for example, evoking fear of national bankruptcy or of losing sovereignty and independence with reference to the 'path of Greece' (Autto, et al., 2022). Government parties that were not part of the previous government turned to blame avoidance, stating that they had no other option because of the irresponsibility and neglect in the past. While government members openly recognised that the effects of cuts would fall most heavily on those in most economically vulnerable positions, they argued that tax increases (the alternative) would work against economic recovery, as is characteristic of austerity rhetoric

(Blyth, 2013; Autto, et al., 2022; Autto & Törrönen, 2019). The welfare state was not opposed as such; instead, austerity was presented as a necessity in order to save the 'core of the welfare society,' and the welfare of future generations (Autto, et al., 2022).

In line with many other European countries, right-wing populism has brought social rights and social citizenship debates onto the agenda in recent decades (Turtiainen & Kokkonen, 2020). The currently leading populist Finns Party (formerly True Finns) was established on the grounds of an agrarian party, initially with a conservative and nationalistic political agenda (Turtiainen & Kokkonen, 2020; Horsti & Saresma, 2021). While a part of PM Sipilä's cabinet, the party split in two in 2017. The party's agenda has increasingly been characterised by ethnic nationalism and welfare exclusionism.

2.4.2 Economic well-being

Finland is a Nordic welfare state with comprehensive social security system consisting of universal, earnings-related and means-tested benefits as well as a relatively wide range of universal social and health services (Kangas & Kalliomaa-Puha, 2019). Eligibility for basic benefits and for health and social services is residence-based. Households without (sufficient) market income are exposed to a wide range of social protection policies, the institutional framework of which determine their livelihood. The complexity of the system challenges efforts to estimate the effects of policy on economic well-being. To assist these efforts, statutory evaluations (L 456/2001 §4a) shed light on the extent to which the population subgroups deemed most vulnerable (based on reliance on minimum benefits) are at risk of poverty, and how their situation has evolved over time.

The evaluations base their definition of basic social security on §19 of the Finnish Constitution which concerns rights to social security (The Finnish Institute for Health and Welfare, 2011). Theoretically, distinction is made between minimum and basic subsistence, in line with the first and second paragraphs of §19. 'Indispensable subsistence and care' guaranteed to '[t]hose who cannot obtain the means necessary for a life of dignity' is addressed by means-tested social assistance. Basic subsistence consists of benefits paid based on a life event, predominantly without a means test, to guarantee 'basic subsistence in the event of unemployment, illness, and disability and during old age as well as at the birth of a child or the loss of a provider.'

In practice, distinguishing between minimum and basic subsistence is challenged by the multitude of other forms of support (e.g. housing allowance) and overlaps of different types of benefits. The evaluations of basic social security have aimed for a holistic approach instead of separate analyses of individual benefits. Thus, the basic

benefit level has been examined as consisting of benefits providing income replacement for households outside the labour market and ineligible for earnings-based benefits, supported when necessary by housing benefits and social assistance. To account for the marked overlap of different types of benefits and the effects of other, coinciding factors such as taxation (a large part of benefits are taxable), first evaluations were performed using the disposable incomes of four model families.

What is considered adequate is obviously a value-based question, and no exact poverty threshold has been set in Finland (The Finnish Institute for Health and Welfare, 2011). The evaluations apply a consensus-based approach based on the understanding that the basic benefit level should not deviate too much from the average standard of living. However, this still leaves ample room for disagreement on what is too much. In the initial evaluations, several measures of relative poverty were used, including standard measures used in national and European statistics on living standards, and reasonable minimum living standards were defined using reference budget methods.

The first report examined the development of basic and minimum benefit levels between 1990 and 2011 (The Finnish Institute for Health and Welfare, 2011). Overall, the disposable incomes of households on basic benefits were estimated to have increased by 4%–41% in real terms between 1990 and 2011. After increased housing costs were accounted for, incomes had decreased for all except for pensioners. In 2011, the disposable income after housing costs of a person living alone on basic benefits was 23%–32% that of an average wage earner. In relation to a reasonable minimum calculated using the reference budget method, the only group of basic benefit recipients for whom the benefits were sufficient to cover minimum living costs were pensioners.

The poverty risk rate (defined as having an income below 60% of the median income) among households with 51%–90% of gross income deriving from basic benefits increased from 52% in 1990 to 74% in 2009, and among households with over 90% of income from basic benefits from 75% to 89%. In 2008, material deprivation was reported by 25% of the unemployed (vs. 3% in the general population), and by 4% of pensioners. For households with more than 50% of gross income deriving from basic benefits, the material deprivation rate was over 20%.

The second evaluation (The Finnish Institute for Health and Welfare, 2015) concerned the period aligning with the government term of PM Katainen / Stubb (2011–2015). The evaluation was broadened to include earnings-based benefits, detailed examination of housing costs, and the impact of tax-benefit legislation reforms on income distribution.

Overall, disposable income before and after the dwelling costs of households on basic benefits or with a low income increased during this period, in real terms and when compared to the average wage earner, whose wages remained relatively

unchanged. The disposable income of persons living alone and receiving basic social assistance was 43%, and that of persons receiving the guarantee pension, 48% that of the average wage earner. Again, only pensioners reached the level of basic benefits that was sufficient to cover reasonable minimum living costs. The poverty risk rate (below 60% of median income) among households with over 50% of gross income deriving from basic benefits decreased to 71% in 2013. Households depending on basic benefits also commonly reported financial problems. Based on microsimulation estimates, tax-benefit changes between 2011 and 2015 decreased the poverty risk rate by 1.4 percentage points.

The third evaluation report (The Finnish Institute for Health and Welfare, 2019) examined the period coinciding with PM Sipilä's term. In contrast to previous reports, a distinction was made between basic subsidence and minimum subsidence (social assistance). The report was also broadened in terms of European comparisons. Overall, the disposable income of households on basic benefits after dwelling costs, and including social assistance, decreased slightly (1–2 percentage points) in relation to the average wage earner during 2015–2019. Without accounting for social assistance, the basic social security level decreased in particular among the unemployed, while the level remained relatively stable among pensioners, and among recipients of basic sickness or parental benefits. Among students, social security became increasingly dependent on student loans. In line with previous reports, only pensioners reached a level of basic benefits that was sufficient to cover reasonable minimum living costs. Finland ranked among middle-to-top Western European countries, depending on life situation and family type. According to microsimulation calculations, tax-benefit changes increased the poverty risk rate by 0.7 percentage points.

The fourth evaluation report extends from 2019 to 2023, coinciding with the term of PMs Rinne/Marin, slightly outside the period of focus in the current work (The Finnish Institute for Health and Welfare, 2023). To summarise the results, the level of basic social security increased in relation to earnings levels. Based on microsimulation calculations, tax-benefit changes decreased the at-risk-of-poverty rate by 0.1 percentage points.

Over the entire period from 1990 to 2021, the population share whose income consisted almost exclusively of basic benefits first rose rapidly between 1990 and 1995 (approximately from 1.4% to 3.6% of the total population), after which it remained at a higher level. Between 1995 and 2021, population shares are available for the household population (instead of total population), within which the proportion decreased from 4.3% to 3.2% between 1995 and 2008, after which the share increased to 4.5%–4.6% in 2015–2018, decreased to 4.4% in 2019, rose to 4.8% in 2020 (the COVID-19-year) and decreased again to 4.4% in 2021.

The share of the population receiving 51%–90% of their income from basic benefits also increased from 5.9% to 8.2% between 1990 and 1995, but gradually decreased to 1990s level by 2005. As the share of household population, the share decreased from 5.6% to 4.6% between 2005 and 2019, rose to 4.9% in 2020 and decreased again to 4.7% in 2021.

In sum, the reports give some support to the changes in policy emphasis towards pronouncing austerity in the 2010s. The poverty risk rate of people relying predominantly/exclusively on basic benefits decreased from 76%/87% to 67%/77% between 2010 and 2015, and by 2019 it had risen to 73%/83% (The Finnish Institute for Health and Welfare, 2023). Apart from pensioners, the income level of people predominantly relying on basic benefits remained low in relation to what is considered reasonable minimum living costs. Particularly the unemployed faced weakening replacement rates, and students' income became increasingly dependent on loans. A stated weakness in the evaluations was that they could not evaluate the effects of increased cost-sharing of healthcare on households (The Finnish Institute for Health and Welfare, 2019).

2.4.3 Healthcare system

History and institutions

In comparative healthcare system research focusing on actors and institutions, the Finnish health system bears the strongest resemblance to the National Health Service (NHS) model or 'entrenched command-and-control state,' with the state playing the dominant role in all key dimensions of health politics: financing, regulation and provision (Wendt, 2022; Böhm, et al., 2013). Finland shares the long Nordic tradition of decentralisation and municipal responsibility in organising healthcare, owing to the shared history: Finland was under Swedish rule for approximately 600 years before being conquered by Russia slightly over one hundred years preceding its independence in 1917 (Keskimäki, 2022).

