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# The impact of local social spending on the political dissatisfaction of economically deprived individuals — Evidence from Dutch municipalities

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Previous research demonstrates that local conditions are highly visible and proximate for citizens and thus have a distinct impact on political attitude formation. However, we still lack knowledge of the interplay of the local and the individual level. In this study, we examine how a specific group (economically deprived individuals) responds to local social spending in the formation of political dissatisfaction. Research at the national level has provided contradictory findings concerning the influence of social policy measures. To shed new light on this interrelationship, we investigate the extent to which the individual link between economic hardship and political dissatisfaction is moderated by the level of local social spending. To empirically gauge this, we use panel data from the Netherlands merged with municipality-level data on social spending. Results from multilevel regressions reveal that the positive relationship between economic hardship and political dissatisfaction is mitigated in municipalities with higher levels of local social spending, suggesting a resource effect. Changes in the economic situation over time play a crucial role in this regard since the connection between economic hardship and political dissatisfaction is particularly pronounced for individuals in constant economic hardship.

## KEYWORDS

local social spending, economic hardship, political dissatisfaction, multilevel regression, Netherlands

## 1 Introduction

Providing welfare and reducing inequalities within a society are at the heart of social policy. The latter is particularly relevant for individuals in difficult economic situations who rely on governmental support to make ends meet. In addition, social policies shape individuals' political attitudes (Kumlin, 2014), such as political dissatisfaction. These three components—individual economic hardship, social policies, and political dissatisfaction—are assumed to be closely intertwined. Previous research at the individual level suggests a link between economic hardship and expressions of political dissatisfaction, such as voting for radical political parties or engaging in political protest (Abou-Chadi and Kurer, 2021; Rooduijn and Burgoon, 2018). The broader socio-political context is suspected to influence this individual relationship.

Analyses at the national level, however, provide contradictory results regarding the influence of welfare contexts. On the one side, for instance, Vlandas and Halikiopoulou (2022) show that welfare state policies reduce the propensity to support radical right

parties—a potential expression of political dissatisfaction. On the other side, [Giustozzi and Gangl \(2021\)](#) illustrate that political distrust of individuals in unemployment is more pronounced in more generous welfare states than in less generous ones. Hence, there is empirical evidence that more generous welfare policies might either reduce or foster expressions of political dissatisfaction of individuals in economic hardship. Given these mixed findings at the national level, we argue that it is crucial to investigate this interrelationship at the local level. Using a more proximate level has the advantage of examining the relationship between economic hardship and political dissatisfaction within one welfare state and, of being able to detect and analyze local differences. This is vital, since local social contexts, such as municipalities, provide filters through which individuals gather information, which they in turn use to form political attitudes ([MacKuen and Brown, 1987](#)). Thus, our study aims to disentangle the interplay between the individual and the local level by asking: Can local social spending mitigate the impact of economic hardship on political dissatisfaction?

We focus our analyses on the Netherlands, which is well suited to our study for two reasons. First, the Dutch welfare state can serve as an example for other European welfare states as it comprises liberal, conservative, and social democratic elements ([Van Oorschot et al., 2012](#)) and reflects the general trend of decentralization in European welfare states ([Martinelli, 2017](#)). Relatedly, the Dutch welfare system can be characterized as comprehensive with above-average levels of social spending compared to other EU countries ([Van Gerven, 2020](#)). According to [Seawright and Gerring's \(2008\)](#) typology, the Dutch welfare system is a typical case of a Western European welfare state. Second, the Dutch welfare system has undergone significant reforms over the past 20 years, with decentralization being a central component. In the course of these reforms, Dutch municipalities gradually received more competencies, especially regarding the provision of social assistance ([Van Gerven, 2020](#); [Van Oorschot, 2009](#)). This greater autonomy at the local level concerning social policy measures may lead to considerable local differences, which can be examined in terms of their influence on the individual relationship under study.

To empirically assess our research question, we employ the Netherlands Longitudinal Lifecourse Study (NELLS; [Tolsma et al., 2014](#)). Using these panel data allows us to probe the link between economic hardship and political dissatisfaction, and to analyze potential effects of changing situations of economic hardship between the survey waves. Moreover, the dataset allows for the addition of fine-grained data on social spending in Dutch municipalities, which we use to analyze the contextual dependence of the individual association.

This study makes three important contributions to existing research. First, it provides a thorough analysis at the local level and is thus able to elucidate the influence of local social spending. Second, unlike previous research, this paper scrutinizes local differences within one comprehensive welfare state by holding the overarching characteristics of the welfare system constant and focusing exclusively on local variations. Third, the paper provides empirical evidence by using panel data enriched with detailed information on local social spending. Previous research in this field using individual-level panel data largely focused on the effects of individuals' evaluations of social policies on political trust

([Kumlin et al., 2024](#); [Haugsgjerd and Kumlin, 2020](#)) or on how changes in individuals' economic situations influence social policy preferences ([Margalit, 2013](#)). By combining individual-level panel data with data on local social spending, this paper sheds light on the influences of the local context on the political attitudes of individuals in dynamic economic situations.

The results of multilevel regression models show that the experience of economic hardship leads to higher levels of political dissatisfaction. In addition, we find that local levels of social spending mitigate political dissatisfaction, showing that economically deprived individuals have systematically lower political dissatisfaction in municipalities with higher social spending compared to those with lower social spending. Further analyses demonstrate that political dissatisfaction is particularly high among individuals who are economically deprived for a long period or who experience severe economic difficulties.

## 2 Theoretical background

### 2.1 The individual relationship: economic hardship and political dissatisfaction

Economic hardship is understood as a difficult financial situation in which individuals may find themselves, for example when they have difficulties making ends meet due to a lack of resources ([Visser et al., 2014](#); [Whelan et al., 2001](#)). Economic hardship places considerable pressure on individuals and might change their overall living conditions and opinions, including political attitudes, such as political dissatisfaction. The conceptualization of political dissatisfaction is closely related to Easton's concept of political support, which distinguishes between specific and diffuse political support. Political dissatisfaction taps into both types; citizens may be dissatisfied with the political system, its actors, its outputs, and/or its performance (specific political support), or they may have a more general, deeply rooted dissatisfaction with the political system (diffuse political support; [Easton, 1975](#)). In this respect, political dissatisfaction can be interpreted as indicator of diffuse political support ([Christensen, 2016](#)). The potential causes and consequences of political dissatisfaction have constantly been the subject of research (e.g., [Hay, 2007](#); [Jennings et al., 2017](#)) since political support is a prerequisite for stable democracies ([Dalton, 1999](#)). One strand of the literature concerns the economic causes of political dissatisfaction (e.g., [Bauer, 2018](#); [Hacker et al., 2013](#)), which we consider in this paper.

