WORKING PAPER 2024:18

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ISSN 1651-1166

Territorial capacity and territorial outcomes

Local governance and municipal NEET rates in Sweden

by

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September 07, 2023

Abstract

Youth not in employment, education or training (NEET) is a heterogeneous group in which many run the risk of long-term exclusion from the labor market and from society. Numerous national and international policy initiatives targeting NEETs have therefore been launched, often involving the creation of new programs and the establishment of new governance structures. Little is however known regarding the relationship between these governance structures and NEET rates. This is here explored using unique data on local governance structures in Sweden, data obtained through qualitative surveys with caseworkers in a sample of municipalities strategically selected based on a quantitative analysis of all Swedish municipalities. The results point to the importance of professional knowledge and problem formulation and question the centrality of organizational structures, but also indicate that there may be multiple ways to achieve a particular outcome.

Keywords: Territorial capacity, territorial resources, territorial governance, steering, NEET, local variation, fsQCA
JEL-codes: H75, H77, H83, I18, I28, I38, J18

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1 Introduction

Youth who do not have a job, are not enrolled in training and are not classified as a student, often called NEET, are considered to be one of the most problematic groups in the context of youth unemployment (Furlong 2009, Eurofound 2012). For governments, reducing NEET rates is a great challenge. A host of different policy measures have been introduced, the Swedish government has for instance launched initiatives at the national level such as introducing a national NEET coordinator, formed a special Delegation for the Employment of Young People, and funded conditional grants. In addition, innumerable municipal programs exist targeting this group of at-risk youth.

The occurrence of NEETs is often explained in terms of individual and structural aspects, were the former stress the importance of gender, health, education or migration background and the latter point to the role of economic growth, the education system and labor market institutions for the risk of becoming a NEET (e.g. Carcillo et al. 2015). These factors are undoubtedly of great importance for NEET risks, yet given the number of policy initiatives directed at NEETs is extremely problematic that very little is known regarding the impact that different governance arrangements may have on the risk of becoming a NEET. The overarching aim of this study is to contribute with such an analysis, an analysis that takes its starting point in the sub-national variation in NEET rates that can be observed in many countries. Considerable variation in NEET rates across regions and municipalities has for example been documented in Sweden (e.g. Forslund & Liljeberg 2020). While such difference in part may be related to the individual and structural factors mentioned above, they may also be driven by differences in the local work with NEETs.

We will here therefore address this question by exploring the relationship between local governance and local NEET rates using the concept of territorial capacity, a concept capturing geographical entities' ability to mobilize social and economic support and consent for the achievement of public goals (Cole et al. 2021). Territorial capacity can in turn be divided into two separate but interrelated components: territorial resources and territorial governance. The former encompasses structural factors ranging from the physical characteristics of a territory to less tangible factors facilitating local creativity and innovation (Capello et al. 2010). The latter in contrast emphasizes the formal and informal relationships among local actors and networks (Well and Schmitt 2015). In our analysis we focus on territorial governance, while taking differences in territorial resources into account.

We do this through an initial quantitative analysis of all 290 Swedish municipalities using multiple indicators of local resources, an analysis that provided the basis for qualitative interviews regarding local work with NEETs in 20 strategically selected municipalities. Semi-structured interviews were used to survey actors and institutions in the 20 municipalities yielding a unique qualitative cross-sectional dataset on local governance structures that is here analyzed using fuzzy-set Qualitative Comparative Analysis (fsQCA). Although this does not allow us to establish causal effects, we are able to systematically explore the relationships between local governance and NEET rates in a manner lacking in the current literature.

The subsequent section discusses the two concepts of territorial resources and territorial governance, briefly touching upon Swedish governance structures as well. Section 3 then describes the data, the operationalization and methods used. This is followed by a presentation of the results in Section 4, before Section 5 concludes. Two appendixes are included, Appendix A describing the quantitative case selection and data collection as well as the qualitative interviews and Appendix B presenting a series of robustness tests.

2 Territorial capacity: territorial resources and territorial governance

As mentioned earlier, we see territorial capacity as consisting of two distinct but closely linked concepts: territorial resources and territorial governance. While the subsequent empirical analysis will focus on the impact of territorial governance on local NEET rates, this cannot be analyzed without proper attention to territorial resources. Differences in local resources are likely to generate differences in the prevalence of NEETs, and territorial resources therefore need to be taken into account in analyses of the relationship between governance structures and NEET rates.

2.1 Territorial resources

The concept of territorial resources is rather new. It was introduced by the OECD (2001) and has since been frequently used in analyses of regional economic growth and associated economic disparities (Capello et al. 2010, Constantin et al. 2013, Tóth 2015). Regions' different conditions, or territorial resources embracing public and private, material and immaterial assets, have in this context attracted considerable attention, and it has been stressed that region specific resources makes investments in one region more effective than in another (Zonneveld and Waterhout 2005). The operationalization of the concept varies across research traditions, yet most definitions highlight the need to exploit and actively use specific territorial assets to promote regional development (Tóth 2015; Huggins and Thompson 2017). Davoudi et al. (2008) identified several elements that could be counted as territorial resources ranging from the pure physical or spatial characteristics of a territory (e.g. geographical location, size) to intangible factors facilitating creativity and innovation. In the context of NEETs, structural resources in terms of e.g. educational systems or labor markets have been suggested as explanations for variation in NEET rates (e.g. Bacher et al. 2017). Hence, we see territorial resources as encompassing local individual, structural as well as institutional factors.

2.2 Territorial governance

The notion of governance, as overlapping and complex relationships involving a range of actors, networks or constellations thereof, is well established (Torfing et al. 2012). Governance is here about forms of steering and inter-organizational relations, about mutual exchange of knowledge, and about achieving a specific goal. In contrast, the notion of territorial governance has only recently emerged on the policy agenda. Less attention has as a consequence been paid to the more specific territorial dimensions of governance and to the question of how knowledge of territorial specificities and territorial courses of action (e.g. coordination at local level) are used in policy- and

decision-making (Davoudi et al. 2008, Erlingsson and Wallman Lundåsen 2021, OECD 2001, Stead 2013, Well and Schmitt 2015). According to Davoudi et al. (2008), territorial governance involves the creation of horizontal and vertical coordination between (i) various levels of government (multi-level governance, vertical relations); (ii) sectoral policies with a territorial impact; and (iii) governmental and non-governmental organizations and citizens (multi-channel governance, horizontal relations between actors and their territories).

Local (territorial) knowledge and its usage have been identified as critical for identifying and solving local problems (Ansell and Gash 2007, Leung 2009). The territorial dimension refers to the context-dependent nature of problems that the policy deals with, and that contextual differences such as resources, knowledge and preferences imply that policies need to be tailored to places (Barca 2009). Knowledge development and utilization is in particular important in contexts of complex problems where a plurality of agents is involved but do not necessarily interact with each other. To capture this complexity, we see territorial governance through an interactive lens. This interactive dimension stresses that "a plurality of social and political actors with diverging interests interact in order to formulate, promote, and achieve specific objectives by means of mobilizing, exchanging, and deploying a range of ideas, rules, and resources" (Torfing et al. 2012, 14).

We are consequently interested in the relevant professionals' assessment of the local situation with regard to NEETs, including prevalence and composition as well as the overall seriousness of the problem in the municipality. The assessments are in turn likely to be related to efforts to address the situation of local NEETs in the form of e.g. specific vertical and horizontal coordination arrangements. The assessments may for example be relevant for the choice of actors (local, regional and national) and choice of specific policy fields (e.g. health care, education, employment, and social services) involved in coordination arrangements.[1]

2.3 Territorial governance in a Swedish context

Sweden is a large country with a rather small population, and living conditions for youth differ substantially depending on where they live (SOU 2013:74, SOU 2017:1). The responsibility for NEETs is first and foremost municipal. Sweden is divided into 290 municipalities which are legally obliged to guarantee a broad range of services (such as compulsory and upper secondary education and social services). Within the local social services, municipalities for example offer social assistance as well as preventative and other measures relating to family problems, and municipalities are also legally obliged to follow up young people who have dropped out school (in Swedish *Kommunalt aktiveringsansvar*). Regarding NEETs, other potentially relevant municipal administrations are labour market departments, education departments or recreation & culture departments. However, since municipalities have substantial autonomy in

[1] Since the character of these coordination arrangements can vary substantially, we use the term coordination as an umbrella for various types of interaction between organizations. Such interaction can be both formal and informal, yet we have for a number of reasons chosen to focus exclusively on formal coordination arrangements. Specifically, formal arrangements between national and local actors targeting NEETs have been promoted extensively by the Swedish government, such arrangements could be assumed to be more long-lasting as they are less dependent on personal relationships between caseworkers, and examining informal coordination properly would have required more detailed and lengthier interviews.

deciding what services to offer and in what manner they should be provided, the local organization around a specific target group can vary substantially.
The multifaceted problems of NEETs imply that work with the group spans multiple policy areas, the most important being employment policy, health care, education and social welfare. This in turn implies the involvement of different levels of government, as these policy areas are a central government responsibility, a regional responsibility, and a municipal responsibility respectively. Central government is for instance involve through the national Public Employment Service, the regions are engaged through their overarching responsibilities in the area of health care, while the remit of the municipalities includes education and social welfare. The various levels also cooperate through Coordination Associations in which the regions, the employment service, the national Social Insurance Agency, and the municipalities coordinate rehabilitation measures around individual cases. National, regional and local actors are in other words involved. In a Swedish context, this implies mostly public actors, whereas private actors, social enterprises and non-profit organizations play a minor role.