Nevertheless, the legislative foundation of the universal, comprehensive healthcare system was laid relatively late in the Nordic context. The late introduction is attributed to historical, economic and political reasons, in particular tensions between social democrats, who advocated for schemes targeted to wage earners, and agrarians, who in turn embraced universal allowance schemes for which non-wage earners were also eligible (Kangas, 1992; Mattila, 2011).

In 1964, Finland established centralised, universal National Health Insurance (NHI), which included reimbursements for municipal and private healthcare services, prescription medicines and travel costs for healthcare as well as sickness and parental allowances (Mattila, 2011). NHI is administered by Kela (the Social

Insurance Institution of Finland), a centralised public institution originally founded in 1937 to pay out public pensions. Today, Kela is responsible for administering some earnings-based and most basic benefits, including national and guarantee pensions, flat-rate disability benefits, labour market support, housing allowances, basic unemployment benefits and since 2017, basic social assistance.

Less than a decade after the establishment of the NHI, the Primary Health Care Act (1972) made the municipalities responsible of organising all healthcare services (Keskimäki, 2022). NHI reimbursements for public services were discontinued in 1983; however, reimbursements for private services, prescription medicines and travel costs have continued to co-exist with the public system (Keskimäki, 2022). After the Occupational Health Care Act (1978) was passed, NHI has also reimbursed mandatory occupational healthcare (Keskimäki, 2022). In the preceding decades, occupational healthcare developed along with international trends (e.g., International Labour Organisation recommendations), with the first law on health examinations of industrial workers being enacted in 1961 (Mattila, 2011).

Three parallel systems

The three at least partly publicly funded parallel channels (i.e., public, private and occupational) that provide first-contact care persist until today and are a unique feature of the Finnish system (Keskimäki, et al., 2019).

Public healthcare is tax-funded and encompasses universal preventive, primary, secondary and tertiary care, and dental care; however, it is characterised by long waiting times, gatekeeping and at least some user charges for nearly all types of service (Keskimäki, et al., 2019; Tervola, et al., 2021).

Occupational healthcare is employer-organised, financed by employers and tax-like social insurance contributions through the NHI, and typically provided by private clinics (Keskimäki, et al., 2019; Kela, 2025; Kela, 2012). NHI-funded occupational services cover employees, including the self-employed and farmers if they choose to arrange occupational healthcare for themselves; however, employees' families are not covered, nor does the coverage extend to retirement. Between 2010 and 2020, over 85% of all employed people, or approximately one third of the entire Finnish population, were covered by occupational services (Kela, 2012; Kela, 2025). Occupational services include primary and sometimes specialist services and are free-at-point of use, often without waiting times.

Private healthcare (primary, specialist, dental, treatments and examinations) can be sought by individuals directly without gatekeeping, and services are reimbursed by the NHI directly to the individuals. The prices of private healthcare services are market-based, and NHI reimbursements are paid based on fixed tariffs (Tervola, et al., 2021).

Governance and reform

The public (municipal) health system was under strong national steering and centralised planning until the late 1980s, after which a shift towards decentralised decision-making and local-level adjustment occurred (Saari & Tynkkynen, 2019). The 1993 reform of state subsidies notably increased municipalities' autonomy and largely abolished centralised governance structures, which previously had an important role in the governance of municipal service provision. Reflecting the NPM ideas, central government agencies were considered administratively cumbersome and inefficient (Niemelä & Saarinen, 2015). At the same time, the economic recession shifted the focus from expansion to curbing spending, increasing efficiency, and drawing savings. Further drivers of reform were growing role of private provision, attempts to increase patient choice of provider, and purchaser-provider models (Niemelä & Saarinen, 2015).

During the following decades, consolidating tendencies were seen in the other Nordic countries, particularly as a response to the rapidly increasing costs of specialised care (Saltman, et al., 2012). Finnish municipalities were also deemed too small to effectively handling all healthcare organising and financing responsibilities, and many were struggling to finance care for their ageing populations from their shrinking pools of taxpayers. This led to increasing inequalities in access among the municipalities, many of which also had difficulty attracting healthcare workers (Saari & Tynkkynen, 2019). The challenges were confronted in attempts to restructure municipalities, mainly through mergers and collaborative arrangements, but these failed to correct what were structural problems (Saari & Tynkkynen, 2019).

In the 2010s, the governments of PMs Katainen/Stubb and PM Sipilä listed social and health services reform among their top priorities, yet both failed to execute their plans due to constitutional difficulties (Saari & Tynkkynen, 2019). In 2023, Finland finally restructured its healthcare system by shifting the organising responsibilities from municipalities to larger Wellbeing Service Counties (Karanikolos, et al., 2024).

The long political inertia and under-resourcing of municipal primary care services have taken their toll on the service structure. Public services are criticised particularly for the long waiting times (Karanikolos, et al., 2024). Given the long-lasting problems of public services, occupational healthcare has expanded, and the private insurance market has grown markedly (Lavaste, 2023; Tynkkynen, et al., 2018). For example, an increasing share of families cover their children and youth with private insurance plans to be able to use private services (including specialist services), and thus avoid waiting times and gatekeeping in the public sector (Sointu, et al., 2021).

Neither private healthcare providers, nor the voluntary health insurance market is regulated in terms of coverage or prices. The NHI pays reimbursements universally for private healthcare services; however, reimbursement levels have long

lagged behind price increases due to cuts and lack of adjustment for price increases. Thus, users need to be able to pay most of the costs out-of-pocket or through voluntary health insurance. Accordingly, the use of private services is strongly skewed towards the better off (Blomgren & Virta, 2020).

The coexistence of parallel channels and the resulting 'multi-channel' financing structure has been criticised for inefficiency, inequality, and perverse incentives. Inefficiency is attributed to the costs of sustaining three parallel systems and is exacerbating healthcare personnel shortages (Pekurinen & Sintonen, 2022). Healthcare organisers have no incentive to promote cost-efficient outpatient prescribing and they have an incentive to promote the use of outpatient versus inpatient medicines because outpatient reimbursements are borne by the centralised NHI (Pekurinen & Sintonen, 2022). The combination of private clinics and private insurance is suggested to promote overuse (Lavaste, 2025).

As a result of the expansion of privately provided healthcare that serves the young and the better off – and thus on average healthier – share of the population, the customers of the public system are increasingly old, worse off, and in great need for healthcare (Karanikolos, et al., 2024). The under-resourcing of the public and over-resourcing of the private sector have been criticised for allocative inefficiencies and socioeconomic inequalities in access to care (Karanikolos, et al., 2024; Keskimäki, et al., 2019; Tervola, et al., 2021). Nevertheless, discontinuation of public funding of highly popular occupational and private healthcare is not likely to be politically viable.

2.4.4 Health payments

Due to the reforms implemented as a response to the recession in the 1990s, the out-of-pocket share of health financing was relatively high even before the financial crisis in 2008 (Kokkinen, et al., 2015).

The 1990s reforms included the re-introduction of primary healthcare service fees – only 12 years after they hade been abolished (Keskimäki, 2022). The legislation that allowed municipalities to set patient charges for social and healthcare services within the limits of defined maximum charges was implemented in 1993 (L 734/1993). The legislation also defines services that need to be provided free of charge. Previously, charges were regulated in detail in various acts and decrees. The justification was to allow flexibility for municipalities to steer service use, while securing the constitutional rights to services, as part of a broader health and social service decentralisation reform (Government Proposal 216/1991 vp). Tax refunds for healthcare costs were abolished in 1992 (Government Proposal 62/1991 vp).

Medicines have been reimbursed through NHI since its establishment in 1964 (Kela, 2000). While the initial decades were characterised by expanding the number

of illnesses that made patients eligible for higher reimbursements, co-payments have always been a feature of the scheme. Gradual increases in medication co-payments started as soon as the 1970s (Kela, 2000). In 1994, Finland joined the European Economic Area, after which prices for medicines could no longer be regulated through national marketing authorisations (Government Proposal 101/1993 vp). Since, NHI was gradually restructured by implementing policies that targeted the supply side.

Reimbursements for outpatient medicines are paid regardless of whether they are prescribed in public, private or occupational healthcare, as long as they concern products on the positive list (for which reimbursement status is confirmed by the Pharmaceutical Pricing Board at the Ministry of Social Affairs and Health) (L 1224/2004). The prices of reimbursable medicines are also regulated by the Pricing Board with periodical re-evaluations (L 1224/2004).