We assume that individuals in difficult economic situations are more inclined to be dissatisfied with politics. Previous research on economic voting frequently downplayed the effect of personal economic situations, arguing that citizens rely on evaluations of the economy as a whole, so-called sociotropic considerations when making political choices ([Bélanger and Nadeau, 2014](#); [Kinder and Kiewiet, 1979](#)). More recent studies, nevertheless, provided evidence that personal economic experiences also matter for individuals' political attitudes ([Hacker et al., 2013](#); [Tormos, 2019](#); [Wroe, 2016](#)). We presume that the personal economic situation matters for political dissatisfaction. Two major theoretical

explanations, based on psychological mechanisms, underpin this assumption.

The first explanation relates to satisfaction in general. Situations of economic hardship, such as unemployment, negatively affect an individual's life satisfaction and personal wellbeing (Anderson and Mendes, 2005; Bauer, 2018). If individuals are not satisfied with their personal situation, they might hold governmental authorities accountable for their unsatisfactory life situation, which in turn may increase their political dissatisfaction (Esaïasson et al., 2020; Singer, 2018).

The second explanation concerns the situation of psychological distress caused by economic difficulties. Economic hardship poses considerable stress on individuals since they lack sufficient financial resources to meet their basic needs. This situation may lead to worries and anxieties, and influence individuals' political attitudes (Hacker et al., 2013; Reeskens and Vandecasteele, 2017), as they may hold political authorities responsible for making their economic situation more secure. If these demands for economic security are unmet, political dissatisfaction seems more likely, which is closely related to the attribution of blame. Economic voting theory suggests that people who experience a deteriorating economic situation will vote against the incumbent government and hold it accountable, blaming it for the poor economic situation (Johnston and Pattie, 2002; Lewis-Beck and Stegmaier, 2019). This can be transferred to the context of political dissatisfaction. If economically deprived individuals blame the government for their poor economic situation, they are likely to be politically dissatisfied. Hence, we hypothesize as follows:

*Hypothesis H1: Individuals experiencing economic hardship are more likely to express higher levels of political dissatisfaction.*

However, economic situations are not stable and subject to change. In this sense, a potential change in the individual economic situation could influence the expression of political dissatisfaction. Research on the consequences of the Great Recession has shown that a deteriorating economic situation and increasing financial worries change individuals' political attitudes and reduce political trust (Hacker et al., 2013; Tormos, 2019). This means, that a change in an individual's economic situation might lead to distinct levels of political dissatisfaction compared to those who experience persistent economic hardship. Therefore, we will consider possible changes in the individual situation of economic hardship.

## 2.2 The role of the local context: the moderating effect of local social spending

Thus far, we have argued that individual economic hardship is positively associated with political dissatisfaction through various psychological mechanisms. Previous research demonstrated that the relationship between economic hardship and expressions of political dissatisfaction is influenced by the national welfare context (Giustozzi and Gangl, 2021; Vlandas and Halikiopoulou, 2022). In this sense, the individual relationship between economic hardship and political dissatisfaction is expected to vary depending on contextual conditions, in particular on the generosity of the welfare state. However, since there is empirical evidence of both mitigating and reinforcing moderation by national welfare state policies

(Marx and Nguyen, 2016; Giustozzi and Gangl, 2021), the specific direction of this contextual moderation remains uncertain.

We argue that narrowing the focus from the national to the local level can provide new insights regarding this moderation for two reasons. First, local contexts—such as municipalities—are more proximate to individuals and constituting factors for the formation of political attitudes and behaviors (e.g., Dinesen and Sønderkov, 2015; McKay, 2019). Thus, considering this lower level facilitates a deeper understanding of the role of local social policies for political dissatisfaction. Second, by focusing on local variations in social policies, which can result from decentralized competencies to municipalities (Van Gerven, 2020), we analyze differences within a single welfare state, consequently keeping the general characteristics of the system constant. Focusing on the lower level of municipalities, therefore, allows the empirical investigation of the underlying effects of these local variations in social spending.

The Dutch welfare system is a suitable case for this endeavor. Over the past two decades, the Dutch welfare state has undergone paradigmatic changes with decentralization being one guiding principle of these reforms (Van Gerven, 2020). With these reforms, Dutch municipalities constantly gained more competencies regarding social policies. For example, Dutch municipalities are responsible for administering social assistance—the safety net for all citizens who have little or no income from work or other benefits (Van Oorschot, 2009). With the Social Support Act (2007), Dutch municipalities became responsible for administering tax-based funds for social assistance.<sup>1</sup> Specifically, municipalities are tasked to provide support to citizens in economic hardship by assessing their individual needs and potential (in)formal solutions in so-called kitchen table talks (Van Gerven, 2020). In this context, Dutch municipalities have considerable room for maneuver in determining rules for the applicability and amount of social assistance benefits (Van Gerven, 2020; Van Oorschot, 2009). Indeed, NELS data demonstrate that the amount of local social spending per capita varies considerably between municipalities (see Appendix A4).

Nevertheless, how such differences in local social spending between municipalities shape the individual relationship between economic hardship and political dissatisfaction remains unclear. In general, social spending affects individuals' evaluations of the political system as a whole (Kumlin, 2014). More specifically, according to policy feedback theory (see Mettler and SoRelle, 2018 for an overview), which examines the dynamic interaction between politics, policies, and policy recipients, there are different ways in which policies can affect citizens' political attitudes. Pierson (1993) proposed resource and interpretive effects as potential mechanisms through which policy feedback influences individuals' political attitudes. Apart from that, normative effects of policies have been introduced as an additional mechanism (Ziller, 2019). Generally speaking, resource effects imply that individuals gain material profit from a policy, which shapes their evaluation of

<sup>1</sup> The Social Support Act of 2007 was replaced by the 2015 Participation Act which further increased the decentralization of Dutch social policy to the municipality level (Van Gerven, 2020). However, this reform does not fall into the period analyzed and is therefore not considered here.

this policy and the government. Concerning interpretive effects, the material profit is replaced by a more general feeling of government responsiveness to own preferences. Normative effects, in contrast, function differently: policies can create social norms for socially acceptable behavior (Ziller, 2019), which may have political consequences. Social policies, such as social assistance, are highly visible for citizens, and therefore highly likely to affect citizens' political attitudes (Ziller, 2019). Regarding their influence on the relationship between economic hardship and political dissatisfaction, we consider all three mechanisms.

First, the receipt of social spending, like social assistance, generates *resource effects* that increase political satisfaction by creating feelings of gratitude toward the state. Second, social policies shape perceptions of the extent of government responsiveness, referred to as *interpretive effects*. Thus, higher levels of social spending may lead to a greater attribution of responsibility to the welfare system. Third, social policies establish social norms within a society, leading to *normative effects*. For example, in extensive welfare states, the prevailing norm is to contribute to the welfare system by paying taxes. Being unemployed is therefore highly stigmatized compared to countries with rudimentary welfare programs (Larsen, 2008), and may lead to political dissatisfaction and social disengagement (Oskarson, 2007).