Given this institutionalized division of responsibility, NEETs may therefore meet actors that may be specialized on single problems, and not necessarily actors with a broad range of competencies. That the actors only work within their area of expertise may in turn imply that they have a fragmented picture of the NEETs' situation and lack knowledge regarding the general extent and characteristics of the problem at the local level.

3 Data and method

3.1 Case selection and data collection

The study applies a two-step multi-method approach (Seawright 2016); a multilevel regression analysis of individual NEET risk in all Swedish municipalities and interviews with local professionals in 20 subsequently selected municipalities analyzed using fsQCA. The aim of the first step was to identify deviant municipalities once individual and structural variables previously found to be important for NEET risk had been taken into account, variables largely corresponding to the concept of territorial resources. The second step then involved the collection and analysis of detailed and otherwise unavailable information on territorial governance structures in the strategically selected municipalities. This section provides general information regarding the two steps, more detail can be found in Appendix A.

In the first step, a 2-level random intercept logistic regression analysis was conducted in which the likelihood of an individual being NEET was regressed on a set of individual and municipal variables. For the analysis, anonymized register data from Statistics Sweden for the whole Swedish population was used. We followed the definition of NEETs used in other Swedish register-based studies including 16- to 24-year-old who during a calendar year only worked or studied to a very limited extent. Earlier studies have shown that structural and individual factors are of major importance for NEET risk and these therefore needed to be accounted for in order to properly study the importance of local governance structures. Broadly speaking, the independent variables encompassed the types of individual and structural factors the previous research had

found to be of important for the NEET risk. More specifically, the analyses included indicators measuring the demographic composition of local youth, indicators capturing the local labor market structure as well as indicators measuring the local provision of education and health care.[2] The analysis spanned a 4-year period (2013-2016) with each year analyzed separately. The municipalities were ranked according to their estimated random intercept (i.e. municipal-level residual) in each year, and an average rank across the four years calculated.[3]

In the second step, 10 among the 20 municipalities with the highest average rank and 10 among the 20 with the lowest average rank were selected. These 20 municipalities in other words consistently deviated from what could be expected given their structural pre-conditions, the former in that their expected NEET rate tended to be higher than their actual rate and the latter in that their expected rate tended to be lower.

60 qualitative, semi-structured interviews were then carried out in these 20 municipalities in 2019. In all municipalities, several professionals (informants) working with various subgroups of NEETs were interviewed. A snowball procedure (surveying municipal webpages, contacting units directly responsible for NEETs, contacting case workers) helped us identify the informants. Additional professionals or units of relevance were sometimes identified during the interviews and subsequently contacted. Thus, the number of professionals and type of local actors was determined by local institutional structures and not by us. These professionals generally included different combinations of the municipal school administration, the municipal social services (units for families & children, for social assistance), the municipal department for recreation and culture, the municipal labor market services, the regional coordination associations, and the national public employment service.

Questions were posed regarding the problems and possibilities of the local NEETs, the task and organization of the institutions involved, the interaction between professionals and policy areas, and other local circumstances related to NEETs. Detailed questions were asked regarding all local formal coordination arrangement targeting NEETs, with questions on the actors involved, the purpose of the arrangement, problem formulation and possible solutions, duration of the arrangement, conflicts and how these were handled etc. The aim was to obtain detailed and otherwise unavailable information on territorial governance structures, that is what measures were provided (social, educational, health and labor market related measures) by whom and how they were designed and organized (coordination) in a certain locality.

[2] The decision which variables to include in the regression models involve balancing the risk of including too few or too many control variables. Too few refers to the possibility that some important background factor was overlooked and that other municipalizes might have been selected had it been included. Too many conversely pertains to the risk that the included variables in some way were related to work with NEETs (if, say, local work with youth affects the local demographic composition), something that also might yield a biased sample of municipalities. Both risks have been given due consideration when selecting the control variables, and. as noted, the individual and structural variables included in the regressions correspond to those earlier analyses had found to be important for NEET risks.

[3] The municipalities' position in these rankings was very stable across the four years, Spearman correlation coefficients between two separate rankings varied between 0.97 and 0.99.

3.2 The governance indicators

To examine the importance of territorial governance for municipal variation in NEET rates we need to be able to identify differences in governance. Our underlying hypothesis is that having a low NEET rate is associated with caseworkers assessing this to be a multi-faceted but manageable problem and that their work with NEETs include some form of inter-agency coordination. Drawing on the definition of interactive governance, we operationalize territorial governance of NEET policies along three general dimensions; target group knowledge, problem formulation, and work organization.

The first dimension involves caseworker knowledge about NEETs in the municipality as a whole and not only within their own area of expertise. Indicator 1) *knowledge of target group* is made up of three questions; assessments about the local prevalence of NEETs, about the characteristics of NEETs in the municipality (group composition) and about the willingness of local NEETs to relocate for work or studies. The caseworkers' answers to these questions are averaged into one encompassing knowledge measure.

The second dimension aims to capture differences between the municipalities in the formulation of a problem definition. This dimension is covered by Indicator 2) *NEETs assessed a* manageable *problem* based on a direct question about whether or not the professionals regard NEETs to be a manageable problem in the municipality. This question differs from the question about prevalence in that aims to capture whether or not NEETs are regarded as a social problem, that is distinct from their actual numbers.

The third dimension is about work organizational and NEETs having multiple, interconnected problems requiring some form of coordination among actors. This dimension is operationalized by three separate indicators; 3a) *vertical formalized coordination,* 3b) *horizontal formalized coordination* and 3c) *information exchange*. As noted earlier, we focus on formalized coordination. Indicators 3a and 3b distinguish between the presence of vertical coordination between policy sectors (education, labor market, health and social services) located at different levels of governance (national, region and local) and the presence of horizontal coordination among the actors at the local level. Indicator 3c in turn emphasizes that the mere presence of coordination is unlikely to be sufficient unless information is shared among participating stakeholders. All three indicators were extracted from the direct questions posed in relation to each coordination arrangement targeting NEETs in a municipality; 3a regarding the number of policy fields located at the national, regional and local levels involved in cross-sectorial coordination, 3b relating to the number of local organizations involved in coordination and 3c concerning the sharing of information on NEETs (giving and receiving) through formalized coordination. The indicators all focus on actual organizational arrangements, indicating the extent to which each organizational solution is present in the municipalities.

Table 1 summarizes the indicators and questions used to operationalize the two territorial governance dimensions. It may here be worth emphasizing that we rely entirely on the caseworkers' responses when constructing the different indicators, we have in other words no access to outside information regarding the local NEETs and the local work with them to verify the caseworkers' statements.

Table 1. Territorial governance: dimensions, indicators, and questions

	Dimensions	Indicators	Questions
Territorial governance	Professional knowledge	Knowledge of target group	Describe NEET prevalence Describe NEET composition Describe NEET willingness to relocate for work or study
	Problem formulation	NEETs assessed a manageable problem	Assess local NEET problematic
	Work organization	Vertical formalized coordination	Describe vertical coordination between policy areas
		Horizontal formalized coordination	Describe horizontal formalized coordination with other local professionals
		Information exchange	Describe exchange of information in formalized coordination

Our aim is to obtain a picture of work with NEETs in the municipality as a whole, and not in the separate organizations, and we consequently make use of the fact that we have multiple informants in each locality. Such a multi-informant strategy generates more reliable information that relying on single informants (Wagner et al. 2010). All indicators are therefore calculated as the average values of the answers of all local professionals in a municipality, generating detailed and comprehensive information on local governance structures.

Our interest in comparing the organization of work with NEETs in the municipalities also led to the exclusion of one municipality from the analysis. This municipality cooperated closely with a neighboring municipality, a cooperation that included shared organizational structures. This prevented the identification of the work structures specific to the municipality (i.e. Indicators 3a to 3c), and therefore to its exclusion from the analysis.

