Article

Municipal Territoriality: The Impact of Centralized Mechanisms and Political and Structural Factors on Reducing Spatial Inequality

Itai Beeri 1,2,⁎, Meirav Aharon Gutman 3 and Jonathan Luzer 4

1 Department of Public Administration & Policy, School of Political Sciences, University of Haifa, Haifa 3498838, Israel
2 SPEA—O’Neill School of Public and Environmental Affairs, Israel Institute, Visiting Faculty, Indiana University, Bloomington, IN 47405, USA
3 Faculty of Architecture and Town Planning, Technion—Israel Institute of Technology, Haifa 3200003, Israel
4 Strategic Planner, 1A Ha’Yarden St., P.O. Box 1133, Airport City 7010000, Israel
⁎ Correspondence: itaibeeri@poli.haifa.ac.il

Abstract: We explore two complementary mechanisms that are designed to work together to reduce spatial inequality—redrawing municipal borders and the redistribution of tax resources. This study’s methodology is based on the empirical analysis of 376 decisions of boundary commissions and permanent geographic commissions that resulted in land transfers and redistributed tax resources in Israel. Our findings indicate that the impact on spatial inequality is mixed. Over time, the amount of land transferred to low socio-economic municipalities has increased, provided that these municipalities are located in the center of the country, or have a Jewish ethnic majority, are politically affiliated with the Minister of the Interior and the ultra-Orthodox right, are financially sound, and have a large population and a large area. In contrast, the redistribution of tax resources provides revenue increases for low socio-economic municipalities that are in the periphery, largely populated by Arabs, are unaffiliated with powerful politicians, are financially weak and small in size and population.

Keywords: municipal territoriality; spatial inequality; spatial resource mobility; local governance; localism; spatial balance of power; land and boundaries; socio-economic affiliation and ethnicity

1. Introduction

Two basic assumptions underlie the discussion of spatial inequality. First, according to the philosopher Jean-Jacques Rousseau, spatial inequality has existed from the very first time a human being claimed, ‘This is mine!’ and has continued to exist in one form or another in every society. Thus, inequality is forever the result of asymmetrical power relations marked by the control of individuals and groups over material and non-material resources [1]. The second basic assumption is that every point in space differs from all other points in space [2]. Hence, it is only natural for discrepancies to emerge in the value ascribed to various places, leading to competition over their ownership [1]. Finally, Ward [3] defined spatial inequality as the unequal distribution in space of something that would not have emerged without human intervention. While spatial variance created by forces of nature is usually regarded as reasonable and fair, spatial inequality is usually considered to be undesirable and unfair [2]. Is spatial inequality a problem? How should it be defined? Should and how can it be controlled, regulated, and minimized?

We begin by assuming that spatial inequality reflects social and economic inequality. These disparities can be expressed at the state or regional levels and/or in the local authority or the city and should be minimized [4–7]. Spatial inequality is also termed spatial resource mobility and differentiates from within-person resource mobility, e.g., income, education,
and alike. We explore two complementary mechanisms used in Israel that are designed to work together to accomplish this goal—redrawing municipal borders and redistributing local tax resources. To perform this, we investigated how political and structural municipal factors reduce or preserve spatial inequality. This study’s methodology is based on the empirical analysis of 376 decisions of boundary commissions (2003–2016) and permanent geographic commissions (2016–2022) that resulted in land transfers and redistributed tax resources.

Our findings indicate that the impact of these transfers on spatial inequality is mixed. In relation to land transfer, decisions usually did not bring about a decrease in spatial inequality but preserved spatial inequality. In relation to the redistribution of tax resources, decisions usually reduce spatial inequality. Hence, we contribute to the literature by highlighting the mechanisms and factors that play a role in the effects that redrawing municipal boundaries and redistributing tax revenues have on reducing and preserving spatial inequality.

2. Literature Review, Framing and Hypotheses Development

Spatial inequality has been examined in various local authorities and cities ranging from China [8] to Benin [9], Greece [10] and the UK [11,12], both during normal times and in emergencies [13].

The current study can be seen as one possible extension of the debates about urban science, urban sustainability, urban development, and land use and land management. For instance, while urban and city development is necessary for improving people’s mobility and quality of life and providing them with affordable housing and urban integration [4,14], everyone, to some extent, also needs land and space [10]. In a similar vein, inclusive urban planning, sustainable planning, and the socio-spatial landscape of urban areas also require land and space as a precondition for their sustainability [15]. This need is especially relevant for urban areas that suffer from vulnerability and a lack of resources or lack of land [4,16,17].