Previous research has mainly focused on investigating resource effects, examining the relationship between social policies and political satisfaction. Studies show that generous welfare state programs lead to higher levels of satisfaction with the government (Algan et al., 2017; Marx and Nguyen, 2016) by creating a sense of security and care for citizens (Sirovátka et al., 2019; Vlandas and Halikiopoulou, 2022). In addition, such programs reduce economic hardship and insecurity through direct welfare benefits (DiPrete, 2002; Visser et al., 2014). However, recent comparative research by Giustozzi and Gangl (2021), focusing on unemployed individuals, revealed ambiguities about the direction of the effect. They found that political distrust among the unemployed is more pronounced in generous welfare states than in less generous ones. This unexpected effect is called the “welfare paradox.” The authors suggest non-economic processes, like status deprivation, as a potential explanation for this paradoxical finding. Applying policy feedback theory in this context, one could argue that the expected positive resource effect is overlaid by more latent effects, namely normative and interpretive effects.

Given previous evidence and the three effects proposed by policy feedback theory, the level of local social spending might either have a mitigating or an amplifying effect on the relationship between economic hardship and political dissatisfaction. The resource effect argument suggests that extensive social policies can create a sense of state responsibility and care among citizens, leading to less political dissatisfaction in situations of economic hardship. In addition, if we consider interpretive effects, higher levels of social spending may increase feelings of responsiveness of the welfare system to individual preferences and needs. Accordingly, both mechanisms—resource and interpretive effects—should lead to a weaker relationship at the individual level in municipalities with higher levels of social spending. Local social policies are expected to be more proximate and visible to citizens, thus occurring at the local level. For instance, Dutch

citizens must engage directly with local authorities in “kitchen table talks” to assess their need for social assistance. Such individuals might directly experience material benefits as well as a feeling of governmental care and responsiveness to personal needs. Thus, we assume:

*Hypothesis H2a: In municipalities with higher levels of local social spending, the positive effect of economic hardship on political dissatisfaction is mitigated.*

Conversely, the normative effect argument works in the opposite direction, as extensive social policies increase the social norm of contributing to the welfare system and promote feelings of stigmatization among those experiencing economic hardship. According to prior research, social policies can shape public attitudes by emphasizing societal norms such as being employed or government responsibility (Svallfors, 2007, 2010). The Dutch welfare system increasingly focuses on “work, activation, and individual responsibility” (Van Oorschot, 2009, 373f). Hence, in extensive welfare states being at work and taking responsibility for the own wellbeing can be seen as social norms (Van der Wel and Halvorsen, 2015). Failure to comply with these norms may increase political dissatisfaction among the economically deprived. This aligns with findings that normative pressure within welfare systems emphasizing policies can exacerbate dissatisfaction among those unable to meet the social norms (Mau, 2004; Stavrova et al., 2011). We consider this mechanism to be particularly relevant in municipalities with higher levels of social spending since individuals are more confronted with their inability to comply with the social norm to contribute to this extensive social spending. Consequently, this mechanism suggests that the positive effect of economic hardship on political dissatisfaction is amplified in municipalities with higher levels of social spending, which leads us to hypothesize:

*Hypothesis H2b: In municipalities with higher levels of local social spending, the positive effect of economic hardship on political dissatisfaction is amplified.*

As previously mentioned, a change in an individual's economic situation might lead to distinct levels of political dissatisfaction compared to those who are experiencing persistent economic hardship or no economic hardship at all. If such changes at the individual level matter, it is likely that they will also affect the contextual influence of local social spending. Again, research at the national level on the Great Recession demonstrates that citizens reacted to a deteriorating economic situation with lower levels of political trust if governments did not provide adequate social protection measures (Haugsgjerd, 2018). Apart from that, considering changes in the individual economic situation and their effect on the interplay between economic hardship, political dissatisfaction, and local social spending allows for a closer investigation of their interrelationship and the potential underlying mechanism. For example, lower levels of political dissatisfaction among individuals constantly in or entering economic hardship living in municipalities with higher levels of social spending would support a resource effect, since such individuals are likely to consider their material benefits when evaluating the political system. Conversely, higher levels of political dissatisfaction among individuals constantly in or entering economic hardship living in municipalities with higher levels of social spending would

argue for a normative effect, as such individuals are likely to feel stigmatized in such contexts and, thus, express higher levels of political dissatisfaction.

### 3 Empirical analysis

#### 3.1 Data and variables

For the empirical analysis, we use two waves (2009 and 2013) of the Netherland Longitudinal Lifecourse Study (NELLS; Tolsma et al., 2014). This survey data is based on a two-stage sampling procedure and importantly, facilitates the addition of contextual data by providing geocodes at the municipality level. Due to the sampling strategy, the sample represents a population that tends to be young (aged between 15 and 45) and oversamples individuals of Moroccan and Turkish origin. Our analytical sample includes only individuals who participated in both waves and who did not move between the two waves, as relocation might affect the hypothesized relationship. This left us with a sample size of  $N = 1,546$  respondents ( $N = 3,092$  respondents for models using both waves) living in 32 different municipalities.

Except for the variable of local social spending, the context variables used were pre-merged in the NELLS dataset by using the 2009 and 2012 versions of the “Wijk-en Buurkaart” (“District and neighborhood map”). Local social spending (from 2010 for the first wave and from 2014 for the second wave) was derived from data provided by Findo—Data Financiën Decentrale Overheden.<sup>2</sup>

Our dependent variable, *political dissatisfaction*, is captured by the level of agreement with the statement “criticizing politics is meaningless because they do not care” on a 5-point Likert scale (from 1 “strongly disagree” to 5 “strongly agree”). This item refers to a general feeling of dissatisfaction with politics, which is not directed at a specific political actor or institution and does not refer to specific demands of citizens. Instead, it covers a general feeling of alienation and disenchantment with politics, which thus can be seen as an aspect of diffuse political support.

The central independent variable at the individual level is an index relating to specific situations and behaviors of individuals experiencing economic hardship. Specifically, respondents were asked whether they had experienced the following difficulties in the last three months: (1) being unable to replace broken things, (2) having to borrow money for necessary expenses, (3) lagging behind with rent/mortgage or utilities, (4) creditors/ushers at the door, and (5) difficulty to make ends meet. They were also asked (6) whether they had borrowed or received 500 € or more from their parents in the past 12 months. Based on these items, we created the dichotomous variable *economic hardship*, which was coded 1 (for “yes,” there is a situation of individual economic hardship) if a respondent answered “yes” to one of the items. The variable was coded 0 if the respondent answered “no” to all of the items above. The items are sufficiently internally consistent with a Cronbach’s alpha of  $\alpha = 0.70$  for wave 1 and  $\alpha = 0.75$  for wave 2. Furthermore, a factor analysis revealed that the items are unidimensional. In further analyses, we transformed these items into an additive index

ranging from 1 to 6, reflecting the number and thus the degree of economic hardship.