Of course, description of target group, problem formulation, and work organization are likely to be interlinked. Vulnerable groups with complex problems need to identified and supported by different professionals; often specialists with knowledge about causes, needs and support possibilities for a specific problem. However, these professionals do not necessarily have the competencies of a generalist, and formalized coordination may then appear attractive as it provides opportunities to gather, share and use fragmented in-depth knowledge in joint-up work around the youth. In the best of all worlds, all units and professionals working with NEETs are able to identify and assess the young persons' needs, not only in the professionals' own area of specialty but also in the municipality as a whole, and have the opportunity to coordinate activities across institutional boundaries. In less optimal cases, (some) professionals lack knowledge

regarding the group and the prevalence of the NEET and/or are not part of coordination and information exchange.
Since we believe target group description, problem formulation, and work organization to be interlinked, we expect that none of these three dimensions will in itself be sufficient to explain local variation in NEET rates. We do however expect all dimensions to be necessary. In other words, to have lower-than-predicted NEET rates, we expect it to be necessary for professionals to be able to identify and describe the local NEETs, to assess the seriousness of the NEET problematic to be manageable, and to be involved in at least one form of formalized coordination (i.e. either formalized cross-sector coordination, formalized professional exchange or information sharing).

3.3 Fuzzy-set qualitative comparative analysis

Fuzzy-set qualitative comparative analysis (fsQCA) was developed in comparative political science and sociology to evaluate data with too few cases for statistical analysis and where the available data often are qualitative or a combination of qualitative and quantitative information (Ragin 2000). QCA differs from regression analyses in that it is based on set theory and logic, not inferential statistics, and it is therefore possible to apply it also in analyses of small-n data (Fiss 2011, Ragin 2009). While the method also can be used for causal analyses, we, given the preliminary nature of the hypotheses as well as the cross-sectional nature of the data, apply it in an exploratory fashion.

QCA seeks to reveal configurations of characteristics or conditions (e.g. formalized coordination or knowledge sharing) associated with an outcome (here NEET rates) and rests on three premises. First, QCA assumes that there can be many pathways to the same outcome (so-called equifinality). Second, it assumes that each pathway can contain different combinations of explanatory characteristics; the method thus identifies effects of combinations (configurations) of necessary and sufficient explanatory characteristics rather than effect of individual characteristics. Third, a condition is understood as a set with boundaries defining inclusion and exclusion, and cases are classified according to their fit within these boundaries. Set membership in other words defines whether a case can be said to be part of a concept or not (Schneider and Wagemann 2012). Converting raw data into measures of set membership is called calibration and is based on a combination of theoretical knowledge and empirical evidence (Ragin 2000). It contains a qualitative part; the identification of thresholds for full membership in a set or concept (given the fuzzy value 1), non-membership (0) and the cross-over point between membership and non-membership (0.5). In fuzzy-set QCA, calibration also contains a quantitative part in the identification of the degree of membership. Set membership does in other words not have to be either-or, but cases that are assessed as belonging to a set (i.e. having a value above the fuzzy cross-over point 0.5) can vary in the extent to which they do this. The further away from the cross-over point a fuzzy score is the more clear-cut a case's (non-) membership thus is, and conversely the closer to the cross-over the fuzzy score is the greater the uncertainty about a case's set membership.

The calibration criteria are summarized in Table 2 and described below. The calibration of the outcome Low NEET rate (LNR) takes its starting point in the municipal-level residuals from the multi-level regressions for the four years. An average residual has been calculated for each municipality and the lowest average residual (-0.59), indicative

of a lower NEET rate than predicted, has been assigned the cutoff for full membership, the highest residual (0.68) the cutoff for full non-membership, and the cross-over point set to the average residual (0.00). The other municipalities LNR scores have been based on the relation between their residual and these two extremes. This calibration procedure in other words generates an outcome measure that captures both the extent of Low NEET membership and produces a natural cross-over point between municipalities with higher and lower NEET rates than predicted.

Table 2. Calibration of outcome and conditions

	Label	Original values	Threshold
Outcome			
Low NEET	LNR	From -0.59 to 0.68; mean 0.00	-0.59 = full membership; 0.00 = cross-over 0.68 = full non-membership
Conditions			
Knowledge of target group	KTG	0 = yes, 1 = youth in general, 2 = no; mean 0.16	0 = full membership; 0.35 = cross-over; 0.92 = full non-membership
NEETs assessed a manageable problem	AMP	0 = no, 1 = yes; mean 0.45	0 = full membership; 0.7 = cross-over; 1 = full non-membership
Vertical formalized coordination	VIC	0 = all, 1 = partially, 2 = none; mean 0.82	0 = full membership; 0.8 = cross-over; 2 = full non-membership
Horizontal formalized coordination	HIC	0 = all, 1 = partially, 2 = none; mean 0.77	0 = full membership; 0.8 = cross-over; 2 = full non-membership
Information exchange	IEX	0 = yes, 1 = partially, 2 = no; mean 0.16	0 = full membership; 0.4 = cross-over; 1 = full non-membership

When calibrating the different conditions, we apply both theoretical and empirical reasoning. We thus start from theoretical reasoning about the importance of the conditions, yet we also have to take into consideration the empirical distribution of the responses in our sample.

When it comes to the first two conditions, we expect them to be of great importance for dealing with NEET problems in a municipal perspective and have therefore calibrated them rather strictly. With regard to *knowledge of target group*, the raw data ranges from 0 to 2. For full membership, all interviewed professionals in a municipality must have displayed knowledge about the target group. Since most professionals display some knowledge on the prevalence, composition and NEETs willingness to relocate, as evident from the mean (0.16), we have set the value for non-membership to equal only general knowledge. Thus, only displaying knowledge about youth in general, and not

specifically NEETs, has been defined as non-membership. The cross-over point has been set to 0.3, so that municipalities where one out of three professionals lacked of knowledge of the composition of local NEETs have been classified as more out than in.[4]

As for *NEET assessed a* manageable *problem*, the answer categories are either 1 (challenging problem) or 0 (manageable problem). Municipalities have here been coded as full members only when all professionals within the same municipality judged NEETs to be a manageable problem, and non-members only when all professionals assessed NEETs to be a challenging problem. The cross-over point has been set to 0.7, i.e. when two out of three professionals defined NEETs to be a challenging problem.

The criteria for the conditions describing work organization have also been rather strict. *Vertical formalized coordination* concerns coordination between the four central areas education, social services, employment, and health, with the raw data again ranging from 0 to 2. Qualifying for full membership has required that at all local professionals reported the existence of formalized vertical coordination around NEETs across all four policy areas, and non-membership implies no vertical coordination. Yet, as evident from the mean (0.8), most municipalities have coordination across some of the policy areas and this is also where we set the cross-over point.

When it comes to *horizontal formalized coordination*, answers again range from 0 to 2. Qualifying for full membership has also here required that at all local professionals reported formalized horizontal coordination around NEETs, non-membership in contrast implies no horizontal coordination. As was the case above, as shown by the mean (0.77), most municipalities display some horizontal coordination and this again where we set the cross-over point.

Finally, in the case of *information exchange* answers also range from 0 to 2, and full membership has again required that all professionals share information with each other. As can be seen from the mean (0.16), a large amount of information sharing took place in most municipalities. Full non-membership has therefore been set to partial information sharing among all professionals, with the cross-over point (0.4) corresponding to a situation where one out of three caseworkers only share information partially.

4 Analysis and results

The analysis, using the software fsQCA 3.0, describes the relationship of the conditions to the outcome in terms of sufficiency. The analysis of sufficiency aims to find the minimal combination of conditions, or configurations, that are sufficient for a given outcome.[5] A first answer to this question is provided by the so-called truth table, illustrating the relationship between the configurations and the outcome.

[4] We use three professionals in this and subsequent examples as this was the average number of interviews per municipality.
[5] We focus on sufficient conditions as these also encompass the necessary conditions (Thiem 2017).

A complete truth table consist of a data matrix with 2^k rows showing the theoretically possible configurations of membership and non-membership, with k indicating the number of conditions. With five conditions there are thus 32 theoretically possible configurations. As most of these combinations of conditions in practice are non-existent, the 11 configurations to which empirical cases have been assigned are presented in Table 3. The first column in this condensed truth table (labelled Configuration number) simply enumerates the configurations, while the next five columns indicate the presence or absence of the separate conditions. A black circle (●) here indicates the presence of the condition (membership in a set) while a white circle (○) indicate absence (non-membership). Configuration 3 for example incorporates cases in which professionals' display knowledge about the target group, assess NEETs to be a manageable problem, interact both vertically and horizontally, and share knowledge with other professionals.