At least some co-payments are always applied, and they do not vary by income. Co-payment depends on the individual patient's age, chronic illnesses, and annual cumulative co-payment expenditure, as well as the medical product's reimbursement status and category (L 1224/2004). Individuals are protected from a high accumulation of costs by an annual ceiling, after which low fixed co-payments apply. Individuals diagnosed with specific chronic and severe illnesses requiring long-term or expensive pharmacotherapy may be eligible for reductions in co-payments under Special Reimbursement schemes (hereafter, eligibilities). Eligibilities apply only to medicines used to treat specific diseases (L 1224/2004).

During the 2010s, health payments were increased several times. Public healthcare maximum user fees were increased in 2015 and again in 2016, on top of the biennial index adjustment (Tervola, et al., 2021). Children are exempt from the majority of charges; otherwise, most services were subject to at least some fees. During the time of the studies, municipalities could set charges below the maximum amounts, and some municipalities waived payments of, e.g., primary care visits. Private healthcare and/or dental care reimbursements were cut in 2013, 2015 and 2016. Co-payments for prescription medicines were increased in 2013, 2016 and 2017; however, the co-payment ceiling for medicines was also lowered in 2013, 2014 and 2019. Individuals' share of travel costs to healthcare was increased in 2013, 2015, 2016 and 2018.

These reforms were predominantly motivated by government saving targets. Comprehensive analyses of health payments have indicated regressivity and a concentration on the poor and ill (Hetemaa, et al., 2018). Variations in public healthcare user charges among municipalities (and between occupational and municipal healthcare) have raised questions about equity (Hetemaa, et al., 2018). The factors suggested to be undermining financial protection are the complex and heavy health payment schemes with inadequate protection mechanisms,

underutilisation of ceilings, multiple overlapping coverage schemes, variation across municipalities in user charges and waiting times, and the favouring of wealthier and employed people through private pathways and occupational healthcare (Hetemaa, et al., 2018; Keskimäki, et al., 2019; Tervola, et al., 2021). A higher risk of unmet needs for medical care is associated with multimorbidity, unemployment, worse self-assessed health, and immigration background (Çilenti, et al., 2021; Nguyen L, 2022). People of migrant origin also report lower satisfaction with care received (Çilenti, et al., 2021).

Social assistance and health payments

Basic social assistance is a last-resort financial support within the Finnish social welfare, aimed at ensuring a minimum necessary income for a life of human dignity for individuals and families (L 1412/1997). Basic social assistance is strictly means-tested. The amount is calculated as a difference between a national norm and household's disposable income after reasonable housing cost. The norm is set to cover normal consumption items, including food, clothing and hygiene. Certain expenses, including user fees for public healthcare services, prescription medicines and other products prescribed for the treatment of an illness, are paid on top of the norm (Tervola, et al., 2022; Tervola, et al., 2021).

Basic social assistance recipients are normally automatically given an electronic voucher for prescription medicines. Pharmacies check for vouchers when they also check patient’s eligibility to reimbursements. Self-paid costs for prescription medicines can also be accounted for in calculating the eligibility for basic social assistance (Tervola, et al., 2021).

Previous evidence on the effects of health payments

Several quasi-experimental studies have contributed to the evidence base on the effects of health payments. Studies related to medication co-payment increases implemented in the 2010s have reported decreased consumption of medicines among affected patients (Hamina, et al., 2020; Rättö, et al., 2021), halting of a preceding decrease in hospitalisations among schizophrenia patients (Hamina, et al., 2020), worsening glycosylated haemoglobin levels among diabetes patients (Lavikainen, et al., 2020a), increased use of social assistance to buy medicines (Rättö & Aaltonen, 2021), and increased subjective financial problems, and greater dissatisfaction with care (Lavikainen, et al., 2020b).

Three recent (quasi-) experimental studies examined the effects of user charges in municipal healthcare on service utilisation. The first study exploited municipal and temporal variation in nurse visit user charges and observed a decrease in

utilisation after the introduction of fees (Haaga, et al., 2024). Definite results on the effects of their subsequent abolition could not be drawn because of a violation in the parallel trends assumption. The second study exploited the change of individuals turning 18 years old and being exposed to user charges for doctor visits that they were previously exempt from paying, together with municipal variation in doctor visit user charges (Haaga, et al., 2025). Based on the results, utilisation decreased more in municipalities in which doctor fees were applied in public healthcare. The third study examined the effects of waiving doctor visit charges in public healthcare in the city of Helsinki, in comparison to regions that did not waive these charges (Haaga, et al., 2024). Statistical comparison was methodologically challenging; nevertheless, the results suggested a moderate increase in utilisation.

2.5 Gaps in previous literature

European welfare state restructuring after the 2008 crisis was characterised by austerity; however, its implications for countries were shaped by the depth of crisis, pre-existing welfare state institutions and other conditions, and the nature of government responses, particularly the extent to which they embraced the prevailing austerity hegemony (Thomson, et al., 2015; Karanikolos, et al., 2013; Ólafsson & Stefánsson, 2019). While harsh austerity measures were externally imposed in a few countries, others adopted measures voluntarily, albeit to varying degrees.

Austerity is envisaged to decrease redistribution and increase inequality; thus, these are important benchmarks against which the policies implemented can be evaluated (Helgason, 2019b). Finland and the other Nordic countries appeared to be less affected in these regards. This is attributable to the strength of their comprehensive and universal social protection systems, which buffered the effects on households and individuals (Ólafsson & Stefánsson, 2019; Kangas, 2019).

The majority of studies, however, focus on the period directly after the crisis, with few using data beyond 2015. In Finland, austerity rhetoric became dominant prior the 2015 elections, and austerity-inspired reforms were mostly implemented during the subsequent government term in 2015–2019 (Autto, et al., 2022; Nygård, et al., 2019). Reforms included increasing the conditionality of benefits and cutting or freezing indices, which affected the levels of many cash benefits (The Finnish Institute for Health and Welfare, 2019). At the same time, healthcare costs were increasingly shifted to individuals through co-payment and patient charge increases (Tervola, et al., 2021).

Previous estimates of tax-benefit changes have reported negligible effects on relative poverty (The Finnish Institute for Health and Welfare, 2019). Increases in co-payments have been shown to negatively affect certain patient groups

(Lavikainen, et al., 2020a; Rättö & Aaltonen, 2021; Hamina, et al., 2020); however, no widespread hardship has been observed. This is likely because the Finnish welfare state encompasses relatively generous and universal protection mechanisms against a wide spectrum of 'new' and 'old' social risks (Kangas & Kalliomaa-Puha, 2019).

Nevertheless, austerity measures may have widened the gap between the broad majority of the population who fare relatively well or encounter only one or two social risks at a time, and smaller subgroups who are exposed to multiple, simultaneous social risks and face the risk of accumulating disadvantage. Moreover, the Finnish healthcare system has long suffered with the under-resourcing of primary care and large geographic and socioeconomic disparities in access (Keskimäki, et al., 2019). While a large part of the working-age and better off population has largely avoided these issues through the expansion of occupational and private options, those dependent on minimum cash transfers typically lack access to these alternatives. As a result, they are left with only public healthcare services, which have also seen rising user charges.

It is possible that the indicators of economic well-being and financial protection in healthcare lack the sensitivity, at least when used separately, necessary to adequately capture these dynamics in comprehensive welfare state settings. The experiences of vulnerable subgroups may also be obscured by population-level averages. Furthermore, when smaller cuts and savings are introduced incrementally, the impact of each individual reform may appear minor, but their cumulative effects build up over time. Therefore, methods are needed to produce more detailed evidence on how different policies interact, particularly in relation to groups in vulnerable economic situations.

Given the global challenges and turbulence, welfare state retrenchment is likely to stay on the political agenda. In Finland, population ageing combined with global crises and prolonged economic stagnation seem to underpin electoral support for austerity-oriented parties that, while fluctuating, repeatedly regains momentum. Traditional blame-avoidance strategies in welfare retrenchment have, to some extent, been replaced by credit-claiming tactics, notably through the stigmatisation of benefit recipients – a trend increasingly driven by right-wing populist discourse.

If these patterns persist, renegotiation of the social contract is also needed. Decommodification provides a framework for assessing the roles and responsibilities of individuals, the market and the state. If recommodification occurs, who does it affect, and what are the consequences? Are these consequences in alignment with social rights and/or the societal norms, values and expectations?

Several gaps in data and methods currently preclude adequate answers to these questions. Methods conceptualising the social rights of citizenship through quantitative parameters allow examining variation in welfare state efforts over time and across macrosocial units, and their correlations with various welfare state

outcomes. Nevertheless, they require harmonised and longitudinal institutional data, which for healthcare are scarcely available and in need of further harmonisation (Waitzberg, et al., 2024b; Waitzberg, et al., 2024c; Morgan & Xiang, 2022)

A specific application of institutional parameters is tax-benefit microsimulation, which allows detailed analyses of the combined effects of the complexity of transfers and the tax system for the multitude of household constellations. However, in-kind transfers, or related payments are not currently a feature of the models (Matsaganis & Leventi, 2014; Hetemaa, et al., 2018; The Finnish Institute for Health and Welfare, 2019).