Urban science research and the research on municipal territoriality and spatial inequality share a common interest in the implications of these needs for urbanization and sustainability. The current research aims to bridge these two areas by exploring one of the preconditions of urban sustainability and development. To conduct this, we examined the leading mechanisms used in Israel to regulate land use and reduce spatial inequality. While many studies assume as a starting point that the territory of the city is a fixed figure, we began our investigation one step earlier. Thus, we examined the allocation of land between local authorities as the key to reducing spatial inequality.

An In-depth critical review [18] introduces four serious criticisms and lacunae in political research on spatial inequality. First, the research conducted thus far has lacked any political context, even though the study of spatial inequality is political by nature. Therefore, spatial inequality must be reinvestigated from a vantage point that considers the political and historical context. Second, some of the research conducted so far has not been objective, leading to fragmented policies that have focused on either people or places which do not best serve those who need them. Thus, an empirical study based on valid observations is needed. Third, there are few studies on the effect of methods designed to reduce spatial inequality, even though such an examination is essential for understanding the phenomenon. Fourth, territoriality has been explored almost exclusively in the context of international relations. Very few studies have examined its impact at the local and municipal levels.

In response to these lacunae, this study responds to both global and Israeli calls for investigations into how political actors, social groups and regulatory mechanisms are related to spatial inequality, local boundary changes and tax revenues in particular, e.g., [1,19–23]. We contribute to the theory on this subject by considering the political and historical context of our Israeli case study. In doing so, we reveal the role of the spatial balance of power in minimizing spatial inequality. Another significant theoretical contribution of this study is that it extends the territoriality discourse, which usually focuses
on international relations, e.g., [19,24–29] to the local scale by focusing on the interrelations between local actors, municipalities and the relations between these actors and the central government.

In Israel, due to political, geographic, and demographic circumstances, land is scarce, and society is heterogeneous and fragmented into communities and minorities. Up until 2016, one of the main governmental mechanisms of municipal territoriality at the local level was ad hoc boundary commissions—public commissions that the Minister of the Interior was appointed to discuss and recommend changes in municipal jurisdictions [30]. These boundary commissions recommended whether, which and to whom territory would be transferred [23]. Thus, this was viewed as a tool for regulating spatial policy. However, these boundary commissions were subject to various political pressures and forces. They operated as ad hoc reactive players, not as proactive players, and did not follow a clear, strategic spatial policy [30]. In 2016, the boundary commissions were replaced by permanent geographic commissions. To date, it is still unknown how these generations of regulatory mechanisms affect spatial inequality or how the transferring of land and tax resources from one local authority to another reduces or preserves spatial inequality. Hence, our research question is as follows: what are the conditions under which centralized regulatory mechanisms and political and structural factors reduce or preserve spatial inequality?

Several researchers have coupled politics with spatial inequality at the local level. Some of them connect politics and space using the term territoriality. While the definition of the territory is narrow—a fenced area controlled by people—territoriality is a broad term referring to human, social and political behavior that results in territorial achievements. Territoriality is defined as political behavior shaped by interactions, competition, struggle and cooperation. In other words, it is the political organization of space that connects land and boundaries. Thus, a possible solution to the ‘lack of fit’ between the legal municipal area and the need for land is redrawing these boundaries [31]. Land is a physical, political, economic, cultural, and symbolic resource. Boundaries are what transform space into place. They distinguish between groups, connect them, give them territory, and assign geographic space to particular groups. Thus, local borders define communal identity and determine inclusion and exclusion. They reflect the degree of socio-political and ethnic homogeneity of the community [32].

In their cross-country analysis, Ezcurra and Rodríguez-Pose [33] stressed that countries with a better quality of government have less spatial inequality. Nevertheless, the heart of the political process influencing spatial inequality at the local level—municipal territoriality—reflects the spatial and political relations between local authorities, communities, classes and ethnic groups, and the relations between these groups, and the central government [34,35].

Hence, we adopt a structural approach to understand the balance of power in space and its impact on land, boundaries, and economic resources. Indeed, the very act of assigning land and its associated rights and powers to a community is, in and of itself, a political act. In fact, it is the wielding of power vis-à-vis neighboring communities and the central government, which is legitimized by affiliation with a social, geographic, political or ethnic group [36]. The objective of such acts is to achieve territorial, economic and symbolic benefits, such as attracting residents and businesses and increasing revenues, which may lead to support and governmental stability [37]. On the other hand, the very act of assigning and allocating land or tax resources and of delegating their associated rights and powers in a way that benefits a local authority, community, social class or ethnic group constitutes a political act on the part of the central government, and national politicians and regulators working on their behalf. The consequences of such acts might reduce spatial inequality, at least for some groups, at the expense of others or preserve spatial inequality at the expense of others [38].
3. The Israeli Context

The main historical events that have influenced spatial inequality in Israel are the ongoing Arab–Jewish conflict and the new immigrant settlement policy in the early years of the state. The main aim of the Arab–Jewish conflict, which reached its height in 1948 during the Israeli War of Independence, was to gain national control of land. The Arabs refused to accept the Partition Plan, leaving them without national land. Most private land owned by Arabs who fled during the war was expropriated [39].