In additional analyses focusing on how changes in economic situations influence political dissatisfaction, we used a transformed independent variable: the *transition of the economic situation*. Based on the dichotomous variable of *economic hardship* described above, we created a categorical variable that captures the changes in the economic situation between wave one and wave two. The variable includes the following four categories: (1) no hardship (no situation of economic hardship reported in both waves), (2) hardship (situation of economic hardship reported in both waves), (3) transition into hardship (no economic hardship reported in wave one, but in wave two), and (4) transition out of hardship (situation of economic hardship reported in wave one, but not in wave two).

As an indicator of local social policy at the contextual level, we use the amount of *local social spending per capita* within a municipality (measured per inhabitant in 1,000 €), which includes social spending in those areas that can be considered as either distributive or redistributive and are thus the most important for persons in need. Specifically, the following areas are covered: transport, economy, education, sports, welfare, healthcare, and housing. Factor analysis revealed that all components load on one factor. For the robustness analysis, we employ an additional measure that indicates the amount of local social spending on unemployment and social assistance per inhabitant in 1,000 €.

Since the relationship between economic hardship, political dissatisfaction, and local social spending might be confounded by a number of characteristics at the individual as well as the contextual level, we include several mechanism-relevant control variables in our models. At the individual level, we included socio-demographic characteristics, namely *age* in years, *gender* (1 “female,” 0 “male”), *education* (1 “low education,” 2 “medium education,” 3 “high education”), *unemployment* (dichotomous variable with 1 “unemployed”), and *personal income* (measured with 16 categories from low to high income as net income per household in € per month). Moreover, we use *migration background* (0 “Dutch origin,” 1 “self-reported migration background”) to account for the oversampling of respondents of foreign origin. In line with previous research, we also include respondents’ *social life satisfaction* (1 “not at all satisfied” to 10 “very satisfied”). Satisfaction with social life is used as a proxy for satisfaction with life in general, which is assumed to be influenced by situations of economic hardship and to affect dissatisfaction with politics (Anderson and Mendes, 2005; Bauer, 2018). Additionally, we control for *political interest* (1 “not interested,” 2 “quite interested,” 3 “very interested”), which has been shown to influence individuals’ dissatisfaction with politics (Christensen, 2016; Dahlberg et al., 2015).

As context-level control variables, we employ several characteristics that might confound the level of as well as the effects of local social spending. These characteristics are *degree of urbanization*, the *average local income*, the *share of non-Western ethnic origin residents*, and the *share of households at risk of poverty* at the municipality level. Overall, this set of contextual covariates is included to control for compositional effects that may arise from systematic differences between the municipalities and their levels of local social spending. In particular, *the degree of*

<sup>2</sup> See [www.findo.nl](http://www.findo.nl).

*urbanization* (ranging from 1 to 5, with higher values indicating more urbanization) is used to account for differences between rural and urban municipalities, as research has shown that the effects of social spending may be unequally distributed between rural and urban areas within a country (Zwiers and Koster, 2015). *The share of non-Western ethnic origin residents* (in percent) is also included, as there is empirical evidence of a link between ethnic diversity and the total amount of social spending (Römer, 2022; Steele, 2016) also at the local level (Ferwerda, 2021). The *average local income* was measured per inhabitant in 1,000 €, accounting for economic inequalities between municipalities.<sup>3</sup> Previous research demonstrated that economic inequality is an important predictor of individuals' social spending demands and preferences (Finseraas, 2009; Schmidt-Catran, 2016), and thus might also influence how satisfied individuals are with related policies. The *share of households at risk of poverty* is also included in the models to control for the number of social benefit recipients in a municipality. This controls for systematic differences in total social spending due to varying proportions of social assistance recipients in two ways: first, because the central independent variable of local social spending is measured per capita, and second, by controlling for the number of people eligible for social assistance.

All metric variables, including the dependent variable, are z-standardized to improve the comparability of the effect sizes between the models. Descriptive statistics and a correlation matrix can be found in Appendices A1 and A2. We provide our syntax for replications in the HavardDataverse: <https://doi.org/10.7910/DVN/P4VNZN>. The dataset is geocoded and can only be accessed on request (see replication files for more information).

## 3.2 Methods

The analytical procedure consists of three steps, focusing on multilevel regressions to test our hypotheses. First, we present descriptive statistics showing the spatial variance of political dissatisfaction between economically deprived and non-deprived people in Dutch municipalities.

Second, we run multilevel regressions to examine the relationship between economic hardship and political dissatisfaction and the influence of local social spending. We use multilevel models with three levels, where the observations from the two waves are clustered within individuals, which are nested within municipalities. The time dimension is captured by using dummy variables for the waves. We use cluster-robust standard errors to avoid heteroscedasticity and apply weights to capture the oversampling of foreign-born individuals in the sample. Model M1 tests the individual relationship between economic hardship and political dissatisfaction, controlling for important covariates at both individual and contextual levels (H1). Models M2 and M3 use a split-sample approach to test whether the relationship varies systematically between municipalities with below-median ( $m = 2,243$  € per capita) and above-median local

social spending per capita (according to H2a and H2b). In model M4, we test this contextual dependence by including a cross-level interaction between economic hardship and local social spending, allowing us to observe how local social spending moderates the individual relationship.

Third, we investigate how individual transitions in the economic situation between the two waves affect political dissatisfaction depending on local social spending. Again, we use multilevel models, but only the second wave, to test how transitions in the economic situation (e.g., transition into or out of economic hardship) between the waves shape political dissatisfaction. Analogous to the previous analyses, we first test the individual relationship (M5), continue with the split-sample approach to compare the individual effect between municipalities with differing levels of local social spending (M6 and M7), and finally include a cross-level interaction between the transitions of economic hardship and political dissatisfaction (M8).

In an additional analysis (see Appendices A5 and A6), we examine the central relationship by using the additive index that captures the degree of economic hardship.