The column Number municipalities in turn displays the number of municipalities that have been assigned to the various configurations. Each municipality can belong to only one configuration, but each configuration may encompass more than one municipality. The extent to which the conditions in the municipalities correspond to a particular configuration does however vary. Recall that a fuzzy-set value for each of the five conditions is calculated for each municipality, and a municipality's degree of membership in a configuration corresponds to the municipality's lowest membership score among the separate conditions within the configuration. As can be seen in the column Membership score, the configurational memberships in most cases equal 0.57. This is relatively close to the cutoff, indicating some uncertainty regarding the configurational membership of the cases. Not evident from the table is that this uncertainty in almost all cases is related to membership in the two conditions vertical and horizontal coordination, this is the case in 14 out of the 15 municipalities with a membership score of 0.57. It should be noted that this is not a consequence of the calibration of these conditions as membership in the two conditions in most municipalities is unambiguous.[6]

As mentioned, only 11 of the 32 possible configurations are actually observed. A limited number of actual cases in relation to the possible (so-called limited diversity) is common in studies of social phenomena (Schneider and Wagemann 2012). This is of course in part related to the number of conditions, as this has implications for the number of possible configurations. It can also be a consequence of sample size as a larger survey of municipalities may have found a greater diversity in local governance arrangements. However, it can here also be a result of the construction of the sample as the intent with the selection of deviant municipalities was to obtain a concentration of under- and over-performing governance arrangements.

The subsequent column shows the municipalities' fuzzy outcome scores, with increasing scores indicating increasingly lower-than-expected NEET rates. The last column displays raw consistency scores, a.k.a. the consistency of sufficiency scores, of the configurations indicating the extent to which a configuration can be considered a

[6] Specification checks reported on in Appendix B also show that the results are largely robust to alternative calibration decisions.

sufficient condition for the outcome, i.e. the extent to which the members of a configuration share the same outcome.

Table 3. Truth table

Config. no.	KTG	AMP	VIC	HIC	IEX	No. munic.	Memb. score	Outcome score	Raw consist.
1	●	●	●	○	○	1	0.57	0.89	1.00
2	●	○	○	●	○	1	0.57	0.96	0.97
3	●	●	●	●	●	4	0.81 0.81 0.71 0.57	0.88 0.86 0.87 0.88	0.95
4	●	●	●	○	●	1	0.57	0.93	0.95
5	●	●	○	○	●	1	0.57	0.85	0.94
6	○	●	○	○	○	2	0.57 0.54	0.26 0.91	0.84
7	○	○	○	○	●	1	0.57	0.28	0.79
8	●	○	○	○	●	2	0.57 0.57	0.98 0.20	0.71
9	○	●	○	●	●	2	0.57 0.57	0.21 0.20	0.67
10	●	○	●	○	●	2	0.57 0.57	0.11 0.07	0.66
11	●	○	○	●	●	2	0.57 0.57	0.28 0.22	0.60

Notes: ● indicates presence of condition, ○ absence. Frequency cutoff = 1, consistency cutoff = 0.80. KTG = Knowledge of target group, AMP = Assessed manageable problem, VIC = Vertical formalized coordination, HIC = Horizontal formalized coordination, IEX = Information exchange.

Applying a consistency cutoff of 0.80 suggests that the first six configurations can be considered sufficient for LNR, while an alternative cutoff of 0.75 also includes Configuration 7.[7] As can be seen from the outcome scores for the municipalities included among these configurations, the top six configurations include 9 of the 10 municipalities with lower-than-expected NEET rates (i.e. with outcome scores above 0.5). A first preliminary conclusion is therefore that no single configuration can be said to explain LNR, instead different configurations appear to lead to the same outcome in different municipalities.

At first glance, these six configurations would not appear to display any discernable pattern. However, closer inspection reveals that one feature shared by most of these six configurations is the presence of target group knowledge and of assessment as manageable problem. In particular, both conditions are present in 4 of the 6 configurations. This is something that sets them off from most of the configurations

[7] We have chosen these thresholds based on the suggestions of Ragin (2009) and Schneider and Wagemann (2012, 129), with the former suggesting a rule-of-thumb of 0.80 and the latter of 0.75.

associated with non-LNR municipalities. First, it may be noted that, as was the case among the LNR municipalities, most possible combinations of presence and absence of the organizational conditions can be found among the non-LNR municipalities as well. However, with regard to the other two conditions, the majority of the municipalities lack at least one of them.

Another aspect that also becomes apparent is that the IEX condition is present in most configurations, yet the three configurations in which it is absent all belong to the LNR configurations. This sets it apart from the other two organizational conditions, were presence and absence is much more evenly distributed across the LNR and the non-LNR configurations.

Another interesting observation pertain to Configuration 6 and 8, as both include one municipality with lower-than-expected NEET rates (outcome scores > 0.5) and one municipality with unexpectedly high NEET rates (outcome score < 0.5). They are examples of so-called contradictory configurations were cases with identical characteristics display different outcomes. Contradictory configurations can be dealt with in different ways, e.g. by excluding them from the analysis, by reexamining the measurement of the conditions, or by leaving them in the analysis and taking note of the uncertainty produced by the contradiction (Schneider and Wagemann 2012). After reviewing all the information gathered in relation to these four municipalities, we have chosen to retain them, not finding any measurement issues nor any other reasons to change the treatment of these cases, recognizing the element of uncertainty added to the conclusions.

The conclusions are in turn based on the solutions produced by the minimization process, an algorithmic process through which the number of overlapping and redundant conditions and configurations are reduced generating distinct solution models leading to the outcome. We here focus on the so-called parsimonious solutions, as simulation exercises have been shown that these most reliably recover predetermined causal patterns in artificial data (Baumgartner and Thiem 2020).

The parsimonious solutions for the truth table in Table 3 are shown in Table 4, with Solution A showing the solution using the 0.8 cutoff and Solution B the one using the 0.75 cutoff. Starting with the former, this shows two different models, or pathways, for obtaining LNR:

$$\sim IEX + KTG*AMP \rightarrow LNR \quad (1)$$

Here, an asterisk (*) indicates the logical operator AND while a plus (+) the operator OR. The two ways of obtaining lower-than-expected NEET rates would in other words involve either the absence of information exchange among professionals or the presence of knowledge of target group and the assessment of NEETs as being a manageable problem.

Table 4. Parsimonious solutions

	Raw coverage	Unique coverage	Consistency	Solution coverage	Solution consistency
Solution A				0.84	0.88
Model 1: ~IEX	0.37	0.12	0.89		
Model 2: KTG*AMP	0.72	0.47	0.91		
Solution B					
Solution B1				0.85	0.85
Model 1: ~IEX	0.37	0.08	0.89		
Model 2: KTG*AMP	0.72	0.46	0.92		
Model 3: ~KTG*~HIC	0.22	0.01	0.71		
Solution B2				0.84	0.86
Model 1: ~IEX	0.37	0.08	0.89		
Model 2: KTG*AMP	0.72	0.46	0.92		
Model 3: ~KTG*~AMP	0.19	0.00	0.79		
Solution B3				0.85	0.84
Model 1: ~IEX	0.37	0.08	0.89		
Model 2: KTG*AMP	0.72	0.46	0.92		
Model 3: ~KTG*~HIC	0.22	0.01	0.71		
Model 4: ~KTG*~AMP	0.19	0.00	0.79		

Note: Solution A obtained using consistency cutoff 0.8, Solution B using 0.75. KTG = Knowledge of target group, AMP = Assessed manageable problem, VIC = Vertical formalized coordination, HIC = Horizontal formalized coordination, IEX = Information exchange. Logical operators * = AND, ~ = NOT.

The high consistency scores, both for the overall solution as well as for the separate models, indicate that there is a fairly close relationship between the models and the outcome scores. The coverage score for the solution shows that a large share of the LNR municipalities are encompassed by the solution. The raw coverage scores for the separate models shows that more municipalities are covered by the second model (target

group knowledge and problem assessment) than by the first (absence of information exchange among professionals), and the difference between the raw and unique coverage scores that the two models partly encompass the same municipalities.

As noted, using the alternative cutoff of 0.75 would also include Configuration 7 in the minimization process. This introduces some ambiguity into the resulting solution. Rather than producing one unique solution encompassing two models as in (1) above, the minimization algorithm is now unable to logically distinguish between the three alternative solutions (2) to (4) below.

$$\sim IEX + KTG*AMP + \sim KTG*\sim HIC \rightarrow LNR \quad (2)$$

$$\sim IEX + KTG*AMP + \sim KTG*\sim AMP \rightarrow LNR \quad (3)$$

$$\sim IEX + KTG*AMP + \sim KTG*\sim HIC + \sim KTG*\sim AMP \rightarrow LNR \quad (4)$$

However, from a substantive standpoint, the differences between Solution A and the three alternative Solutions B1 to B3 are rather small. First, note that Models 1 and 2 in all three versions of Solution B are identical, and that they also are identical to Model 1 and 2 of Solution A. Second, Models 3 and 4 of the different Solution B provide little in the way of additional explanation. The consistency scores for Models 3 and 4 shown in Table 4 are clearly lower than for Models 1 and 2, and their unique coverage is minimal. This is a consequence of the lower cutoff only leading to the inclusion of one additional configuration encompassing only one municipality, and the two additional models generated by the minimization process being combinations of Configurations 6 and 7 with relatively low outcome and consistency scores and with Configuration 6 also being one of the contradictory configurations. Our conclusion is therefore that the main ways of obtaining LNR are the two models in Solution A.