The new immigrant settlement policy, on the other hand, was affected by ethnic tensions within the Jewish society. In the early years of the state, Jewish immigrants from European countries (Ashkenazim) usually settled in the center of the country and in the land-rich kibbutzim and regional councils. In contrast, Jewish immigrants from Asia and North Africa (Mizrahim or Sephardim) were directed to new development towns in marginal and peripheral areas of the country, leading to dramatic and structured inequality in the control of land. In other words, alongside the Arab–Jewish conflict, populating developing towns with new immigrants from Mizrahi backgrounds, Jews from Arabic-speaking countries, was a central component in the creation of spatial inequality in Israel [40].

In continuation of these trends, the local government map in the state’s early years and in the years to come benefited municipalities and local and regional councils located in the center of the country and regional councils located in the periphery. Most of the residents of these areas were Jews from the upper–middle class or were well-established Ashkenazi immigrants. In contrast, the small new urban development towns populated by poorer Mizrahi immigrants and Arab villages were disadvantaged and had fewer resources [23,41–43].

Local authorities can appeal to a boundary commission to redraw the municipal boundaries and have land, including the rights for planning, construction, and business development on that land, transferred to them. Alternatively, a local authority may ask to transfer land that already includes developed commercial and industrial areas and, thus, claim to own the tax resources and the future profits from these areas [23]. Permanent geographic commissions follow the same procedures, with one major addition. With the approval of the Interior Minister, they can engage in proactive measures to reduce spatial inequality by transferring land and redistributing taxes in accordance with the Interior Ministry’s spatial policy.

Over time, frictions between the various groups in Israeli society led to demands for the redrawing of municipal boundaries [43]. More importantly, the conflicts and tensions between neighboring local authorities and between the local and central governments often stemmed from spatial inequality. These conflicts resulted in claims about owning land and repeated demands to transfer land and its associated rights and potential profits [44,45]. As a result of these increasing formal conflicts, the central government tried to regulate spatial inequality using the mechanism within its control—boundary commissions [23].

4. Minimizing Spatial Inequality. The Conditions under Which Boundary Commissions and Permanent Geographic Commissions Conduct Land Transfer and the Redistribution of Tax Resources in Israel

From the 1950s to the 1970s, boundary commissions were more of an internal bureaucratic procedure of the Ministry of the Interior. They usually comprised Ministry employees and attracted little publicity or public interest. They generally focused on preserving agricultural land. During the 1980s and 1990s, due to the urgent need to absorb a massive wave of immigrants from the former Soviet Union and other areas and the rapid rise in housing prices in the central regions, the number of municipal boundary commissions appointed each year increased substantially. However, the pressure to rapidly transfer land for residential construction created difficulties that were considered a bottleneck that retarded development [23].

In response, the Israel Land Authority introduced new norms of municipal territoriality. It implemented a spatial policy that allowed Jewish regional councils, primarily those
in the center of the country, to rezone agricultural land in their jurisdiction for the purpose of developing and constructing industrial zones—an authorization that produced profits in the years to come. Jewish regional councils were not the only ones to profit from this change. The Israel Land Authority itself was entitled to profit from this rezoning despite not being the owner of the land [23].

Nevertheless, this land policy created resentment among those who did not benefit from it. In 2001, a number of NGOs appealed to the Israeli High Court to change what they claimed was built-in discrimination in the policy. The court voided the resolutions that granted construction and development rights on agricultural lands to various municipalities, saying that they were unreasonable and disregarded the principle of distributive justice [46,47]. It seems clear that the court regarded spatial inequality as a problem that could and must be minimized by the equal distribution of resources. The ruling was passed in 2002 against a background of ongoing spatial inequality, social and ethnic rifts, and institutional non-governance. Disadvantaged groups gave up on parliamentary politics as a means of resolving spatial inequality and appealed instead to the Supreme Court [48]. Heartened by the court’s decision, more local authorities appealed to boundary commissions demanding distributive and spatial justice and equity. At the same time, the central government tried to preserve and regain its power in this area, which had been gradually eroded since the 1970s [23].