Methods developed for measuring equity in healthcare financing rely on household survey data that, in relation to health payments, are imprecise at the household level. Catastrophic spending tends to be rare in comprehensive welfare states. Subjective measures can inform policy in terms of fulfilling peoples' legitimate expectations; however, a comprehensive approach would combine several indicators capturing the different dimensions. European surveys do not currently capture all needed aspects and functions, at least not in the same surveys, nor longitudinally.

From a policy evaluation perspective, the direct effects of different policies are difficult to disentangle due to their complementary effects (Israel & Spannagel, 2019; Israel, 2016; Reeves, et al., 2017; Vaalavuo, 2020). In comprehensive welfare states, relevant effects of retrenchment also include spill-over effects in other policy sectors (Rättö & Aaltonen, 2021).

3 Research design

3.1 Research objectives and questions

The project consists of four substudies, addressing the following research questions:

I. What were the combined effects of health payment policies and tax-benefit policies on household incomes and the relative poverty risk and poverty gap in Finland in the two government terms during which austerity ideas became prominent (2011–2015 and 2015–2019)?
II. Did pronouncing austerity in Finland coincide with an increase in socioeconomic inequality in going short of medicines because of lack of money and did medication access problems increase more than other forms of economic hardship (going short of food or physician visits)?
III. How strongly is income associated with the financial burden of medicines in Northern European countries with egalitarian welfare states (Denmark, Finland, the Netherlands, Norway, Sweden), is this association modified by age and health, and do countries differ with respect to these questions?
IV. Did experiences and opinions related to reimbursements for medicines differ by exposure to policies and medicine use, and between surveys collected before and after reforms that increased co-payments?

The main objective of this dissertation is to examine the relationship between health payments and households' economic well-being through the theoretic lens of decommodification. Given the austerity context, the focus is on recommodification (Pierson, 2001; Farrants & Bambra, 2018). In healthcare, recommodification has been linked with increasing the share of private expenditure. This may occur as a result of changes in cost-sharing, but also through the introduction of market mechanisms, often politically framed as increasing individuals' freedom to choose, for example through privatisation or voluntary health insurance (Diderichsen, et al., 2021).

This analytic perspective positions the dissertation in the literature on welfare state development (Vis, 2019), within which it aligns with streams specialising in

narrow policy areas (Nelson, et al., 2022) and welfare state retrenchment (Taylor-Gooby, 2004; Taylor-Gooby, et al., 2014). The studies are further inspired by Reibling and colleagues' (2019) healthcare system typology integrating comparative-institutional and health policy research perspectives. Accordingly, the dissertation aims to bridge insights from health policy and social security literature in order to address interlinkages. A key novelty in relation to previous literature is broadening the scope of the healthcare functions considered to include costs for medicines, which are a key driver of healthcare-related financial hardship in Europe, including Finland (Hetemaa, et al., 2018; Tervola, et al., 2021; WHO Regional Office for Europe, 2023).

The focus of the studies is on Finland in 2011–2020, a decade during which austerity rhetoric became increasingly popular in political debate (Autto, et al., 2022; Nygård, et al., 2019). The findings are therefore examined in terms of changes in redistribution and inequality, deemed characteristic to austerity (Helgason, 2019b). Reforms shifting healthcare costs to individuals were implemented almost annually throughout the decade; however, they coincided with different approaches to tax-benefit policies (Tervola, et al., 2021; The Finnish Institute for Health and Welfare, 2015; The Finnish Institute for Health and Welfare, 2019).

Exploration of the allocation of cost burdens, along with related opinions and experiences, is also envisaged to provide insights necessary for evaluating the aligment of policies with social rights and public expectations. These perspectives are important for maintaining legitimacy, particularly if social rights are to be renegotiated to reconcile growing healthcare needs with diminishing resources.

Building from these conceptual and theoretic frameworks, the sub-studies in this dissertation address the main objective through a triangulation of complementary perspectives. A summary of the research questions, data and methods are presented in Table 1. The studies rely on indicators of economic well-being and financial protection in healthcare and apply various pre-existing sources of data. More precisely, the first study applies objective measures and register data to explore the distribution and evolution of health payments. The following studies apply subjective measures and survey data to compare experiences in Finland by morbidity, income and labour market position and in comparison to four other Northern European countries with comparably comprehensive welfare states. Finally, subjective experiences and opinions are examined from the perspective of legitimacy.

The dissertation has a strong policy dimension. Key aims were to develop methods that allow incorporating health payments to prospective policy evaluation and to provide retrospective analyses of whether and how the austerity politics of the 2010s were reflected in households' economic well-being and healthcare access.

Table 1. Summary of the research designs.

	Study I	**Study II**	**Study III**	**Study IV**
Data	National tax-benefit microsimulation model (SISU), Care Register for Health Care (HILMO), National Health Insurance reimbursement register	Postal and internet panel survey: Regional Health and Well-being study (ATH) and FinSote study	EU statistics on income and living conditions (EU-SILC) microdata	Postal and internet panel survey: Medicines Barometer (Finnish Medicines Agency)
Years	Data: 2017; legislative parameters and prices: 2011–2019	2013, 2014, 2015, 2018, 2020	2017	2015, 2017
Population	Nationally representative 15% sample of Finnish households (n=826,001)	Finnish residents (n = 139,324)	Households in Denmark, Finland, the Netherlands, Norway, Sweden (n = 40,415)	Finnish citizens (n = 10,801)
Design & method	Static legislative microsimulation	Repeated cross-sectional study, multinomial logistic regression	Cross-sectional study, linear probability model	Repeated cross-sectional study, multinomial logistic regression
Research question(s)				

3.2 Data

The studies in this dissertation were conducted using nationwide Finnish administrative register data, and three population-based survey datasets.

Study I used the Finnish SISU tax-benefit microsimulation model including its nationally representative microdata developed and maintained by Statistics Finland. The SISU main model is a static microsimulation model encompassing the entire income transfer system that is further divided into sub-models containing taxes and benefits by legislative area. The SISU microdata encompass a 15% representative,

cross-sectional sample of the population (N = 826,001 in 2017) and detailed register-based information on its households' incomes.

Register-based data on public healthcare service utilisation, and on NHI reimbursed goods and services in the SISU sample households were linked to the data by using their unique personal identity codes. The data on public healthcare included outpatient (incl. primary care, specialist, night/weekend visits, physiotherapy, serial treatments, and ambulatory surgery) and inpatient care (incl. short-term care, day patient care, and inpatient rehabilitation) and dental services, the utilisation of which were derived from the Finnish Institute for Health and Welfare's (THL's) Registers of Primary Health Care Visits (AvoHilmo) and Care Register for Health Care (Hilmo). Excluded were payments for social services (e.g. home care incl. home nursing and domestic services), and user charges for long-term institutional care because they include housing and living costs.

The data on NHI reimbursements for prescription medicines, healthcare-related travel costs, and private healthcare (including dental care) originated from Kela's registers. Information on prices was acquired from the Finnish Medicines Agency (Fimea) and from publicly available sources. Price information was needed to simulate the effects of price developments over time, including therapeutic shifts and changes in product range.

Study II used the data of five nationally representative cross-sectional population surveys by the THL, which included an adequate number of respondents and comparable questions. These were the 2013–2015 waves of the Regional Health and Well-Being Study (ATH), collected to monitor the health and well-being of the adult population (age 20+ years) by region and population subgroup, and 2018 and 2020 waves of the FinSote National Survey of Health, Well-Being and Service Use.

Study III used EU statistics on income and living conditions (EU-SILC) microdata, collected by the European National Statistical Institutes. The variables of interest (financial burden of healthcare) were collected as part of an *ad hoc* module, which at the time of the study was available only for 2017. In the Nordic countries, Netherlands, and Slovenia, EU-SILC data are compiled partly from administrative registers, and only one person (the sampled person) within each household is interviewed (Wirth & Pforr, 2022). In the other countries, all members aged 15+ years are interviewed, and the concept of sample person does not exist. Thus, data on health status and unmet needs for medical care have differing coverage across countries (sample person only vs. the entire family). To compare Finland with countries applying similar data collection methods and with similarly egalitarian aims related to healthcare, the Nordic countries and Netherlands were included. Iceland had to be excluded because the outcome variable was available for less than half of the sample.

Study IV used the first two waves (2015 and 2017) of a nationally representative survey: the Medicines Barometer by Fimea.