In addition to exploring the consequences of applying the two different consistency thresholds, the robustness of these results has also been examined in relation to the sample of cases, sets of conditions, and calibration decisions. Details of these specification checks are reported in the appendix, but in general these analyses show that the results from the main analysis are fairly robust and that our overall conclusions hold.

5 Discussion and conclusion

The starting point for this analysis was the idea that a territory's capacity to deal with NEETs not only depends on territorial resources in terms of unemployment rates, local industrial structure etc., but also on cognitive and collective elements. These in turn consist of how individuals and their organizations think, interact and utilize local knowledge – in other words of governance.

Before discussing the results, it should be noted that there are some limitations to the indicators used in the analysis. While we believe that the explicit enumeration of the participants involved in cooperative arrangements, their respective roles etc. has been sufficiently detailed to accurately distinguish between different work organization, the

information used to construct the target group knowledge and the problem formulation indicators could likely be improved upon. With regard to problem formulation it would for instance be interesting to be able to distinguish between the caseworkers' and the policy-makers' assessment of the problem, as the latter may be indicative of the resources provided in support of NEETs.

It is also worth pointing out that we only have investigated a certain set of governance conditions. Only a limited number of factors can be examined simultaneously with such a small data set, and other dimensions may of course be relevant as well. One dimension already mentioned that we did not include is for example informal interaction between local professionals, in contrast to the formalized interaction examined here. In particular, in small municipalities informal interaction might be more significant than formalized. Another possible aspect would be inter-municipal interaction and resource sharing, a strategy potentially relevant for municipalities lacking territorial resources. An additional caveat is of course that we examine a non-random sample of 20 municipalities, the sample size and the non-random selection introduce uncertainties that make it difficult to draw conclusions pertaining to Sweden's remaining municipalities and make all conclusions preliminary. On the other hand, the strategic construction of the sample and the collection of unique organizational data gives us better opportunities to discuss these issues than previous research in this area. Finally, the cross-sectional nature of the data and the tentative status of our expectations make the analysis more exploratory than definitive.

Starting with the truth table, this suggests that target group knowledge and problem assessment seem to be important for lower-than-expected NEET rates as the presence of these two conditions is one of the most obvious distinctions between the LNR and the non-LNR municipalities. A second distinction would seem to be the limited importance of information exchange, as all municipalities in which this is absent belong to the LNR municipalities. This indicates that professional knowledge and problem formulation are two important dimensions associated with lower-than-expected NEET rates, while questioning the importance of work organization.

Moving to the results from the minimization process, this produces two main models associated with LNR. This algorithmic comparison of commonalities and differences among cases that share the same outcome aims at generating a more parsimonious result, a result that here largely reiterates the impressions from the truth table.

The first model emphasizes the absence of information exchange. This solution is represented by geographically large rural municipalities with small populations, and we interpret this as an organizational adaptation in municipalities where formalized information exchange often is difficult to achieve and informal procedures are seen as sufficient. In the interviews, caseworkers thus described the burden of driving long distances to meet colleagues within the same municipality, and formalized coordination with other local actors as unnecessary ("this has not been needed"). Formalized information exchange might under such conditions not be the first option, in these municipalities it might instead be enough that the professionals know who the NEETs are and that they are not a larger group.

The second model instead highlights the combination of knowledge about the target group and assessing the local NEET problematic as manageable. This model encompasses a larger variety of municipalities, including e.g. both smaller municipalities, medium-sized towns and metropolitan suburbs. The similarities in knowledge and assessment does not extend to work organization, on the contrary we find everything from extended formalized coordination with vertical and horizontal coordination and information exchange to only one of the three organizational arrangements. This is in line with our finding that the form of work organization may not be as important as the ability to describe the target group and assess its problems.

Caseworker comments with regard to coordination arrangements are also quite diverse, resembling the diverging experiences frequently found in the governance literature. Some caseworker participating in more encompassing coordination arrangements for example stated that they have "become good at taking in other people's perspectives, a different understanding of regulations that govern/restrict work with young people. You have gained an overall picture of how society is structured" or witnessed that "the common knowledge of the group has increased". Other caseworkers instead displayed dissatisfaction: "I got bitter; it is better to do it yourself". These contrasting experiences may be related to other aspects that have been found to facilitate or impede coordination, such as starting conditions or leadership and routines (Ansell and Gash 2007).

As has often been pointed out, work with NEETs requires expertise from different professionals and policy fields, with no profession having a monopoly on work with these youth adults. The importance of knowledge has been increasingly acknowledged, Weber and Khademian (2008, 334) for instance argued "that a fundamental challenge to effectively managing any public problem in a network setting is the transfer, receipt and integration of knowledge across participants". There is a large literature on knowledge and knowledge management covering a broad spectrum of research fields (e.g. Austin et al. 2008, Leung 2009, Ragab and Arisha 2012). Most is concentrated on the knowledge cycle process within an organization, ignoring the territorial contexts within which the organizations are working (see however Mellberg et al 2021).

Yet, our study also indicates that professional knowledge may be related to formalized coordination. We are unable to conclusively establish the precise structure of this linkage, and further research is therefore needed on whether knowledge makes some organizational models unnecessary or whether certain forms of organization lead to improved knowledge. However, that formalized coordination is not a panacea for solving the NEET puzzle is somewhat unexpected given the emphasis that earlier theoretical and empirical analyses have assigned to coordination and other related forms of organization (cooperation, coordination, collaboration etc.). Intuitively, the idea of formalized coordination to promote welfare solutions is appealing. The advantage of pooling resources and knowledge of stakeholders from several policy areas and organizations to clients with complex problems seems obvious. Consequently, coordination has been described as the "holy grail" for service and/or benefit provision (Breckenridge et al 2015). This would supposedly solve problems that arrived with NPM-style reforms such as structural devolution and disaggregation of service delivery but also problems related to a more insecure world (Christensen and Lægreid 2007).

Still, Dowlinget al. (2004) observed that the ideological environment can lead to an uncritical promotion of coordination. They identified an overwhelming pressure to coordinate, where joint partnership is no longer an option but a requirement. Evidence showing that coordination actually improves public policy implementation is however scare and difficult to find.

Coming back to the term territorial capacity, our result that the two distinct models associated with lower-than-expected NEET rates seem to be associated with different types of municipalities is particular interesting from a local policy maker perspective. It implies that local politicians not necessarily need to adapt to so-called best practices promoted by e.g. (inter-) national actors, but instead need to consider what content of these practices could be of value in the policy makers' own municipality given the available territorial resources.

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Appendix A

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Data and method

The study is based on an explanatory mixed methods design (Creswell and Plano Clark 2011), a two-step procedure in which a quantitative study provides the basis for a qualitative. The quantitative study made use of administrative data for the whole Swedish population, while the qualitative study focused on an extreme, or deviant, cases sample of municipalities selected based on the results from the quantitative analysis. Such a purposive sample aims at locating cases believed to particularly informative as they in some way are atypical (Patton 1990). This appendix contains detailed information regarding each of the two steps.

Quantitative case selection

In an initial stage, the likelihood of not being in employment, education or training (NEET) was regressed on a set of independent variables using a 2-level random intercept logistic regression model. The data consisted of annual anonymized register data from Statistics Sweden pertaining to all residents in Sweden's 290 municipalities. The analysis was conducted separately for each year between 2013 and 2016, with the latter being the last year for which register data was available at the time of the selection of the sample.

A 2-level random intercept logistic regression model can be written as

$$\log(\pi_{ij}/(1-\pi_{ij})) = \beta_0 + X_{ij}\beta_1 + Z_j\beta_2 + u_j, \quad (1)$$

where $\pi_{ij} = Pr(y_{ij}= 1)$, y is the binary outcome variable, β_0 is an intercept, X_{ij} is a vector of level-1 variables, β_1 is a corresponding vector of parameters, Z_j is a vector of level-2 variables, β_2 corresponding vector of parameters and i and j are observations at level-1 (here individual) and level-2 (municipal) respectively. u_j is the level-2 residual with $u_j \sim N(0,\sigma^2_u)$ and represent the effect of belonging to group j on the log-odds of $y_{ij} = 1$. u_j is also known as the random intercept, and, as will be discussed further below, the random intercepts produced in the first step provided the basis for the selection of the municipalities examined in the second step.