In a wider sense, the role of the court in setting new precedents was particularly crucial because the trends of decentralization and local democracy that were sweeping the country were neither accompanied by consensus on national goals and priorities nor legal reforms to transfer power from the state to local stakeholders. In practice, the court increasingly became the arena for societal conflicts. Its activism limited the control of the central government and challenged the decisions made by the state and quasi-legislative bodies such as the Israel Land Authority and boundary commissions [23].

According to Razin and Hazan [23], there were various external pressures on the boundary commissions. Politicians from both the central and local governments tended to distrust them. In addition, the commissions tried to strike a balance between decentralization, social justice, sustainable development, globalization, polarization, individualism and materialism, and rational planning, equality, and efficiency. Ultimately, their decisions became increasingly politicized, often prompted by subjective judgments rather than purely objective evaluations of development needs and efficiency [23].

In 2016, the Minister of the Interior replaced the boundary commissions with seven permanent geographic commissions. These commissions were charged with acting according to more professional standards. They used urban planning, economic measures, and GIS tools. They were also supposed to use proactive, balanced, autonomous, transparent, and collaborative practices that were efficient and posted online. They were supposed to base their decisions on a regional approach and on the national spatial policy set by the Ministry of Interior [49].

According to the Interior Ministry [49], by the end of 2021, the permanent geographic commissions had made more than 200 decisions, which involved 91 local authorities, 21,400 transferred dunams of land and the redistribution of NIS 45 million. (A dunam is about one-quarter of an acre. At that time, one NIS from the new Israeli shekel was worth about 28 American cents). Still, Alfasi and Migdalovich [50] stressed that Israeli planning, although desperate to create new tools and procedures for decision making, suffered from the public’s loss of faith in its ability to bring about positive change due to the complete lack of spatial planning principles. While a previous report provides a primary analysis of the performance of the former centralized mechanism of regulating spatial inequality, referring to the boundary commissions that operated until 2016 [30], there are a lack of updated, comparable data and analysis of the current mechanism of regulating spatial inequality through the permanent geographic commissions. Accordingly, our goal is to close this theoretical and practical gap in our knowledge by investigating the conditions under which boundary commissions and permanent geographic commissions influence
land transfer and the redistribution of tax resources in Israel. We also examine their impact on reducing or preserving spatial inequality.

Based on this discussion, we hypothesize that the following:

**Hypothesis 1:** In 2003–2016, there was a positive relationship between the socio-economic status, geographic location, political affiliation and ethnicity of local authorities and the extent to which land was transferred to these local authorities.

**Hypothesis 2:** In 2003–2016, the socio-economic status, geographic location, political affiliation and ethnicity of local authorities and communities moderated the relationship between the timing of the boundary commission’s recommendation (after the 2002 decision) and the extent to which land was transferred to these local authorities.

**Hypothesis 3:** In 2016–2022, there was a positive relationship between socio-economic status, geographic location, political affiliation, ethnicity, financial soundness, the size of the population, the area of the local authority, the area demanded by the local authority, and the initiator of the land transfer process and the extent to which land was transferred to these local authorities and an increase in tax revenues.

**Hypothesis 4:** In 2016–2022, socio-economic status, geographic location, political affiliation, ethnicity, financial soundness, the size of the population, the area of the local authority, and the initiator of the land transfer process moderated the relationship between the area demanded by the local authority and the extent to which land was transferred to the local authority and increases in tax revenues.

5. Research Method

5.1. Databases and Sample

This study uses quantitative methods. The database includes the following two data sets: (1) 94 decisions made by boundary commissions between 2003 (after the High Court of Justice’s landmark decision) and 2016 (hereinafter: BC2003-2016) and (2) 280 decisions made by permanent geographic commissions between 2016 and 2022 (hereinafter: PGC2016-2022). These decisions redrew 175 municipal borders and redistributed revenue to 105 local municipalities. One should bear in mind that these data sets are continuous and comparable. Most of the independent variables measured and analyzed for BC2003-2016 were also available for PGC2016-2022. Nevertheless, given that PGC2016-2022 is based on more accessible resources, we could measure and analyze additional variables. While the reference point of BC2003-2016 was the timing, meaning the time that had passed since the 2002 High Court decision about spatial inequality, the reference point of PGC2016-2022 was politics, referring to the area demanded by the local authority.