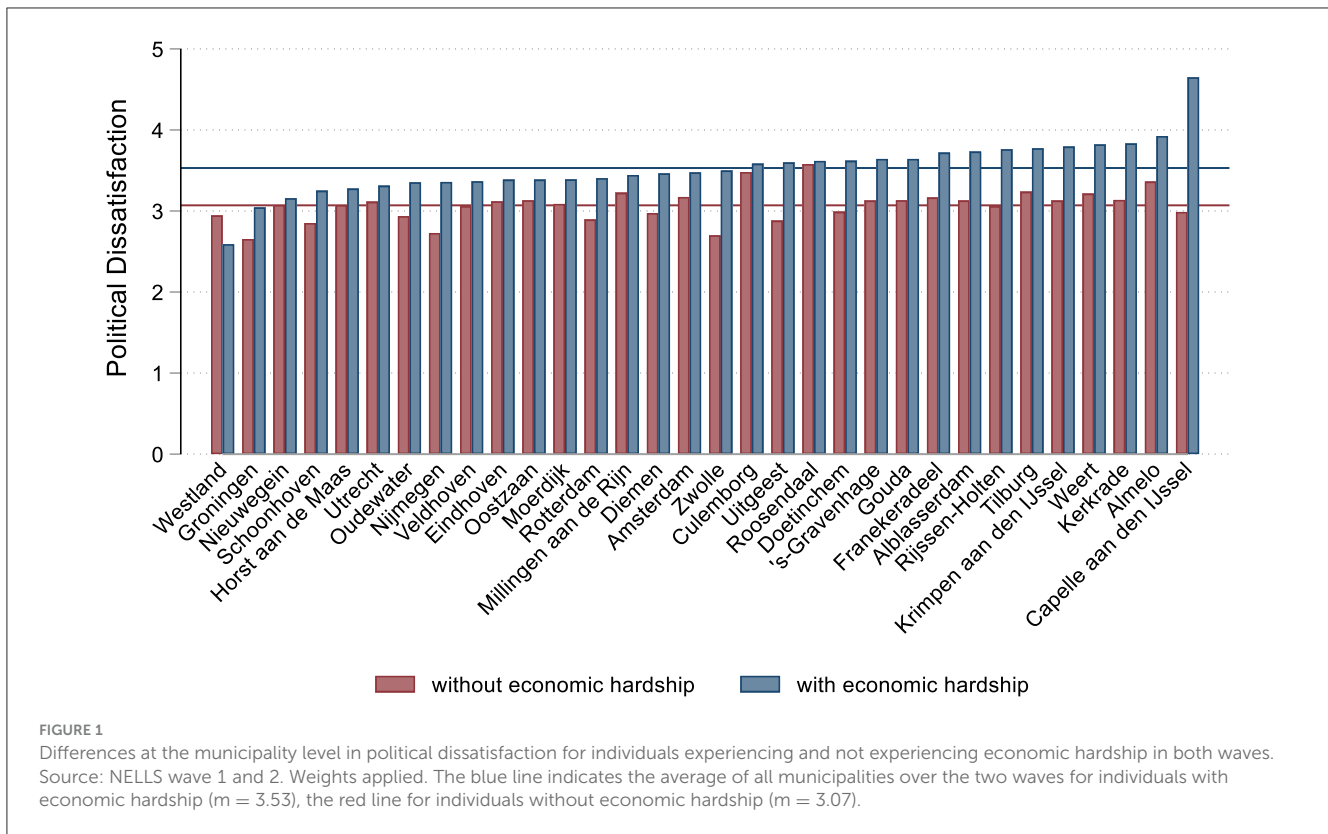
## 3.3 Results

First, we examine descriptively the spatial and temporal differences in political dissatisfaction and local social spending in the Netherlands. Concerning spatial variance, political dissatisfaction ranges from 2.82 (Groningen) to 3.58 (Almelo), with an overall average of 3.18 across both waves (see Appendix A3). In addition, political dissatisfaction increased slightly in all municipalities between 2009 and 2013, from 3.13 to 3.23. Local social spending also varies considerably between municipalities, from around 1,000 € per capita (Uitgeest) to around 5,000 € per capita (Utrecht, see Appendix A4). When comparing people with and without economic hardship at the local level regarding political dissatisfaction, there are significant differences between the two groups across municipalities (see Figure 1). Thus, we find systematically higher levels of political dissatisfaction among people experiencing economic hardship in almost all municipalities. Figure 1 also shows that the difference between the two groups varies substantially across municipalities. Subsequently, we investigate to what extent this spatial variation in political dissatisfaction among people experiencing economic hardship can be explained by the level of local social spending.

Therefore, our second step consists of multilevel analyses to examine the individual relationship between economic hardship and political dissatisfaction and the contextual moderation by local social spending (see Table 1). The null model (M0), with an intraclass correlation coefficient (ICC) of 0.019, indicates that 1.9% of the variance in political dissatisfaction is attributable to variances between municipalities.<sup>4</sup> In model M1, we test

<sup>3</sup> Initially, we included unemployment at the municipality level as a covariate, however, it showed no substantial effect. Since it did not improve our models, and for efficiency reasons, we decided not to include it.

<sup>4</sup> Although the ICC can be considered small (Hayes, 2006), it is important to adapt the modeling strategy to the spatially clustered nature of the data, as estimating the coefficients of contextual variables requires some degree of adoption, such as multilevel modeling (Snijders and Bosker, 2012). Nevertheless, in Appendices A9 and A10, we present the main models



H1 at the individual level by simultaneously controlling for relevant covariates at the individual and contextual levels. The coefficient of our central independent variable, economic hardship, indicates a statistically significant and positive relationship. Thus, people experiencing economic hardship show systematically higher levels of political dissatisfaction than those without economic hardship. The effect size of 0.17 standard deviations can be considered small, nevertheless, the effect is consistent with H1.

The included covariates point in the expected directions. Higher levels of satisfaction with social life and higher levels of political interest are significantly negatively associated with political dissatisfaction. In addition, people of non-Dutch origin also show significantly higher levels of dissatisfaction. Regarding the effect of education, we find that compared to low-educated people, people with a medium level of education show higher levels of dissatisfaction, while people with higher education are less dissatisfied. At the contextual level, a higher average local income, i.e., a more prosperous economic situation, has a statistically significant negative effect on political dissatisfaction. A higher proportion of

residents of non-Western origin is statistically significantly associated with higher levels of political dissatisfaction. By contrast, a higher share of households at risk of poverty is statistically significantly associated with lower levels of political dissatisfaction.

M2 and M3 test our hypotheses at the contextual level (H2a and H2b), i.e., whether the positive individual relationship between economic hardship and political dissatisfaction differs systematically according to the contextual level of local social spending, using a split-sample approach. M2 is based on all municipalities with local social spending *below* the median ( $m = 2,243$  € per capita) and M3 on all municipalities with local social spending *above* the median. The effect of the central independent variable, economic hardship, varies considerably between the models, with the coefficient in municipalities with higher social spending being larger than the coefficient in municipalities with lower levels of social spending.

This finding is also confirmed and classified as statistically significant in M4 including a cross-level interaction. Similar to the split-sample results, the negative interaction term indicates that the positive correlation between economic hardship and political dissatisfaction decreases significantly as local social spending increases. To further illustrate this result, [Figure 2](#) depicts the predicted values of political dissatisfaction as a function of the contextual level of local social spending for people with and without economic hardship. It appears that the difference between the two groups in areas with low levels of local social spending is around 0.25 standard deviations and is statistically significant. However, this statistically significant

using OLS regression instead of multilevel models. The results confirm the main models in [Tables 1](#) and [2](#), especially at the individual level. At the contextual level, however, the estimates and significance levels vary because OLS regression models do not take into account the hierarchy of the data structure and are therefore unable to provide unbiased and efficient estimates.