To allow for comparisons with previous Swedish register-based analyses (e.g. Engdahl and Forslund 2016, SOU 2013, Statskontoret 2019, TemaUnga 2011), the definition of NEET closely followed what in Sweden has become the standard definition for this type of studies. NEETs were thus 16- to 24-year-olds who were not, or only to a very limited extent, working or studying. Not working was defined as having had an annual income from work of less than one so-called price base amount (*prisbasbelopp*), an administrative unit used in the calculation of social transfers which in 2016 equaled SEK 44 300 (approx. EUR 4 700 or USD 5 200). Furthermore, not studying was

defined as not having received any study allowance during the year in question, not having been registered as enrolled in an upper secondary educational program, not having taken part in courses in Swedish as a second language (*Svenska för invandrare*) more than 60 hours during the year nor taken more than 100 credits in municipal adult education. As noted, this definition matches those of previous Swedish studies.

The quantitative analysis aimed at accounting for factors that could lead to municipal differences in NEET shares that were *not* related to the municipalities' work with NEETs. These factors can be dived into three groups: the composition of the local youth population, the level and structure of local labor demand, and the level and structure of the local supply of education and health services. The composition of the local youth population was modeled through the independent variables at the first, lower, level, more specifically through the variables age, sex, any children 0 to 6 years, educational level, and immigrant background. The level and structure of local labor demand as well as the local supply of education and health services were in turn modeled at the second, higher, level through the variables local unemployment, local skill structure, local industrial diversity, local educational supply, and local health care supply. These factors may be considered structural pre-conditions for the municipalities' work with NEETs, and are likely to be of major importance for differences in municipal NEET rates. These factors must therefore be accounted for in order to properly assess the importance of local governance structures.

Age, sex, and children 0 to 6 years of age was defined based on year of birth, sex, and year of birth of any children living in the household as recorded in the registers. Education was based on the highest level of attained education, distinguishing between no or incomplete compulsory education, a compulsory degree (9 yrs.), an upper secondary vocational degree (approx. 11-12 yrs.), an upper secondary degree leading to tertiary education (12-13 yrs.), and tertiary level studies with or without a degree. This corresponds to the ISCED97 scheme's levels 0, 1 or 2, 3b, 3c, and 4 to 6. Finally, immigrant background was defined based on information regarding the individual's own country of birth as well as the country of birth of the individual's parents. Own country of birth was coded as Nordic country, Western European or Anglo-Saxon country, Eastern European country, or country in rest of the world. Parents' country of birth used the same country grouping, and in cases were the parents were born in different countries parents' country of birth was classified according to the country of birth of the parent born "closest" the Nordic countries. The individual's and the parents' countries of birth was then combined into a total of 17 different combinations of own and parental country of birth, including missing information on country of birth. Age, sex, children, education and immigrant background were all modelled with dummy indicators, with age represented through eight, education through four and immigrant background through 16 indicators.

The annual municipal unemployment rate was defined as the ratio between the number of municipal residents who at some point had registered as unemployed and the total number of residents. The share of employees with low skilled jobs was defined as the ratio between the number of residents working in occupations with three-digit Swedish standard occupational classification (SSYK) codes between 900 and 933 and all employed residents. SSYK 900 to 933 encompass occupations with the lowest level of

skill requirements and indicates occupations that only require shorter education or introduction (corresponding to International standard classification of occupations, ISCO, main group 9). In addition, industrial diversification was measured at the 2-digit level of the Swedish standard industrial classification (SNI) (corresponding to the Statistical Classification of Economic Activities in the European Community, NACE, code). More precisely, diversity was measured using Simpson's reciprocal measure of diversity, a measure that takes into account both the number of 2-digit industries present in a municipality and the distribution of the employees across these industries. The two latter measures of the structure of the local labor market were available for 2012 only. Finally, the supply of education and the supply of health care was measured by the number of upper secondary schools per 1000 youth aged 16 to 24 and the number of doctors and psychiatrists per 10 000 inhabitants in the region. Note that the two latter measures of local public services only capture structural differences between the municipalities (alt. the regions), not differences related to their work with youth. These two measures of the structure of the local public services referred to 2016.

An example of the regression results is presented in Table A1 showing the results for 2016. The results show clear patterns with regard to the individual level variables age, sex, children, and education. The risk of being NEET is higher among youth who are older, male, parents, and less educated. There is also substantial variation in the estimates for the different indicators for immigrant background, were most groups display higher NEET risks than the comparison group of youth born in a Nordic country with parents also born in a Nordic country. Two notable exceptions are those born in Rest to parents born in East or Rest. These show a lower likelihood of being NEETs, presumably because they are more likely to be in education or employment programs of various kinds.

As for the municipal level variables, the NEET risk increases with increasing unemployment, but decreases with more health care staff. There are also indications that the risk may decrease with greater availability of low skill jobs and increasing school supply, yet this is here less well established. Industrial diversity does on the other hand not appear to be related to the NEET rate.

The results for the years 2013 to 2015 were substantively very similar and are therefore not presented. The results for the earlier years differed mainly in that low skill jobs and school supply were clearly significant in 2013 and 2014, something which also applied to low skill jobs in 2015.

For each year, the random intercepts were calculated and the municipalities ranked based on their estimated random intercept. Positive random intercepts here indicated that a municipality had a higher NEET rate than expected given the rest of the model, while negative intercepts conversely indicated a lower NEET rate than expected. An average rank for the years 2013 to 2016 was then calculated, and 10 municipalities among the 20 with the highest and 10 municipalities among the 20 with the lowest average rank were selected. These 20-plus-20 municipalities can thus be regarded as consistent outliers. Among the outliers, the 10-plus-10 municipalities were chosen so as to obtain a certain variation in size, geographic location as well as presence of an office of the national Public Employment Service (PES). With one exception, all initially

Table A1. NEET risk in 2016. 2-level logistic regression, standard errors in parenthesis

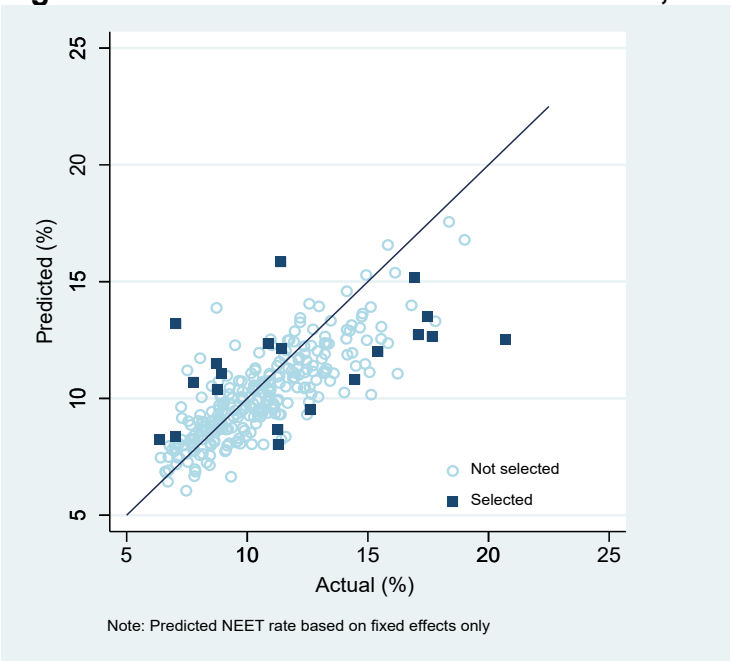
Variable	Coeff. (S.E)	Variable	Coeff. (S.E)
Woman	-0.107***	Age 17	-0.958***
	(0.008)		(0.020)
Child btw.	0.399***	Age 18	-1.003***
0-6 yrs. of age	(0.013)		(0.020)
Born in Nord,	0.430***	Age 19	-0.206***
parents in West	(0.063)		(0.019)
Born in Nord,	0.143***	Age 20	1.008***
parents in East	(0.026)		(0.017)
Born in Nord,	0.223***	Age 21	1.305***
parents in Rest	(0.016)		(0.016)
Born in West,	0.372***	Age 22	1.461***
parents in Nord	(0.053)		(0.016)
Born in West,	0.622***	Age 23	1.513***
parents in West	(0.054)		(0.016)
Born in West,	0.487***	Age 24	1.521***
parents in East	(0.087)		(0.016)
Born in West,	0.365***	Compulsory	-2.625***
parents in Rest	(0.115)	education	(0.012)
Born in East,	0.492**	Upper sec. voc.	-3.624***
parents in Nord	(0.199)	education	(0.017)
Born in East,	0.142	Upper sec. tert.	-3.783***
parents in West	(0.323)	prep. education	(0.016)
Born in East,	0.193***	Tertiary	-3.991***
parents in East	(0.024)	education	(0.017)
Born in East,	0.141	Industrial	0.011
parents in Rest	(0.265)	diversity	(0.008)
Born in Rest,	0.460***	Low skill	-1.517*
parents in Nord	(0.082)	job ratio	(0.885)
Born in Rest,	0.443*	Unemployment	4.856***
parents in West	(0.256)	rate	(0.695)
Born in Rest,	-0.519**	High school	-22.074
parents in East	(0.268)	ratio	(14.174)
Born in Rest,	-0.050***	Health care	-0.042***
parents in Rest	(0.014)	staff ratio	(0.014)
Missing imm.	0.834***	Constant	-0.446***
background	(0.012)		(0.149)

Notes: Nr. of obs. = 1038732; Nr. of groups = 290; Min. obs. per group = 230; Avg. obs. per group = 3582; Max. obs. per group = 86894; Nord = Nordic countries; West = Western European and Anglo-Saxon countries; East = Eastern European countries; Rest = rest of the world. Significance levels: *** = 0.01, ** = 0.05, * = 0.10.

selected municipalities decided to participate in the study, and the non-participating municipality was replaced by one with similar size, location and PES presence.