5.2. Research Variables

5.2.1. Dependent Variable: The Land Transferred to Local Authorities

To assess the land transferred to local authorities, we examined the increase in the land area of the recipient local authority relative to its original jurisdictional size as a continuous variable. Using this approach prevented any bias derived from the size of the local authority. The relative growth rate ranged from 0% to 393% and from 0% to 8.9% for BC2003-2016 and PGC2016-2022, respectively, with an average growth rate of 13.2% (S.D. = 47.8%) and 0.4% (S.D. = 1.3%), respectively. The total requested territory was estimated at 390,826 and 306,340 dunams, of which 45% and 31% were transferred, respectively. For PGC2016-2022 only, the data also enabled us to examine the growth in jurisdictional size relative to the jurisdiction demanded by the petitioning local authority. These variables provided a deeper look into the dynamics of land transfers. Obtaining the rights to this land does not necessarily lead to the use of it in a way that benefits the local authority financially.
5.2.2. Dependent Variable: The Increase in the Income of a Local Authority

For PGC2016-2022, in order to assess the increase in the income of a local authority, we examined the increase in the non-residential property tax revenues of the recipient local authority resulting from the transfer of a land resource. The rates of increase in non-residential property tax revenues ranged from 0% to 5%, with an average increase of 0.23% (S.D. = 0.81%). In total, the tax revenue of recipient local authorities increased by ~K-INS78,000 per year.

5.2.3. Independent Variables

Socio-economic status (SES) is measured by the socio-economic cluster of the recipient local authority in accordance with data from the Israel Central Bureau of Statistics. This organization classifies all Israeli local authorities in clusters from 1 (lowest) to 10 (highest) based on their socio-economic status. In this study, the socio-economic clusters ranged from 1 to 9 and 1 to 10, with an average of 4.5 and 5.0 (S.D. = 2.0 and 2.3) for BC2003-2016 and PGC2016-2022, respectively. For the hypotheses involving moderation effects, Hayes' [51] PROCESS macro uses automatic conditioning values as follows: low SES = average SES minus 1SD, and high SES = average SES plus 1SD.

Geographic closeness to the center is measured by the geographic location cluster of the recipient local authority in accordance with data from the Israel Central Bureau of Statistics. This organization classifies all Israeli local authorities in clusters from 1 (furthest away) to 10 (closest) based on their proximity to the center of the country and their access to economic, political, and cultural resources. In this study, the geographic location clusters ranged from 1 to 10, with an average of 5.5 and 4.6 (S.D. = 1.9 and 1.8) for BC2003-2016 and PGC2016-2022, respectively. For the hypotheses involving moderation effects, Hayes' [51] PROCESS macro uses automatic conditioning values as follows: close to the periphery = average closeness minus 1SD; close to the center = average closeness plus 1SD.

Ethnicity of the community in the recipient local authority. According to the Ministry of the Interior data, 71.3% and 53% of the recipient local authorities had a Jewish majority (i.e., the national majority) for BC2003-2016 and PGC2016-2022, respectively (1 = Jewish majority, 0 = non-Jewish majority). For PGC2016-2022, ethnicity was measured as the rate of the Jewish population.

Political affiliation of the mayor of the recipient local authority. For BC2003-2016 and PGC2016-2022, in 68.1% and 35% of the recipient local authorities, respectively, the mayor belonged to the same party as the Minister of the Interior or the same political coalition (e.g., right-wing and ultra-Orthodox as opposed to left-wing and Arab).

Timing of the boundary commission’s recommendations. We conducted this analysis for BC2003-2016 only. The timing was measured by the number of years from the 2002 decision to the year of the boundary commission’s recommendation, ranging from 0 to 14. Generally, the High Court of Justice’s rulings is not implemented immediately. Therefore, the timing variable reflects spatial policy dynamics. For PGC2016-2022, decisions were made in a relatively short period (2016 to 2022), and we refer to them as if they were made at once.

5.3. Additional Independent Variables for PGC2016-2022

The PGC2016-2022 database enabled us to explore additional explanatory variables. Financial soundness (1 = lowest, 100 = highest), the size of the population in K, the area of the local authority in KKM², the area demanded by the local authority relative to its size, and the initiator of the land transfer process (0 = the government/permanent geographic commissions, 1 = the recipient local authority) were measured in accordance with data from the Interior Office.
5.4. Statistical Analysis

We used SPSS 27.0 for the data analysis. First, we calculated the descriptive statistics and considered a direct relationship using Pearson’s correlation coefficients. Then, we examined the moderation hypotheses using regressions based on Hayes’ [51] random sample approach. Specifically, we used Models 1 and 2 of his PROCESS macro.