Objective measures

Study I applied the income concept used in income distribution statistics, representing households' disposable monetary income, in line with international recommendations (UNECE, 2011). Disposable income consists of wages, salaries, entrepreneurial income and property income, as well as received transfers, from which paid transfers (direct taxes and social security contributions) are subtracted. Household disposable income was equivalised using the modified OECD scale to reflect differences in the composition and size of households. The modified scale gives weights to household members as follows: 1.0 to the first adult; 0.5 to each subsequent person aged 14 years or over; 0.3 to each child below age 14 years.

Other concepts applied include commonly used social indicators, namely the relative at-risk-of-poverty (AROP) rate and the relative median at-risk-of-poverty gap (poverty gap). AROP rate is calculated as the share of people whose equivalised disposable income is below a set threshold in relation to the national median equivalised disposable income. Commonly used thresholds are 40%, 50% and 60% of the national median. Poverty gap represents the depth of poverty and is calculated as the difference between the AROP threshold and the median disposable income of the people positioned below the threshold. Poverty gap is expressed as a percentage of the AROP threshold.

To explore the effects of health payments, an alternative income concept was developed to represent equivalised disposable income after the deduction of health payments. The effects of health payment policy changes are, thus, calculated as annual differences between the standardised income concepts and the alternative income concept.

The SISU model also includes a module that estimates social assistance payments. However, several limitations need to be acknowledged when interpreting simulated social assistance. First, the model assumes full take-up, whereas in practice, non-take-up is common (Tervola, et al., 2022). Second, eligibility for social assistance is in practice typically evaluated monthly, whereas the model estimates eligibility with annual data. Third, the microsimulation model does not encompass the full spectrum of family-level information (including needs and all expenses) that is used in determining eligibility.

Subjective measures

In study II, three questions on economic hardship listed below were used. The outcome variable was constructed to examine particularly how medication access problems developed over time in relation to other problems. Three mutually exclusive categories were constructed: 0=no hardship, 1=hardship including medication access problems and 2=hardship excluding medication access problems.

- 'Have you within the past 12 months ever feared that you will run out of food before you can get money to buy more?' – No / Yes
- 'Have you within the past 12 months ever been unable to buy medicines because you did not have any money?' – No / Yes
- 'Have you within the past 12 months ever not visited a doctor because you did not have any money?' – No / Yes

In study III, three questions were used. Two questions of financial burden belonged to the *ad hoc* module 'Health and children's health'. For both questions, a dichotomised variable was constructed representing '0=No burden or no-one in the household needed medical examination or treatment / medicines; 1=A heavy or somewhat burden.'

The question of unmet need belongs to the EU-SILC core model and is surveyed annually. It has two steps and those who answer 'yes' in the first step will be presented a follow-up question with eight categories. A dichotomised variable was constructed, acknowledging that unmet needs were only surveyed from the sampled respondents and not all household members: '0=No, there was no occasion when the reference person really needed examination or treatment but did not receive it, or the person did not really need any medical examination or treatment; 1=Yes, there was at least one occasion when the reference person really needed examination or treatment but did not receive it.' All reason categories were included since the number of respondents that had chosen 'too expensive, too far to travel or waiting list' was negligible.

- 'To what extent were the costs of medical examinations or treatments a financial burden to your household during the past 12 months (excluding dental examinations or treatments)?'
- 'To what extent were the costs of medicines (prescribed and non-prescribed) a financial burden to your household during the past 12 months?'

Both questions had four answer categories:

1. ‘A heavy burden
2. Somewhat a burden
3. Not a burden at all
4. No one in the household needed/had a medical examination or treatment / medicines’

- ‘Was there any time during the last 12 months when you personally, really needed a medical examination or treatment for a health problem but you did not receive it?’– Yes/No
- [if Yes] ‘What was the main reason for not consulting a medical specialist?
    1. Could not afford to (too expensive)
    2. Waiting list
    3. Could not take time off work (or could not take time off from caring for children or others)
    4. Too far to travel or no means of transport
    5. Fear of doctor/hospitals/examination/treatment
    6. Wanted to wait and see if problem got better on its own
    7. Didn’t know any good doctor or specialist
    8. Other reason’

In study IV, the following two questions were used, representing experiences, and opinions. For the analyses, a dichotomised variable was constructed for experiences (0=No difficulties; 1=At least some difficulties), excluding people who reported not having used prescription medicines from the analysis of financial burden. In terms of opinions, the share of unsure respondents was over 20%; thus, three mutually exclusive categories were created: 1=Agree (fully or fairly); 2=Disagree (fully or fairly); 3=I don’t know.

- ‘During the last year, have you had financial difficulties in buying medicines prescribed to you by a doctor?
    1. I haven’t used prescription medicines.

2. I have had no difficulties.
3. I have had some difficulties.
4. I have had plenty of difficulties.'

- 'How do you feel about Kela reimbursements for medicine expenses? Please give your opinion on each statement even if you don't currently use prescription medicines. Reimbursements for medicine expenses are fair and just.
  1. Fully agree
  2. Fairly agree
  3. Fairly disagree
  4. Fully disagree
  5. I don't know.'

3.3 Methods

Static legislative microsimulation

Study I describes the method development for SOTE-SISU. It was developed in collaboration with the THL and Kela. SOTE-SISU is a health payments module for SISU model, applicable for simulating households' share of costs for healthcare goods and services that were publicly provided, subsidised or reimbursed from public sources. The building process included linking health register data to the SISU sample population and creating health payment legislation parameters and simulation code. User charges for public healthcare were not directly observable in the data; thus, they were imputed according to visits and patient characteristics, accounting for municipal variation.

The static microsimulation used in the Study I applied the Shorroks-Shapley decomposition method (Moisio, et al., 2016; Bargain & Callan, 2010), using fixed population characteristics, healthcare utilisation, and market incomes of the data year (2017). Counterfactual annual estimates were calculated by applying parameters representing tax-benefit and health payment legislation for 2011–2019 and price indices calculated based on realised prices and/or the consumer price index (CPI) to the data. Several scenarios were used to further estimate the effects of social assistance, and different price indices, on the estimates.

The effects of health payment changes were examined by comparing two government terms (2011–2015 and 2015–2019) rather than individual policies, to capture their combined and cumulative effects. Both governments implemented incremental changes annually, and the aim was to provide an overall assessment. Additionally, the analysis was designed to complement national statutory evaluations (L 456/2001 §4a) on the adequacy of basic social security, currently conducted by government term (The Finnish Institute for Health and Welfare, 2015; The Finnish Institute for Health and Welfare, 2019).

Regression analysis

The generalised linear model (GLM) is statistical model commonly used in quantitative social sciences to test hypotheses concerning relations between predictors and outcomes. The GLM states that a variable of interest (dependent variable) can be explained by a set of categorical and/or continuous variables, each carrying a specific weight estimated from data (von Eye & Wiedermann, 2023). The GLM is linear in terms of model parameters, i.e., the association between independent and dependent variables is linear, and the regression coefficients and variables basically form a linear equation. However, the model can be non-linear in the independent variables and, thus allows interactions and curvilinearities.

Interactions allow examining non-linear relationships (Mize, 2019). In a basic regression model, predictors are assumed to have additive effects, i.e., the relationship of a predictor and the outcome is assumed to be similar regardless of the values of the other predictors. Interactions can be considered non-additive relationships between independent variables, sometimes referred to as moderation effects (Jaccard & Turrisi, 2003). In many research questions, these contingencies are the main effect of interest.

When the GLM is applied to cases where the outcomes of interest are categorical instead of continuous, common approaches include using link functions (e.g., logit-link function, i.e., logistic regression) or applying linear regression without transformation (a linear probability model) but interpreting results as probability changes. The latter has the advantage of relatively straightforward interpretation of the estimates, whereas odds ratios commonly drawn from logistic regression models lack interpretability in terms of effect size as they reflect the magnitude of unobserved heterogeneity (Mood, 2010). Another proposed solution is to use probability change measures based on derivates, e.g., average marginal effects (AMEs). AMEs can be interpreted as the average effect of the predictor on the probability of the outcome, measured in percentage points.

Multinomial logistic regression is an application of logistic regression which allows dependent variables to have more than two possible discrete outcomes. The

interpretation of the AMEs in the case of multinomial regression is how the predictors are associated with the cases belonging to one of the different possible outcome categories and not the others.

Study II used multinomial logistic regression modelling and pooled repeated cross-sectional data to examine how individuals' economic activity (student, full-time work, part-time work/pension, disability/sickness, old age retired) was associated with economic hardship with or without medication access problems, and how that association was moderated by study year (2013, 2014, 2015, 2018, 2020). Year 2018 was selected as the reference point, as it was assumed to most effectively capture the austerity-influenced policy measures implemented by Prime Minister Sipilä's government (2015–2019). Based on previous policy simulation evaluations, the tax-benefit changes during this term differed from those of preceding and subsequent governments by increasing the risk of poverty (The Finnish Institute for Health and Welfare, 2015; The Finnish Institute for Health and Welfare, 2019; The Finnish Institute for Health and Welfare, 2023).