An impression of the differences between the selected and the non-selected municipalities is provided by Figure A1 showing the actual and the predicted NEET rates for Sweden's 290 municipalities in 2016 separately for the 20 selected and the 270 remaining municipalities. The predicted NEET rates have here been calculated based only on the model's fixed effects, that is without including the random intercepts. In the figure, the diagonal line indicates zero difference between actual and predicted rates and municipalities' location in relation to the diagonal gives an indication of the size and direction of their random intercept. Municipalities above the diagonal thus have an actual NEET rate lower than predicted, whereas those below the diagonal have an actual rate higher than the predicted.

Figure A1. Predicted and actual NEET rates, 2016



Most municipalities lie relatively close to the diagonal indicating that the model has been relatively successful in predicting the actual NEET rates. This underscores the importance of controlling for structural factors at both the individual and municipal level when examining the importance of local governance. However, it is also clear that this does not apply to all municipalities, the predicted rate has in some cases differed quite substantially from the actual and it is among these municipalities our sample was selected.

Finally, the figure also shows that the selected municipalities include municipalities with high as well as low actual NEET rates, and that the distribution of actual NEET rates among the selected municipalities roughly matches the distribution among the non-selected municipalities. This further underlines the value of our sample selection strategy.

The figure refers to 2016, while our sample was selected based on the municipalities' random intercepts over the four-year period. Although the municipalities' actual and

predicted NEET rates both vary over time, the figures for the other years are qualitatively very similar and are therefore not shown.

The names of the selected municipalities are confidential, yet an indication of the types of municipalities that were selected is provided in Table A2 using a classification of municipal types constructed by the Swedish Association of Local Authorities and Regions. The classification aims at grouping municipalities according to structural differences related to population size, population density and possibilities for commuting to neighboring municipalities. It distinguishes between nine different types of municipalities; i) Large cities, ii) Commuting municipalities near large cities, iii) Medium-sized towns, iv) Commuting municipalities near medium-sized towns, v) Commuting municipalities with a low commuting rate near medium-sized towns, vi) Small towns, vii) Commuting municipalities near small towns, viii) Rural municipalities, and ix) Rural municipalities with a visitor industry (for details, see SALAR 2016). While the focus lies on demographic differences, the classification indirectly provides information on differences in economic structure as well. Larger municipalities (and those within commuting distance) will thus tend to have a more diverse economic structure, in particular with regard to services of various kinds.

Table A2. Distribution of municipalities by type of municipality

Type	Low NEET	Column %	Not Low NEET	Column %	All municip.	Column %
Large cities	-	-	-	-	3	1
Commuting municipalities near large cities	1	10	-	-	43	15
Mid-sized towns	1	10			21	7
Commuting municipalities near mid-sized towns	-	-	1	10	52	18
Commuting municipalities near mid-sized towns w/ low commuting rate	1	10	-	-	35	12
Small towns	1	10	2	20	29	10
Commuting municipalities near small towns	2	20	4	40	52	18
Rural municipalities	3	30	2	20	40	14
Rural municipalities w/ visitor industry	1	10	1	10	15	5
Total no. municipalities	10	100	10	100	290	100

As can be seen from the table, the selected municipalities represent a variety of municipal types, the only category missing is Large cities. Furthermore, although there is a tendency that selected municipalities with higher NEET rates than expected are slightly smaller than the others, the distribution of the selected municipalities with higher and lower NEET rates nonetheless roughly matches the distribution of all municipalities. As for geographical variation, the selected municipalities are distributed throughout the country, something that applies to both the negative and the positive deviants (not shown). To summarize, while the 20 municipalities are a non-random sample of Sweden's 290 municipalities they could still be said to illustrate the situation in a rather wide variety of settings.

One indicator that, due to delays in the ethical review process, was not available at the time of the selection of the sample related to individual differences in health. This, however, turned out to be inconsequential for the selection of the cases. Once ethical clearance was received, the analyses for the four years were carried out anew yielding basically the same results. Information on individual ill-health in the form of the sum of sick pay, rehabilitation allowance and collectively bargained sick pay as well as on early retirement in the form of early retirement pay and disability allowance was thus added to the model. These sums were both modelled as three dummies; namely no sick or retirement pay, some but below the national mean among 16- to 24-year-olds, and some but at or above national mean. While the results showed that ill-health clearly is a risk factor with regard to NEETs, the ranking of the municipalities according to their random intercepts with or without these dummies did not differ in any significant manner.

Qualitative data collection

The second step consisted of semi-structured interviews with professionals working with NEETs in the 20 municipalities, interviews conducted in 2019. There is thus a gap between the period covered by the data used in case selection and the interviews, a gap caused by the time lag in the availability of the register data. While this was unavoidable, basing the selection of the sample on outcomes over a four-year period was intended to guarantee that the sample captured long-term differences likely to remain over the interim period. Analyses using data for 2017 and 2018 that has subsequently become available also indicated that of the 10-plus-10 municipalities originally selected, the majority (around two-thirds of the municipalities, evenly distributed across positive and negative deviants) would have belonged to the target municipalities also with the more recent data.

Respondents were located by first consulting municipal webpages, then contacting municipal units directly responsible for NEETs, and finally contacting case workers. During this process, questions were asked regarding other respondents, units or organizations who would be working with this group of youth. Any such additional respondents were contacted and interviewed as well, producing a snowball sample.

The respondents represented a variety of organizations. In most municipalities, this included different combinations of respondents from the municipal school administration, the municipal social services (units for family/children, for social assistance, for recreation and leisure), municipal labor market services, regional Coordination Agencies, and the local PES office. Since the local municipal organizational structure varies, the type of organization and expert interviewed varied as well. Table A3 provides an overview over the interviews per municipality and type of expert, and it is clear that most relevant local experts at the municipal level came from the labor market and educational units, closely followed by the social services.

Table A3. Overview of interviews per municipality

	Local NEET experts									
Municipa-lities	**Mun. LMU**	**Mun. EU**	**Mun. SS**	**Mun. CCS**	**Mun. DU**	**Mun. LRU**	**Mun. SP**	**Reg. CA**	**Nat. PES**	**Total**
Low NEET										
1	1	1	1							3
2	1	1	1							3
3	1		1				1		1	4
4	1	1	1							3
5	1	1	1							3
6	1	1	1							3
7	1	1								2
8	1		1					1		3
9	1	1	1			1		1		5
10	1	1	1							3
Not Low NEET										
11	1	1	1							3
12	1	1	1	1						4
13	1	1	1							3
14	1	1	1							3
15	1	1								2
16	1	1								2
17		1							1	2
18	1	1	1			1				4
19		1							1	2
20	1				1				1	3
Total	18	17	14	1	1	2	1	2	4	60

Notes: LMU=Municipal labor market unit, EU=Municipal educational unit, SS=Municipal social services, CCS= Municipal Child care services, DU= Municipal disability unit, LRU= Municipal leisure and recreation unit, SP=Municipal social support, CA= Regional coordination agencies, PES= National Public Employment Services.

In each of organization, caseworkers, sometimes together with unit heads or other relevant colleagues, were interviewed. The respondents were professionals working with various (sub-)groups of NEETs, the intention being that they would be able to provide information on their particular subgroup or from their specific vantage point. A counselor in school will for instance meet young people with a different problem profile compared to a social worker in a family unit or a caseworker at a PES office.

The primary focus of the interviews was not how the respondents' separate organizations worked with NEETs, but rather in how the joint work with NEETs was organized locally. To obtain a comprehensive and reliable picture of the local conditions, resources and structures a number of different respondents were interviewed that together could provide such a picture. This is an example of multiple informant methodology (Wagner, Rau and Lindemann 2010), a method of surveying a complex environment that minimizes the impact of biases and random errors that may be generated by relying on only one informant.