6. Findings


6.1.1. Direct Correlations—H1

Table S1 (see Supporting Files) lists the averages, standard deviations and correlations between the study’s variables for BC2003-2016. The findings reject Hypothesis 1 regarding a direct correlation. The results of the Pearson test did not reveal any significant direct correlation between the variables of socio-economic status, geographic closeness to the center, ethnicity and political affiliation and the relative growth rate of the land that was transferred. Contrary to what was expected, a significant medium and negative correlation emerged (r = -0.25, p < 0.05) between political affiliation and the relative growth rate in the territory of the local authority.

6.1.2. Indirect Effects—H2

Second, we used Model 1 [51] to test whether socio-economic status, geographic closeness to the center, political affiliation and ethnicity influenced the relationship between the timing of the decision and the proportion of land transferred. Each model included one moderator, and we ran a total of four models. Three moderators proved significant as follows: socio-economic status, geographic closeness to the center and political affiliation (see Supporting Files: Table S2 and Figure S1). In general, the more time that had passed since the 2002 decision, the greater the drop in the relative proportion of the territory transferred to local authorities. Nevertheless, contrary to the general trend, in low socio-economic status local authorities, the decreasing trend was more moderate (Model I). In local authorities close to the center of the country, the relative proportion of the territory transferred to the local authorities increased (Model II). In local authorities politically affiliated with the ruling regime, the decreasing trend was more moderate or non-existent (Model III). In other words, the findings supported Hypothesis 2 regarding indirect effects. Socio-economic status, geographic location and political affiliation moderated the relationship between the timing of the decision and the proportion of land transferred.

Supplementary Materials Figures S1–S41: correlations between the timing of the decision and the relative growth in the land transferred moderated by various factors—BC2003-2016—H2. Figures S1–S9 were published in Megamot, 55(2), 67–96 [30]. All the articles in Megamot are accessible in the databases of the Henrietta Szold Institute. © All rights are reserved to the Henrietta Szold Institute—The National Institute for Research in the Behavioral Sciences—9 Columbia St. Jerusalem, 96583. Figures S1–S9 all follow the same format. Thus, in Figure S1, the red line indicates the linear correlation between time (earlier/later) and the increase in the land transferred to local authorities with low socio-economic status. The green line indicates the linear correlation between time (earlier/later) and the increase in the land transferred to local authorities with high socio-economic status. These notations are the same in Figures S2–S9.

6.1.3. Simultaneous Indirect Effects—H2

Third, we used Model 2 [51] to test the simultaneous indirect effects on the relationship between the timing of the decision and the proportion of land transferred. Each model included two moderators, and, in total, we ran six models. All six models were significant (see Supporting Files: Table S3 and Figure S2). In other words, the findings supported Hypothesis 2. Socio-economic status, geographic locations, ethnicity and political affiliation moderated the relationship between the timing of the decision and the proportion of land transferred. The general trend in political dynamics showed a sharp decline over time
in the relative proportion of territory transferred to the local authorities. In contrast, the positive slopes illustrated inverse trends, showing an increase in the relative proportion of transferred land over time. In local authorities with low socio-economic status, there was a trend toward an increasing proportion of transferred land, provided that they were located close to the center of the country (Model IV), had a Jewish ethnic majority (Model V) or were politically affiliated with the ruling regime (Model VI). In addition, in local authorities located close to the center of the country, there was a growth trend regardless of whether the municipality was populated by Jews or non-Jews (Model VII) or located close to the center of the country, provided that they were politically affiliated (Model VIII). Furthermore, a growth trend also occurred in local authorities populated by the Arab ethnic minority, provided that they were politically affiliated (Model IX).

**Figure S2: correlations between the timing of the decision and the relative growth of transferred land simultaneously moderated by various factors—BC2003-2015—H2.**

6.2. Permanent Geographic Commissions from 2016 to 2022—PGC2016-2022

6.2.1. Direct Correlations of Land Transfers—H3

Table S4 (see Supporting Files) lists the averages, standard deviations, and correlations between the study’s variables for PGC2016-2022. The findings confirm Hypothesis 3. The results of the Pearson test revealed a significant direct correlation between the area demanded by a local authority and the fact that land was transferred to it \( (r = 0.28, p < 0.05) \). The results also reveal a significant direct correlation between socio-economic status, ethnicity, the area of the local authority and the area demanded by the local authority, on the one hand, and the relative growth of the amount of land that was transferred, on the other hand \( (r = 0.20, r = 0.19, r = 0.23, r = 0.84, \text{ relatively, all } p < 0.05) \). As expected, the more a local authority demanded land, the wealthier, larger, and more Jewish it was, the more territory it received.