Study III used linear probability modelling and pooled cross-sectional data from five Northern European countries to investigate the effect of household income on the subjective financial burden of medicines and how it was moderated by country. Pooled models were also used to examine how the financial burden of medicines was associated with the financial burden of medical care or unmet needs for medical examination. Within-country models were used to examine how the effect of income on the financial burden of medicines was moderated by health status and age.

Study IV used binary and multinomial logistic regression models and pooled repeated cross-sectional data to examine the associations between exposure to medication reimbursement policies and the subjective financial burden of medicines, and attitudes towards the fairness of the reimbursement policies, and how those associations were moderated by study year (2015, 2017).

3.4 Ethics statement

Study I was based on administrative register data, secondary use of which is permitted for scientific research without acquiring informed consent according to the General Data Protection Regulation of the EU (GDPR) and Finnish law. Research based solely on register data does not require assessment by an ethics board (Finnish National Board on Research Integrity TENK, 2019). Permissions to use data in the study were obtained from Statistics Finland (TK-53-725-19), the THL (THL/2258/5.05.00/2018), and Kela (146/522/2019). All register data used in the study were pseudonymised by Statistics Finland. Researchers involved had only access to pseudonymised data within the remote access system of Statistics Finland (Fiona).

Permissions to use the previously collected survey datasets in Studies II–IV were applied from the Finnish Social and Health Data Permit Authority Findata (THL/5516/14.02.00/2020), Eurostat (RPP 24/2021-EU-SILC) and Fimea (FIMEA/2020/005050-1). The basis of processing survey data is the respondent's freely given, specific, informed and unambiguous consent. The survey data were pseudonymised by data holders, nevertheless, the data included indirect identifiers and sensitive personal data (on health). The survey data for Study II were stored and used in the validated GDPR-compliant remote systems Kapseli of Findata. Survey data for studies III and IV were stored and handled within the IT infrastructure provided and technically administered by University of Turku, including backups, access control and security.

4 Results from the sub-studies

4.1 Health payments had only small effects on poverty outcomes, but the effects strengthened over time

Article I explored health payment policies' effects during two government terms: from 2011 to 2015, and from 2015 to 2019. The simulated increase in patient payments between 2011 and 2019 was 21% when prices were adjusted by the CPI and 19% when adjusted by a price index constructed based on observed price trends. As described in earlier reports (The Finnish Institute for Health and Welfare, 2015; The Finnish Institute for Health and Welfare, 2019), tax-benefit policies contributed to decreasing the poverty risk rate during the prior term, and to slightly the increasing poverty risk rate during the latter. On average, factoring in health payments had a negligible effect when measured by relative poverty indicators during 2011–2015, and during 2015–2019, health payments strengthened the poverty effects; however, with 80%–90% of the effect deriving from tax-benefit policies.

Health payments were strongly skewed towards older adults (65 years and older), which had on average a 1–2 percentage point lower poverty risk rate than the population average and a 5–6 percentage point lower poverty gap. Factoring in health payments moved older adults nearer to the population average. Notably, the skewedness of health payments towards older population groups reflect the known association between older age and increasing morbidity. Therefore, this comparison is conducted to illustrate the distribution and impact of health payments rather than to provide an overall comparison of poverty.

Among working-age households, simulation estimates suggested that relative poverty effects were largely neutralised by the buffering effects of social assistance. However, social assistance recipiency is itself considered a negative outcome. Moreover, the microsimulation of social assistance expects full take-up, and does not include all information that in practice would be accounted for in determining eligibility. In the literature, non-take-up has been attributed to information deficit, process costs, as well as social and psychological costs (e.g., stigma) (Tervola, et al., 2022; Janssens, et al., 2021).

Effects of prices were examined by comparing alternative counterfactual scenarios that used CPI and the index based on observed price developments. Health payments are partly dependent on the prices of goods and services. Reimbursable medicines are subject to price regulation, and reimbursements are most typically percentage-based, with an annual ceiling. For private health services, only reimbursement tariffs are regulated; thus, prices are purely market-based. The examination of price effects showed that using a standardised price index, such as CPI would have overestimated the growth in prices for medicines. The prices of private health services, on the other hand, grew notably more quickly than the CPI.

4.2 Pronounced austerity coincided with widening gaps in subjective economic hardship among working-age population groups

Study II analysed the association between economic activity and subjective economic hardship during a period characterised by austerity in Finland. The types of economic hardship considered included going short of food, medicines or doctor visits because of a lack of money.

In general, working-age adults outside full-time employment had a higher probability of reporting hardship of any kind than their full-time working counterparts, whereas old age retirees had a lower probability of reporting hardship than full-time workers. Year 2018 represented the most pronounced austerity and coincided with a widening gap in economic hardship including problems accessing medication between full-time workers and several economically vulnerable working-age groups: disabled/ill (women and men), unemployed (women), part-time workers/retirees (men).

Economic hardship excluding medication-access problems either decreased or remained at a relatively stable level. The strengthening role of medication-access problems in economic hardship during austerity suggests that medication co-payment increases contributed to accumulating disadvantage.

4.3 Differences in the degree of commodification of medicines and healthcare in Northern Europe

Study III analysed the association between household income and the subjective financial burden from medicines in Denmark, Finland, the Netherlands, Norway and Sweden. In all five countries, the financial burden was skewed towards lower income groups, and more serious health problems (for the reference person) had a moderating effect.

Finland ranked highest in terms of absolute levels of financial burden for medicines and medical care, and Denmark and Norway had the lowest levels. Medicines were a stronger driver of financial burden in Denmark, Finland, Sweden and the Netherlands, whereas in Norway the financial burden of medical care was more prevalent.

By income, the differences in the financial burden of medicines were steepest in the Netherlands. In Finland, relatively high financial burden extended throughout the income spectrum. Finland differed particularly in terms of protecting older adults. The probability of reporting a financial burden from medicines increased with age in Finland, whereas in the other countries, the association seemed more curvilinear.

Overall, the financial burdens of medical care and medicines were strongly associated in all countries, and the burden of medicines was more prevalent in all countries except Norway. Unmet needs for medical care were rarely reported in any country, and mostly for reasons other than costs.

4.4 Co-payment increase coincided with increased financial problems in the targeted patient group and increasing overall scepticism of the fairness of the system

Study IV analysed the associations between exposure to medication reimbursement policies, and the subjective financial burden of medicines, perceptions of the fairness of the reimbursement policies, and how they varied between 2015 and 2017. Co-payment increases had been implemented in between. Individuals were differently affected by the policies depending on their needs for medicines. People using type 2 diabetes medicines were targeted by a particularly large co-payment increase in 2017.

Based on the results, people with diabetes or other chronic illnesses were more likely to report the financial burden of medicines than other users of prescription medicines. Diabetes patients reported a financial burden from medicines more commonly than other chronically ill individuals even before the co-payment increases, and after, the gap was even larger. The chronically ill tended to have more sceptical perceptions of the reimbursement system than others with or without a need for prescription medicines. Co-payment increases coincided with an overall increased level of scepticism.

Overall, individuals with chronic illnesses commonly reported burden of costs from medicines despite being eligible for higher reimbursement. A co-payment increase targeting chronically ill patients coincided with an increase in the prevalence of financial burden from medicines among them. Increasing overall

scepticism of the fairness of reimbursement across all the examined groups raises questions about legitimacy.

4.5 Summary of the main findings

The results of the research articles show that retrenchment in the form of health payment increases and cuts in cash transfer levels in the 2010s coincided with increasing gaps in economic well-being and access to healthcare (main results are summarised in Table 2). These patterns are likely attributable to austerity measures that simultaneously increased health payments and decreased the replacement rates of many income transfers, highlighting their complementary effects. In relation to tax-benefit policies, the effects of health payment reforms on household economics were nevertheless small. Comparatively, medicines and healthcare seem commodified to a higher degree in Finland than in countries with similar egalitarian goals of providing universal access to healthcare without causing financial hardship.

Table 1. Main results

Research questions	Article	Main results
	I	
Did austerity coincide with an increase in socioeconomic inequality in access to medicines, and did medication access problems increase more than other forms of economic hardship?	II	Austerity coincided with a widening gap in economic hardship between working-age adults in and outside full-time work. The strengthening role of medication access problems suggests that co-payment increases had a role in accumulating disadvantage.
	III	
Do experiences and opinions related to reimbursements for medicines differ by exposure to policies and medicine use, and between surveys collected before and after reforms that increased co-payments?	IV	A co-payment increase targeted to diabetes medicines coincided with increasing prevalence of financial burden of medicines among people with diabetes. Scepticism of the fairness of reimbursements increased in general.