TABLE 1 Multilevel regression results of economic hardship on political dissatisfaction depending on local social spending.

	(M0)	(M1)	(M2)	(M3)	(M4)
	Null model without predictors	All municipalities	Only municipalities with below-median local social spending	Only Municipalities with above-median local social spending	All Municipalities with cross-level interaction
<b>Individual level</b>					
Economic hardship (1 = yes)		0.171*** (0.049)	0.216*** (0.045)	0.149* (0.069)	0.173*** (0.049)
Gender (1 = female)		-0.048 (0.049)	-0.115 (0.077)	-0.009 (0.061)	-0.049 (0.049)
Age		0.048 (0.025)	0.065 (0.039)	0.043 (0.034)	0.048 (0.025)
Unemployment (1 = yes)		0.109* (0.045)	0.103 (0.064)	0.107 (0.061)	0.110* (0.044)
Personal income		-0.031 (0.029)	-0.020 (0.045)	-0.037 (0.040)	-0.032 (0.029)
Social life satisfaction		-0.055** (0.018)	-0.003 (0.023)	-0.071** (0.023)	-0.055** (0.018)
Political interest		-0.127*** (0.017)	-0.107** (0.035)	-0.136*** (0.015)	-0.127*** (0.017)
Migration background (1 = yes)		0.305*** (0.056)	0.099 (0.097)	0.317*** (0.070)	0.305*** (0.056)
Education Ref.: Low education		0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Medium education		0.238** (0.092)	0.004 (0.273)	0.321*** (0.096)	0.236* (0.093)
High education		-0.190* (0.093)	-0.238 (0.266)	-0.215* (0.103)	-0.192* (0.093)
<b>Municipality level</b>					
Degree of urbanization		0.008 (0.032)	0.051 (0.053)	-0.043 (0.053)	0.007 (0.033)
Average local income/c		-0.073* (0.032)	-0.055* (0.021)	-0.114* (0.052)	-0.073* (0.032)
Share of non-Western ethnic origin residents		0.105* (0.049)	0.191 (0.179)	0.145* (0.058)	0.105* (0.048)
Share of households at risk of poverty		-0.130** (0.044)	-0.019 (0.088)	-0.171** (0.064)	-0.131** (0.044)
Local social spending per capita		-0.047*** (0.010)			-0.036** (0.011)
<b>Cross-level interaction</b>					
Economic hardship × Local social spending per capita					-0.027* (0.013)
Year (1 = 2013)	0.080* (0.035)	0.165*** (0.038)	0.100 (0.069)	0.181** (0.070)	0.166*** (0.037)
Constant	-0.038 (0.037)	-0.341* (0.147)	0.010 (0.345)	-0.195 (0.271)	-0.333* (0.148)
Variance: Municipalities	0.018*** (0.008)	0.001*** (0.002)	0.000 (0.000)	0.001* (0.002)	0.002*** (0.002)
Variance: Individuals	0.490*** (0.034)	0.377*** (0.035)	0.408*** (0.069)	0.346*** (0.029)	0.376*** (0.034)
Variance: Residual	0.474*** (0.036)	0.465*** (0.033)	0.452*** (0.070)	0.472*** (0.035)	0.465*** (0.033)
N (Individuals)	3,092	3,092	1,198	1,894	3,092
N (Municipalities)	32	32	16	16	32

Outcome and metric predictors are z-standardized to make estimates comparable across models. Cluster robust standard errors appear in parentheses. Weights applied. Source: NELS waves 1 and 2; contextual data obtained from Findo.NL.

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001 (two-sided test).

difference eventually disappears in municipalities with a local social spending of more than 4,000 €per capita.

These results thus provide empirical evidence for the mechanism of resource or interpretive effects. Hence, according to

H2a, local social spending can mitigate the relationship between economic hardship and political dissatisfaction. However, as we cannot test for feelings of gratitude for benefits received or evaluations of government responsiveness, we are unable



TABLE 2 Multilevel regression results of transitions of the economic situation on political dissatisfaction depending on local social spending.

	(M5)	(M6)	(M7)	(M8)	(M9)
	All municipalities, only transition variables	All municipalities	Only municipalities with below-median local social spending	Only municipalities with above-median local social spending	All municipalities with cross-level interaction
<b>Individual level</b>					
Transitions of economic situation Ref.: No hardship both waves	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Transition out of hardship	0.130 (0.094)	0.002 (0.092)	0.091 (0.219)	-0.028 (0.061)	-0.005 (0.096)
Transition into hardship	0.292*** (0.067)	0.135 (0.069)	0.324** (0.102)	0.029 (0.070)	0.144* (0.060)
Hardship both waves	0.482*** (0.077)	0.275** (0.086)	0.515** (0.167)	0.173* (0.085)	0.288** (0.089)
Gender (1 = female)		-0.048 (0.054)	-0.072 (0.090)	-0.033 (0.067)	-0.047 (0.055)
Age		0.029 (0.027)	0.060 (0.039)	0.017 (0.038)	0.029 (0.027)
Unemployment (1 = yes)		0.087 (0.062)	-0.041 (0.090)	0.124 (0.085)	0.086 (0.061)
Personal income		-0.011 (0.036)	-0.004 (0.037)	-0.015 (0.051)	-0.012 (0.035)
Social life satisfaction		-0.071** (0.022)	0.016 (0.044)	-0.095*** (0.020)	-0.073*** (0.022)
Political interest		-0.175*** (0.030)	-0.118* (0.056)	-0.202*** (0.028)	-0.173*** (0.030)
Migration background (1 = yes)		0.248** (0.081)	-0.003 (0.137)	0.274** (0.095)	0.253** (0.081)
Education Ref.: Low education		0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Medium education		0.218* (0.109)	-0.116 (0.352)	0.309** (0.108)	0.204 (0.108)
Higher education		-0.248* (0.111)	-0.394 (0.319)	-0.247* (0.123)	-0.264* (0.107)
<b>Municipality level</b>					
Degree of urbanization		-0.006 (0.041)	0.077 (0.049)	-0.068 (0.052)	-0.011 (0.041)
Average local income/c		-0.071* (0.034)	-0.039* (0.019)	-0.147** (0.052)	-0.072* (0.034)
Share of non-Western ethnic origin residents		0.102 (0.057)	-0.003 (0.199)	0.157* (0.075)	0.101 (0.058)
Share of households at risk of poverty		-0.120** (0.041)	0.040 (0.062)	-0.201** (0.071)	-0.125** (0.042)
Local social spending per capita		-0.043 (0.055)			0.001 (0.059)
<b>Cross-level interaction</b>					
Ref.: Local social spending per capita × No hardship both waves					0.000 (.)
Local social spending per capita × Transition out of hardship					0.004 (0.078)