6.2.2. Direct Correlations of Tax Revenues—H3

In addition, we found support for H3 with significant direct relationships between geographic closeness to the center, the initiator of the land transfer process, ethnicity and financial soundness, on the one hand, and increases in tax revenues on the other \( (r = 0.26, r = -0.24, r = -0.25, r = -0.28, \text{ relatively, all } p < 0.05) \) (see Table S4). When the local authority was geographically close to the nation’s center and the initiator of the process was the permanent geographic commission or the central government (i.e., not the recipient local authority), the increase in income in NIS was higher. In addition, the less a local authority was populated by the national majority (Jewish) and the less financially sound it was, the higher the rates of increase in tax revenues.

6.2.3. Indirect Effects of Land Transfers—H4

Next, we used Model 1 [51] in order to test H4 regarding whether socio-economic status, geographic location, political affiliation, ethnicity, financial soundness, the size of the population, the area of the local authority, and the initiator of the land transfer process moderated the relationship between the area demanded by the local authority and the extent to which land was transferred to it. Each model included one moderator, and we ran a total of sixteen models.

Four moderators proved significant for the extent to which land was transferred to the local authority: socio-economic status, ethnicity, financial soundness, and the area of the local authority (see Supporting Files: Table S5 and Figure S3). In general, the more the local authority demanded land (relative to its size), the greater the relative proportion of territory transferred to it. However, this trend intensified the more the local authority was populated by high socio-economic residents (Model X) and by higher rates of the national ethnic majority (Jews) (Model XI); these factors also corresponded to a more financially strong local authority (Model XII) and a larger area (Model XIII). In other words, the findings supported Hypothesis 4. Socio-economic status, ethnicity, financial soundness, and the
area of the local authority moderated the relationship between the land demanded by the local authorities and the land transferred to them.

**Figure S3: correlations between the land demanded and relative growth in the land transferred and increases in tax revenues moderated by various factors—PGC2016-2020—H4.** Figures S10–S41 all follow the same format. Thus, in Figure S10, the red line indicates the linear correlation between the area demanded by the local authority (small area/large area) and the increase in the land transferred to local authorities with low socio-economic status. The green line indicates the linear correlation between the area demanded by the local authority (small area/large area) and the increase in the land transferred to local authorities with high socio-economic status. These notations are the same in Figures S11–S41.

**6.2.4. Indirect Effects of Tax Revenues—H4**

We used Model 1 [51] in order to test H4 regarding whether socio-economic status, geographic location, political affiliation, ethnicity, financial soundness, the size of the population, the area of the local authority and the initiator of the land transfer process moderated the relationship between the area demanded and tax increases. Each model included one moderator, and we ran a total of sixteen models.

One moderator proved significant for the extent to which the tax revenues increased due to land transfers to the local authority: the initiator of the land transfer process (see Supporting Files: Table S5 and Figure S3). In general, the more the local authority demanded land (relative to its size), the more tax revenues increased due to the land transferred to the local authority. However, this trend intensified when the initiator of the land transfer process was permanent geographic commissions or the central government rather than the recipient local authority (Model XIV). In other words, the findings partially supported Hypothesis 4. The initiator of the land transfer process moderated the relationship between the land demanded by the local authorities and the increase in tax revenues.

**6.2.5. Simultaneous Indirect Effects of Land Transfer—H4**

Then, we used Model 2 [51] to test the simultaneous indirect effects on land transfers. Each model included two moderators, and, in total, we ran twenty-eight models. Twenty-one models were significant (see Supporting Files: Table S6 and Figure S4). In other words, the findings supported Hypothesis 4. The general trend in political dynamics showed a positive correlation between the land the local authority demanded (relative to its size) and the proportion of the territory transferred to it. This trend was attenuated by many simultaneous factors.

**Figure S4: correlations between the land demanded and relative growth in the land transferred simultaneously moderated by various factors—PGC2016-2020—H4.**

Thus, the positive correlations between the land demanded and the proportional territory transferred were stronger in local authorities of high socio-economic status that were also far from the center of the country (Model XV), populated by the national majority (Jews) (Model XVI), politically affiliated with the ruling regime (Model XVII), financially weaker (Model XVIII), less populated (Model XIX), with a larger municipal area (Model XX) and a process initiated by the permanent geographic commissions or the central government (not the recipient local authority) (Model XXI).

The positive correlations between the land demanded and the proportional territory transferred were also stronger in local authorities located far from the center, including those that were also populated by the national majority (Jews) (Model XXII), not politically affiliated with the ruling regime (Model XXIII), financially stronger (Model XXIV), more populated (Model XXV), and had a larger municipal area (Model XXVI).