Generally, the semi-structured interviews covered what (social, educational, health and labor market) measures were provided, by whom, how they were designed, and how they were organized in relation to each other in a specific local structure. Since the aim was to obtain a complete picture of the measures provided, questions were asked regarding the policy areas involved, the division of responsibility, and the design and

organization of the measures. More concretely, the interviews included questions on the different groups of NEETs identified by the experts, specifically the various problems of NEETs such as school dropout, drug abuse, family related problems, health problems. They also contained questions on local conditions impacting on the situation of NEETs, for instance a lack of public transport. Another area encompassed the tasks and organization of the agencies involved. This included who was doing what, e.g. where responsibility was located within the organization and what measures were provided. It also included interaction and cooperation between actors, e.g. the partners involved, the aim of cooperation, problem perception, solutions, and difficulties in cooperation. Finally, the interviews covered any territorial conditions relevant for NEETs such as closure of companies, schools etc.

The vast majority of the interviews were face-to-face. However, this was in some cases unfeasible due to scheduling difficulties or other logistic problems in which case telephone interviews were conducted. Each face-to-face interview was carried out by two researchers, both completing the questionnaire independently of each other. In addition, all interviews were recorded. All in all, 60 interviews were carried out in the 20 municipalities with the number of interviews per municipality varying between two and four. In cases were several respondents took part in an interview this was counted as one interview.

References Appendix A

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Appendix B

When conducting QCA analyses, it is generally recommended to examine the robustness of the results with respect to different consistency thresholds, frequency thresholds, sample of cases, sets of conditions, and calibration decisions. The impact of varying the consistency thresholds was reported above, and the frequency threshold, the minimum number of cases that have to encompassed by a configuration for this to be considered part of a solution, has here been set to one in accordance with recommendations for studies based on small- to medium-sized samples (Schneider and Wagemann 2012).

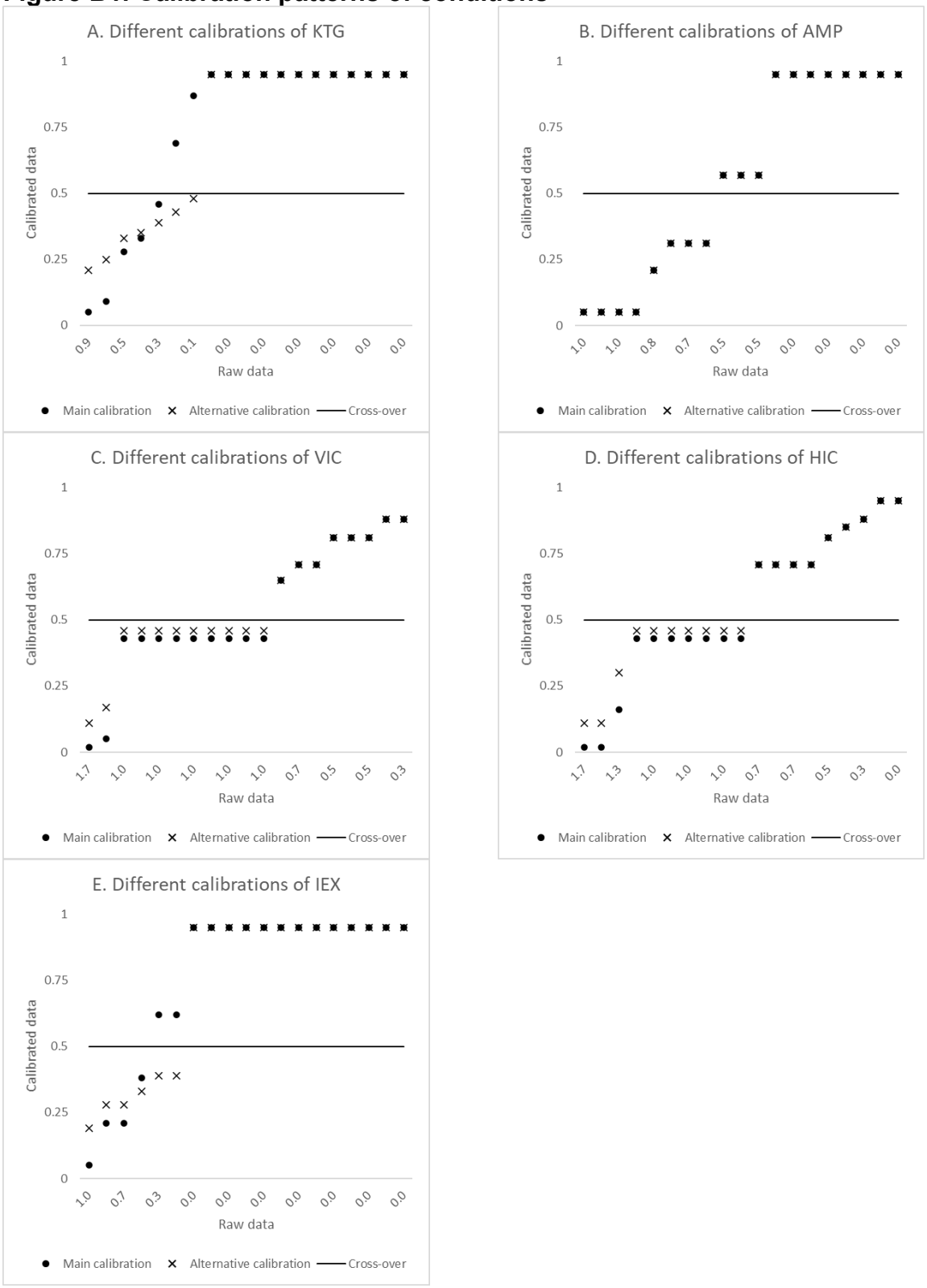
As regards the sample of cases, one municipality had been excluded due to uncertainty regarding its organizational characteristics. Including this municipality using the organizational information provided by the respondents does however not substantially change the results, using the 0.8 cutoff thus reproduces (1) above with similar solution coverage but somewhat lower solution consistency. Using the lower 0.75 cutoff instead yields a solution similar to (1) but without the knowledge condition KTG (not shown).

With respect to the set of conditions, an alternative measure of professional knowledge has been examined, a measure of local territorial knowledge based on the caseworkers' stated knowledge about the availability of public transport enabling NEETs to come to school, practicum or work and the existence of geographical concentrations of NEETs in the municipality. However, the alternative measure was highly correlated with KTG (the correlation between the raw variables is around 0.8) and solutions consequently similar (not shown).

Finally, the importance of the calibration has been explored by changing the membership thresholds as well as the cross-over point. While the main calibration emphasized substantive considerations, the alternative calibration instead focused entirely on empirical aspects of the raw data. More specifically, to reflect the potential ranges of membership in the data, the thresholds for non-membership have been set equal to the lowest empirically possible degree of membership. The cross-over points have furthermore been set to approximately the observed median value in the raw data. The cutoff for non-membership in KTG has for instance been changed from only general to no knowledge and for IEX from partial to no information exchange. In the former case, the cross-over point has been moved from 0.3 to 0.05 and in the later from 0.4 to 0.05, in both cases implying that only municipalities in which all caseworkers displayed knowledge or exchanged information were counted as in. Conditions VIC and HIC have been re-calibrated in a similar manner, while AMP has been left unchanged as this already conformed to the alternative criteria.

The impact these changes have had for the calibrated fuzzy scores is illustrated in Figure B1, showing the municipalities' raw score and the two different fuzzy scores. As is evident from the figure, the re-calibration has generally led to a more compressed distribution of fuzzy scores, and in a couple of instances also to a municipality crossing the cross-over point between more in and more out.

Figure B1. Calibration patterns of conditions



However, as shown in Table B1 this did not lead to any major changes in the conclusions, the parsimonious solution for the truth table using the 0.8 cutoff is identical to (1) with similar coverage and consistency scores. Using the 0.75 cutoff again

basically reproduces this solution, the new Model 2 provides little in terms of additional explanations as its unique coverage is zero.

Table B1. Parsimonious solutions with alternative calibrations

	Raw coverage	Unique coverage	Consistency	Solution coverage	Solution consistency
Solution A				0.84	0.86
Model 1: ~IEX	0.37	0.12	0.84		
Model 2: KTG*AMP	0.72	0.47	0.91		
Solution B				0.84	0.84
Model 1: ~IEX	0.37	0.09	0.84		
Model 2: ~KTG*~AMP	0.21	0.00	0.73		
Model 3: KTG*AMP	0.72	0.45	0.91		

Note: Solution A obtained using consistency cutoff 0.8, Solution B using 0.75. KTG = Knowledge of target group, AMP = Assessed manageable problem, VIC = Vertical formalized coordination, HIC = Horizontal formalized coordination, IEX = Information exchange. Logical operators * = AND, ~ = NOT.

While it is clear that the different analytical choices do affect the results, the robustness checks on the whole show the changes in the results to be relatively minor.