5 Discussion and conclusions

5.1 Interpretation of the results

Overall, the results of Studies I–IV suggest that the relatively large health payments in Finland made access to healthcare and medicines conditional to labour market position and the ability to pay, and many who used healthcare experienced a financial burden as a consequence. Access barriers concentrated in population groups with a high income-poverty risk. In contrast, older adults seemed well protected from financial hardship despite their relatively large health payments. In relation to older adults in other Northern European countries, Finnish older adults nevertheless reported high levels of financial burden from medicines and healthcare. Reforms during the 2010s seem to have exacerbated financial hardship and unmet needs among vulnerable groups, who experienced decreasing income security, increasing health payments, or both.

In healthcare, the decommodification concept has been used in the context of the state's role in regulating how healthcare is organised and to discuss the role of institutions in regulating access to healthcare (Bambra, 2005a; Reibling, et al., 2019; Reibling, 2010; Wendt, 2009; Martinussen & Rydland, 2022). The results yield some insights in both aspects.

Study II showed that access to healthcare is not independent from an individual's market position in Finland, which is to a varying degree the case in all health systems (Carnazza, et al., 2023). Study III demonstrated that the prevalence of the financial burdens of medicines and medical care were higher in Finland than in the compared Northern European countries, indicating a higher exposure to market risk. However, the income gradient was steepest in the Netherlands, and the financial burden skewed towards lower income people in all the countries. Medications were a more important driver of financial burden than medical care in most compared countries (except Norway), which points to the importance of considering all healthcare functions.

Recommodification refers to the withdrawal of previously guaranteed welfare, thus making one's livelihood more dependent on one's market position (Lain, et al., 2013; Pierson, 2001; Farrants & Bambra, 2018; Farrants, et al., 2016; Copeland, et

al., 2015; Farrants, et al., 2017). According to Studies I, II and IV, health payment increases had only a minor role on relative poverty outcomes, but they might have exacerbated the economic struggles of specific groups that had high risk to begin with due to morbidity or labour market position. These findings align with the decreasing generosity of income support for workless and unemployed households, thereby increasing inequality, associated with ideas of social investment and austerity (Farnswort & Irving, 2021; Blum & Kuhlmann, 2021; Rinaldi & Bekker, 2021). Thus, the results provide support for the occurrence of austerity in practice and not only rhetorically.

Increasing households' economic vulnerability and at the same time strengthening barriers to accessing healthcare is among the hypothesised pathways for how economic crises deteriorate population health (Stuckler, et al., 2017; Thomson, et al., 2015). The studies in this dissertation did not examine health outcomes; however, studies examining the effects of the same reforms using quasi-experimental design have observed negative trend changes in hospitalisations and clinical parameters (Hamina, et al., 2020; Lavikainen, et al., 2020a). Together with previous evidence, the results of this dissertation reveal subgroups affected negative by austerity that could otherwise go unnoticed.

Older adults, despite being predominantly outside labour market, seemed well protected from financial hardship even though they were highly exposed to patient payments (Studies I and II). This provides support for the protecting effect of generous benefits from the negative effects of the recommodification of healthcare (Reeves, et al., 2017). Old age pensioners' low poverty risk is attributable to the longer term pension politics and societal change that shaped the careers of pensioners of the time. Between 1995 and 2021, the share of pensioners receiving a solely earnings-based (more generous) pension increased from 5% to 64% and the share pensioners receiving only a flat rate minimum pension decreased from 31% to 5% (Kuivalainen, et al., 2022). Furthermore, implementation of guarantee pension in 2011 increased the level of minimum pensions.

Regarding protection against medicine costs, restructuring also occurred in the form of recalibration (Pierson, 2001). New measures targeting the supply side were implemented alongside co-payment increases to respond to cost growth pressures driven by the global pharmaceutical market. Study I indicates that this price regulation indirectly influenced patient payments through a slower than expected growth in prices, which somewhat counterbalanced the effects of co-payment increases on individuals.

In contrast, the unregulated prices of private services grew rapidly, which provide support for the efficiency and equity arguments made for regulation in healthcare markets (Arrow, 1963; Watts & Segal, 2009). Study I observed higher than expected growth in the prices of private services despite coinciding decreases

in the reimbursement levels. This suggests that cuts in reimbursement to individuals for private healthcare services had a limited effect on their demand. A likely explanation is that demand is largely driven by institutional and corporate customers, such as occupational healthcare organisers, public healthcare outsourcers, and private insurance companies. The price developments are likely to further skew the use of private services towards the better off (Blomgren & Virta, 2020).

5.2 Methodological considerations

The dissertation allows making a few methodological recommendations.

First, tax-benefit microsimulation has become an important method to evaluate isolated and combined effects on different types of households within the complexity of various welfare state policies and entitlements (Moisio, et al., 2016; Sutherland & Figari, 2013; Paulus, et al., 2017; Bargain, et al., 2017). The method presented in Study I supplements the Finnish national model with health payments, thus allowing prospective identification of population and patient groups at risk of the negative effects of health payment changes. Moreover, as simultaneous reforms commonly affect various benefits and health payments, the model enables estimation of the combined effects. The incorporation of health payments into the SISU model was suggested in an earlier report to improve the evidence base for policymaking (Hetemaa, et al., 2018).

Second, the studies in this dissertation examined the usability of available survey datasets in examining healthcare decommodification and recommodification. Several national and European surveys with potentially applicable variables were identified. Nevertheless, few indicators had been collected more than a few times, which limited assessments of developments over time. In the Finnish national context, going without food, doctor visits, or medicines because of a lack of money has been covered in several subsequent surveys; however, changes over time in survey populations and questions related to independent variables limit their comparability. Fimea's Medicines Barometer includes the financial burden of medicines, but lacks assessment of other healthcare-related financial burdens.

The only European indicator of financial protection in healthcare that has been collected annually is unmet need for medical and dental care in EU-SILC (OECD, 2020). It has limited comparability across countries because it is asked only of the 'reference person' in some countries, including all the Nordic countries. This may have contributed to the very low levels of unmet need in the examined countries.

In contrast, a financial burden of healthcare was commonly reported, although generally to some rather than a high degree. Particularly in Finland, financial burden was commonly reported even in the highest income quintile. This raises questions about what the indicator actually measures. One suggestion is that it reflects

dissatisfaction with the level of payments even if the respondent can meet their healthcare needs without experiencing hardship. Conceptually, the financial burden of healthcare could hence embody the difference between the experienced payment level and level judged reasonable and fair. However, whether and the extent to which the protective strength of policies is reflected in the income gradient of people reporting financial burdens remains speculative. Further research is needed to understand how the indicator should be interpreted. To account for both mechanisms undermining financial protection, questions of unmet needs and financial burdens should be administered simultaneously.

A conceptual limitation of indicators of healthcare unmet needs and financial burdens is that need is often difficult to observe reliably. Perceived needs may not accurately reflect the severity of an individual's condition or their actual requirements for care. For instance, disease awareness can be influenced by education, access to information and availability of services (Sen, 2002). Additionally, need perceptions can be shaped by cultural norms or healthcare marketing. In affluent Western countries, overdiagnosis and unnecessary care are growing sustainability concerns, contributing to rising costs, increasing treatment burdens, and environmental impacts (Kühlen, et al., 2023).

A high prevalence of reported need may therefore reflect inefficiencies in protecting individuals from low-value or harmful interventions, which can also impose unnecessary financial burdens on patients. Accordingly, unmet needs and financial burdens can be analysed either conditionally on the presence of need or independently of it, and both approaches have strengths and limitations. For example, Eurostat indicators based on EU-SILC use the total population as the denominator, while EHIS reports outcomes conditional on perceived need (OECD, 2020).

In study II, financial burden was analysed independently of need because of the marked differences across countries in the share of households that indicated no need or no use of medications. In study IV that concerned Finland only, financial burden was analysed conditionally to need. Further methodological studies are needed to better understand whether and how differences in need perceptions have implications on indicators of unmet needs and financial burdens across countries. One possible approach would be to develop indicators that aim to measure overdiagnosis and unnecessary use directly. They would also supplement health system performance assessments and help in targeting interventions.

Limitations

The studies suffered from various shortcomings attributable to design, methods and data. A key limitation of the studies relying on surveys is their inability to address

causality, or to link specific policies to outcomes, which is characteristic of an outcomes perspective (Lohmann & Zagel, 2018). However, this shortcoming is partly addressed through the triangulation of methods and data, which increased the robustness of the findings.