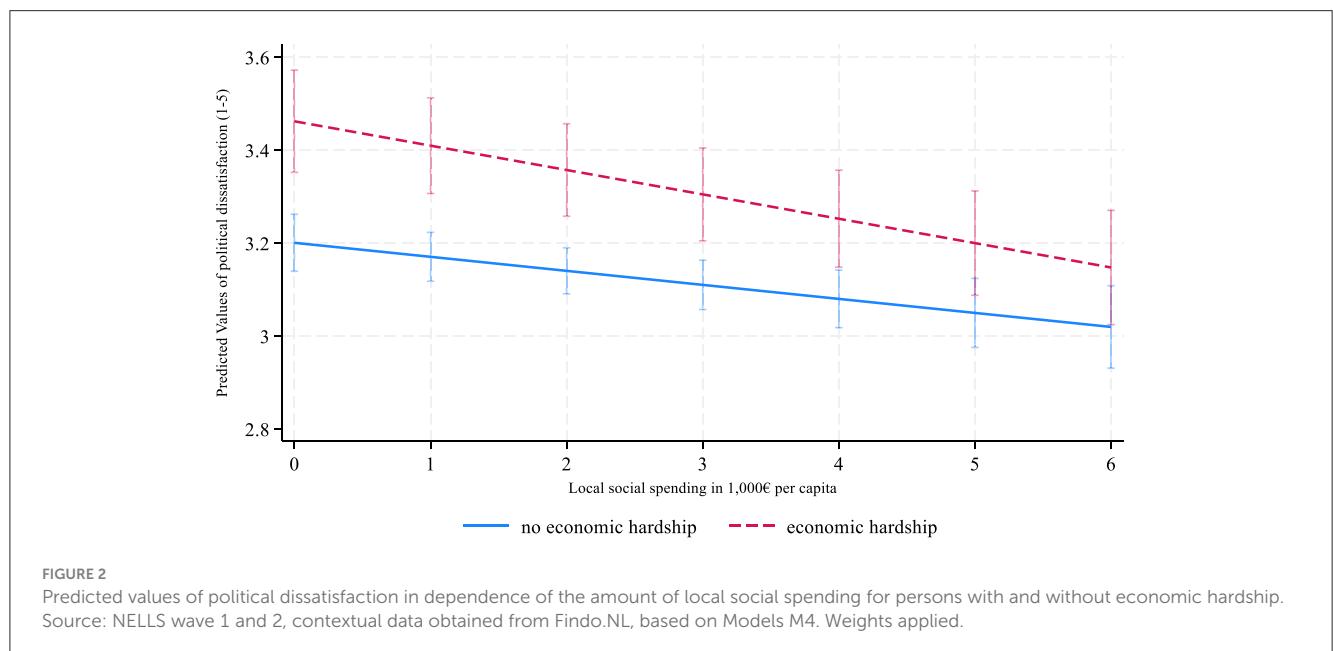
(Continued)

TABLE 2 (Continued)

	(M5)	(M6)	(M7)	(M8)	(M9)
	All municipalities, only transition variables	All municipalities	Only municipalities with below-median local social spending	Only municipalities with above-median local social spending	All municipalities with cross-level interaction
Local social spending per capita × Transition into hardship					−0.123* (0.049)
Local social spending per capita × Hardship both waves					−0.090 (0.062)
Constant	−0.155*** (0.042)	−0.171 (0.166)	−0.044 (0.387)	0.072 (0.272)	−0.139 (0.165)
Variance: Individuals	0.023*** (0.011)	0.002 (0.007)	0.000 (0.000)	0.000 (0.000)	0.003* (0.007)
Variance: Residual	0.951 (0.025)	0.847*** (0.028)	0.872** (0.039)	0.809** (0.055)	0.844*** (0.028)
N (Individuals)	1,546	1,546	599	947	1,546
N (Municipalities)	32	32	16	16	32

Outcome and metric predictors are z-standardized to make estimates comparable across models. Cluster robust standard errors appear in parentheses. Weights applied. Source: NELLS waves 1 and 2; contextual data obtained from Findo.NL.

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001 (two-sided test).



to disentangle resource and interpretive effects. Thus, this attenuation could be due either to feelings of gratitude for benefits received (resource effect) or to a more positive evaluation of government responsiveness (interpretive effect). Nevertheless, as the analyses include reliable measures of social spending in monetary terms, we tend to interpret these results as a resource effect.

In the third step, we examine the impact of the temporal dimension of economic hardship on political dissatisfaction in more detail to gain a further understanding of whether the

duration of economic hardship impacts the level of political dissatisfaction. We, therefore, classify all individuals into four groups<sup>5</sup>: (1) no hardship in both waves, (2) hardship in both waves, (3) transition into hardship, (4) transition out of hardship. M5 (see Table 2) tests whether these groups differ in their levels of political dissatisfaction without additional predictors. Compared to

<sup>5</sup> See Appendix A7 for more information on the prevalence of transitions between the waves.

the reference group (people without economic hardship in both waves), people who entered hardship between the two waves and people who experienced hardship in both waves show statistically significant higher levels of political dissatisfaction. Although the group that overcomes economic hardship also exhibits a positive coefficient, it is smaller and not statistically significant. However, when we add important control variables (see M6), only those who experience hardship in both waves show a statistically significant higher level of political dissatisfaction. Thus, we find that people who experience persistent or recent economic hardship show higher levels of political dissatisfaction.

To estimate the role of local social spending, we again use a split sample that distinguishes between municipalities with local social spending below and above the median (see M7 and M8). As in the former models, the individual-level effects are substantial and statistically significant, especially in municipalities with low social spending. For instance, political dissatisfaction in municipalities with below-median levels of social spending is 0.5 standard deviations higher among the persistently economically deprived than among those without economic hardship, whereas this difference is only 0.17 standard deviations in municipalities with above-median levels of social spending. Moreover, there is also a statistically significant increase in political dissatisfaction among people who transitioned into economic hardship between waves in municipalities with low social spending (see M7), which is not observed in municipalities with high social spending (see M8). Consequently, we find that political dissatisfaction is particularly pronounced among people who experience persistent economic hardship, and this is particularly evident among people living in municipalities with social spending below-average. This contextual difference is also statistically significant in M9 using a cross-level interaction. Again, the negative interaction term provides empirical evidence for either a resource or an interpretive effect (i.e., for H2a), suggesting that local social spending mitigates the positive association between political dissatisfaction and economic hardship.