Moreover, as argued by Kelly-Irving and colleagues (2023), there are several arguments based on which focusing solely on narrowly defined causal analyses can be insufficient and even counterproductive. Health inequalities, for instance, are shaped by complex and interlinked determinants that are difficult to capture in causal models requiring explicitly defined and time-specific exposures. A focus on methodological purity restricts the research questions, leaving other questions in policy and practice without an evidence base or unaddressed in awaiting perfect causal evidence.

In this case, institutional parameters that would have allowed quantitative comparative examination of health payment and co-payment policies across countries over time are largely lacking (Waitzberg, et al., 2024b; Waitzberg, et al., 2024c). As regards medicines, even expenditure indicators lack comparability (Morgan & Xiang, 2022). Current harmonisation initiatives and indicator collections by the OECD and WHO Collaborating Centre for Pharmaceutical Pricing and Reimbursement Policies are likely to address these lacks in the future; however, the accumulation of comparable, longitudinal indicators is likely to take years.

This project used a triangulation of objective and subjective measures. Each type has strengths and limitations and, accordingly, complemented the other (Veenhoven, 2002). Register data have a lower risk of selection and recall bias; however, they are limited in assessments of care forgone or care that was not covered by the funding schemes based on which data were primarily collected. The methods also did not allow consideration of whether the healthcare used was appropriate.

Subjective measures have a direct link with peoples' satisfaction with the system and can address unmet needs, with the specific reasons for care forgone; however, they are prone to the abovementioned bias and cannot distinguish between needs and preferences (Schokkaert, et al., 2017). Subjective measures used in the studies were analysed cross-sectionally, as longitudinal data on most of the variables of interest were not available.

In these studies, methodological triangulation contributed to a more nuanced understanding of how health payments affect household economic well-being. For example, while register-based data revealed the disporportionate accumulation of health payments among older adults, survey results indicated that costs primarily act as barriers for working-age individuals. Moreover, surveys suggest that many people may experience financial strain even when they are able to cover the costs.

Notwithstanding, the studies using survey data employed statistical methods that contain limitations, potentially affecting the robustness and generalisability of

findings. In particular, Study II could have benefitted from further disentangling the complexity of competing necessities in the analyses, and it did not include correction for multiple comparisons. Study IV only included two waves available at the time of study; which challenges distinguishing effects from differences in sampling across years. Notably, the effect of survey method (internet panel versus postal survey) was relatively large in study IV, possibly because internet panellists tend to have prior experience responding to opinion surveys. Meanwhile, postal survey response rates have been declining for decades (Stedman, et al., 2019) making existing internet panels a less risky alternative. These limitations should be acknowledged in further studies.

Legislative static microsimulation can isolate the effects of policies from other macroeconomic and demographic changes; however, it requires the unrealistic assumption that everything else remains unchanged (Moisio, et al., 2016). Further limitations of the current project include lacking data relevant to determining eligibility for means-tested social assistance, assuming full take-up, and not being able to estimate behavioural effects. Furthermore, the focus of the studies was on direct health payments. The distributional effects of in-kind transfers were not assessed, but they remain an important area for further research.

5.3 Lessons for policy and research

In Europe, an increasing proportion of ageing populations live large parts of their lives with chronic disease, attributed to population ageing, genetic predispositions, and personal behaviours that are heavily influenced by, e.g., obesogenic environments (Busse, et al., 2010; Swinburn, et al., 2019). A key question for policy is how to maintain the credibility and legitimacy of welfare state institutions while balancing the increasing gap between technological opportunities and economic constraints (Ferrera & Rhodes, 2000; Jackson, 2019; Walker, et al., 2021; OECD, 2017; OECD, 2023).

Building from the theoretic framework of conditions for welfare state legitimacy (Roosma, 2021), the results of the dissertation give rise to observations related to this question. First, redistributional justice entails questions of who benefits and who contributes. Based on the studies in this dissertation, health payments are skewed towards older adults; however, financial hardship concentrates to workless, long-term sick and unemployed households, reflecting popular political ideas driving exclusionary welfarism.

Nevertheless, in seeking short-term savings, longer term implications should be considered (Ahola-Launonen, 2016). Without adequate access to healthcare, it will become even more difficult for individuals to sustain working ability through periods of unemployment and sickness. Given the increasing prevalence of mental health

problems among youth, and the precarity of work, these patterns go against the social investment ideas of promoting the productivity of individuals and increasing society's resilience (WHO Regional Office for Europe, 2008; Morgan & James, 2022).

Given that recommodification is increasingly shaping the restructuring of ageing welfare states, the assessment of economic well-being should acknowledge the consequences of growing individual responsibility for goods and services that were previously publicly funded or subsidised. Health spending adjusted income measurements, as proposed in study I, are useful in examining the allocation and accumulation of health payments; however, they pose conceptual challenges as poverty indicators. Adjusting only for health payments while excluding other essential costs would be difficult to justify, particularly in the light of current debates on energy and food poverty (Fry, et al., 2023). Nevertheless, food and energy are already considered in material deprivation indicators (Eurostat, 2025). Therefore, incorporating cost-related barriers to healthcare goods and services could add a valuable dimension to poverty assessments.

Second, procedural justice concerns the efficiency and effectiveness of implementation. If subjective measures are viewed from the perspective of performance evaluation, they can inform about the credibility and perceived fairness of policies (Kumlin, 2004; Kumlin & Haugsgjerd, 2017; Kangas, et al., 2022; van Oorschot & Meuleman, 2012). The results of this dissertation suggest broad dissatisfaction with health payments and scepticism regarding the fairness of medicine reimbursements in Finland. Through the interactions of various legitimacy mechanisms, an inability to provide the expected benefit is hypothesised to fuel distrust and pessimistic expectations and to decrease political legitimacy (Haugsgjerd & Kumlin, 2020). Thus, monitoring the realisation of social rights and legitimacy implications are important areas for future research. Further studies could also provide a more nuanced understanding of how fairness perceptions are linked with financial burdens, in particular, whether those exposure to financial burden increases the probability to negative opinions about the fairness of the system.

An important perspective that remains underexplored in the present work is gender. Previous research has identified important gender disparities in healthcare, health seeking behaviour and health, as well as poverty outcomes and experiences (Vlassoff & Moreno, 2002; Isola, 2019). Furthermore, gender relations and welfare state structures mutually shape one another (Orloff, 1996).

In the included studies, only study II presented results separately for men and women, revealing that hardship was slightly more commonly reported among women. Differences also emerged in the groups most affected. Notably, the study applied sex derived from administrative registers, rather than self-assessed gender identity. Furthermore, studies I and III applied household-level income concepts,

which might not accurately reflect women's available resources when financial dependency is not accounted for (Corsi, et al., 2016). Further research is needed to understand both the underlying causes and the consequences of sex and gender differences.

5.4 Conclusions

This dissertation was set out to study the interplay of health payments and households' economic well-being. Its articles approached the topic through the lens of decommodification and provided a triangulation of new insights on the complementary effects of health payments and social policies. The empirical studies in this dissertation contribute to the existing literature in four main ways.

First, the studies showed that health payments in Finland affect households' economic well-being and access to healthcare goods and services negatively and that these negative implications concentrate in population subgroups that are at high risk of poverty and who have high need due to morbidity and/or age. Taking a comparative approach, the studies suggest that healthcare is commodified to a higher degree in Finland than in neighbouring Northern European welfare states. This evidence is envisaged as contributing to societal debate on what is an adequate level and allocation of market risk on individuals.

Second, in terms of equity implications, the studies suggest that austerity coincided with increasing gaps between the worse and better off population subgroups. This finding aligns with and supplements previous evidence of the effects of austerity in Europe, and it suggests that increases in health payments had a role in the negative implications, particularly when increases co-occurred with decreasing replacement rates of cash transfers. To inform decision-making in the future, the developed microsimulation module is envisaged as enabling prospective evaluations of the combined effects of health payment policies and tax-benefit policies on household income distributions, as well as spill-over effects.

Third, the studies showed that medicines play an important role in economic hardship; thus, using access to medical care as a proxy may not give a balanced assessment of financial protection. The use of objective and subjective measures complemented each other and revealed that different population subgroups may appear at risk when using different methods. Study III also revealed limitations in terms of using EU-SILC unmet need for medical examination as an indicator of protection in these countries.

Fourth, the survey responses indicated widespread negative experiences related to health payments in Finland and mixed opinions regarding the fairness of medication reimbursements, with increasing scepticism coinciding retrenchment. Together with recent national evidence on eroding trust of the healthcare system

(Halonen, et al., 2025), the findings raise questions about the legitimacy of the reforms.

In sum, the results of this dissertation highlight the complementary effects of policies on households' economic well-being: they can offset or exacerbate each other's consequences. In the Finnish context, health payment increases seemed to contribute to the negative implications of austerity for vulnerable groups while the majority remained protected from hardship.

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