As a robustness check, we perform a similar analysis using an additive index capturing the number of economic difficulties as the central independent variable (see Appendices A5 and A6). The results reveal that the relationship between economic hardship and political dissatisfaction is positive and linear. Thus, as the number of economic difficulties accumulates, political dissatisfaction increases. In addition, the results again show that this relationship is mitigated by the level of local social spending, leading to lower levels of political dissatisfaction in municipalities with higher levels of social spending. We also examine the extent to which the results are comparable when using an alternative measure of local social spending (see Appendix A8). Using the amount of local social spending on social assistance and unemployment per capita shows a comparable but slightly less pronounced outcome.

In summary, we find robust and consistent support for H1: economically deprived people show higher levels of political dissatisfaction. Particularly individuals with persistent economic hardship and individuals with more economic difficulties express substantially higher levels of political dissatisfaction. At the contextual level, we find empirical evidence for a mitigating effect

(according to H2a), implying that higher local social spending reduces political dissatisfaction among economically deprived persons. This mitigation may be due to gratitude (resource effect) or to a positive evaluation of the states' responsiveness (interpretive effect). Further research is needed to disentangle these mechanisms in more detail. However, political dissatisfaction among the economically deprived is lower in municipalities with higher levels of social spending.

## 4 Conclusion

Local contexts play a crucial role in shaping individual political behavior and attitudes. Nevertheless, studies at the national level left puzzling results on the influence of social policies on political support measures. Against this background, the present study examines whether *local* social policies can mitigate the impact of economic hardship on political dissatisfaction. We thus add to the existing literature by investigating the interplay between these three components at the local level. For the empirical analysis, we rely on panel data from the Netherlands which allows us to focus on the local level and to go beyond previous research that largely used cross-sectional data at the national level.

Analogous to previous studies (Wroe, 2016; Tormos, 2019), we find strong empirical evidence that individuals experiencing economic hardship exhibit substantially higher levels of political dissatisfaction. Furthermore, using fine-grained data at the municipal level, we ascertain that higher levels of local social spending significantly mitigate the positive association between economic hardship and political dissatisfaction. In addition, further analyses show that the relationship is particularly strong for individuals who experience persistent economic hardship and steadily increases as the number of economic difficulties grows.

In contrast to previous studies at the national level, our findings at the local level provide a more nuanced picture. While some comparative analyses at the national level indicate that expressions of political dissatisfaction follow economic hardship, particularly in comprehensive and prosperous welfare states (Giustozzi and Gangl, 2021), we find an opposite effect by focusing on the local level, according to which the level of social spending reduces political dissatisfaction in the presence of economic hardship. Thus, our findings are more in line with the results of for instance Vlandas and Halikiopoulou (2022) who show that more extensive welfare state policies have the potential to reduce expressions of political dissatisfaction. As we have argued earlier, the local context represents a very proximate social living environment of individuals. Such living environments function as filters for the evaluation of information and the formation of political attitudes (MacKuen and Brown, 1987). While focusing on the national level requires higher levels of abstraction, considering the local level—as this study does—has the potential to get a more in-depth picture of how individuals are influenced by these local characteristics in their formation of political attitudes. Furthermore, studies at the national level enable the comparison of the effects of different welfare states on political dissatisfaction, studying these relationships at the local level, in contrast, has the advantage of being able to study

differences in the influence of local social spending effects within a country and welfare state.

Moreover, we provide additional analyses aimed at scrutinizing the mechanism underlying the relationship between economic hardship, political dissatisfaction, and local social spending. Given that the most persistently economically disadvantaged and those with higher degrees of economic hardship are the most politically dissatisfied, and that both groups show sensitivity to local social policies, we consider resource effects to be the most plausible explanation. However, our analyses do not allow us to rule out interpretive effects as an explanatory mechanism. Disentangling these two mechanisms would require detailed data on how individuals translate the material benefits they receive into a sense that the state cares. One way to obtain such detailed data would be conducting qualitative interviews with individuals who are or have been experiencing economic hardship and asking them explicitly about the effect the reception of social spending has on their attitudes toward the state. In the realm of quantitative studies, survey experiments could be a way to isolate the two mechanisms. For example, a vignette experiment could vary situations, in which local social spending does (not) mitigate the effect of economic hardship and political dissatisfaction and ask respondents after the vignette if feelings of gratitude toward the state (resource effect) or the attribution of responsibilities (interpretive effect) are more important to them. Our analyses provide a good starting point for further research in this area, in particular for a more in-depth investigation of the underlying mechanisms.

Nevertheless, some limitations must be acknowledged, especially regarding the operationalization of local social policies. First, this study is based on the absolute amounts of local social spending per capita, whereas previous findings (Haugsgjerd and Kumlin, 2020; Kumlin et al., 2024) suggest that individual perceptions of social policy and welfare performance are relevant for the constitution of attitudes. Second, apart from the quantity of local social spending, the quality of local social spending might exert a decisive influence, since municipalities may differ significantly in the provision, quality, and effectiveness of social spending. Therefore, future studies should consider various operationalizations of local social spending, such as perception- or quality-based measures, to get a more nuanced understanding of the effects. Furthermore, our analyses focus on the case of the Netherlands. The Netherlands can be seen as a typical case for comprehensive Western European welfare states with increasing levels of decentralization and high levels of social spending, which makes our results generalizable to other Western European welfare states. However, investigating the relationship between economic hardship, political dissatisfaction, and local social spending for other countries and welfare states (for instance, welfare states with lower levels of decentralization and/or local social spending), would provide a more comprehensive understanding of the relationship.

Beyond these limitations, our findings have important practical implications. They suggest that the socio-political context in which individuals experience economic hardship influences their expression of political dissatisfaction. In particular, individuals experiencing long-term economic hardship and with a greater number of economic difficulties express higher levels of political dissatisfaction. Increasing political dissatisfaction has serious

consequences for democratic political systems, as citizens tend to lose political support—a prerequisite for stable democracies (Dalton, 1999). Relatedly, as political dissatisfaction increases, so does the likelihood of not voting or voting for extremist parties (Hooghe and Dassonneville, 2018). Our findings, however, suggest that higher levels of local social spending have the potential to mitigate the negative effect of economic hardship on political dissatisfaction. Therefore, providing sufficient social spending to those in need appears to be a remedy to reduce political dissatisfaction and ensure democratic stability.

## Data availability statement

The data analyzed in this study is subject to the following licenses/restrictions: The NELS data set is freely available. However, we used the geocoded NELS dataset, which is only available on request from the data owner. Requests to access these datasets should be directed to [nells@ru.nl](mailto:nells@ru.nl). The code for the analyses is available at HavarDataverse (<https://doi.org/10.7910/DVN/P4VNZN>).

## Author contributions

TH: Writing – original draft, Writing – review & editing. PV: Writing – original draft, Writing – review & editing.

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## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## Generative AI statement

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## Supplementary material

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/fpos.2025.1516985/full#supplementary-material>

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