The positive correlations between the land demanded and the proportional territory transferred were also stronger in local authorities that were mostly populated by the national majority (Jews), financially stronger (Model XXVII), and highly populated (Model...
XXVIII), with a larger municipal area (Model XXIX), and with the process initiated by the recipient local authority (Model XXX).

The positive correlations between the land demanded and the proportional territory transferred were also stronger in local authorities that were financially strong and less populated (Model XXXI), with a larger municipal area (Model XXXII) and the process initiated by the permanent geographic commissions or the central government (not the recipient local authority) (Model XXXIII).

The positive correlations between the land demanded and the proportional territory transferred were also stronger in local authorities that had a larger municipal area and which were also less populated (Model XXXIV) without the initiation of a land transfer process (Model XXXV).

6.2.6. Simultaneous Indirect Effects of Tax Revenues—H4

Lastly, we used Model 2 [51] to test the simultaneous indirect effects on tax revenues. Each model included two moderators, and, in total, we ran twenty-eight models. Six models were significant (see Supporting Files: Table S7 and Figure S5). In other words, the findings supported Hypothesis 4. The general trend in political dynamics showed no direct correlation between the land the local authority demanded (relative to its size) and the increase in tax revenues. However, this trend was significantly attenuated by six simultaneous factors, all of which related to the initiator of the land transfer process.

Thus, the correlations between the land demanded and the increase in tax revenues were stronger in local authorities whose land transfer process was initiated by the permanent geographic commissions or the central government (i.e., not the recipient local authority). These correlations were very strong when these communities were also of low socio-economic status (Model XXXVI), located far from the center of the country (Model XXXVII), populated by national minorities (Arabs) (Model XXXVIII), financially weaker (Model XXXIX), and less populated (Model XXX), with a smaller municipal area (Model XXXI).

Figure S5: correlations between the land demanded and increases in tax revenues simultaneously moderated by various factors—PGC2016-2020—H4.

7. Summary of Results and Discussion

Figure S6 provides an overview of our research results. Altogether, the findings suggest mixed results.

Figure S6: Summary of results: regulatory mechanisms and factors explaining reductions in or the preservation of spatial inequality

In relation to land transfer, there were only three combinations that revealed evidence of reducing spatial inequality.

(i) Between 2003 and 2016, the direct relationship between the amount of land transferred and non-affiliated mayors could have been a sign of a rational, non-politicized approach to reducing spatial inequality. However, land transfers to non-affiliated mayors did not continue over time. They were made only to local authorities that were populated mostly by high socio-economic Jewish residents in the center of the country. On the other hand, after 2016, this trend disappeared and did not preserve spatial inequality anymore. This fact implies that, under the permanent geographic commissions, political affiliation is not a factor that explains the relationship between the demand for land and the responsiveness to this demand.

(ii) In 2003–2016, low socio-economic municipalities received a relatively higher share of land, which could have been a sign of social compensation for past spatial inequality. However, only low socio-economic municipalities that were Jewish, politically affiliated with the Interior Ministry and located in the center of the country received this benefit. Again, after 2016, under the permanent geographic commissions, low socio-economic status was not a factor that brought about a decrease in spatial inequality. Low socio-economic status was not a strong enough factor to overcome other local
factors. The rule of demanding more land and receiving more land remained mainly for financially sound local authorities.

(iii) In 2016–2022, more local authorities were located close to the periphery and not affiliated with the Minister of Interior demanded land, the more they received land, which is a positive move in the direction of reducing spatial inequality. However, closeness to the periphery by itself was not a strong enough factor to reduce the spatial inequality of those who demanded more land. Thus, it was usually Jewish communities, financially strong local authorities, densely populated local authorities, and local authorities that already had a relatively large municipal area that received the land transfers they requested.

In relation to increased tax revenues, which stemmed from the redistribution of tax resources, the findings reveal a different picture. In the case of financial mechanisms, the permanent geographic commissions in 2016–2022 were more enthusiastic about reducing spatial inequality, particularly for non-Jewish national minorities and financially weak local authorities. These communities saw more growth in income and an increase in non-residential property tax revenues than local authorities that were populated mostly by Jews and were financially strong. Another significant sign of the permanent geographic commissions’ insistence on reducing spatial inequality by redistributing tax resources was evident in the many cases in which the commission itself recognized a need, and this was the factor that initiated the redistribution process. Although the initiation of the process by the permanent geographic commissions did not convert more demand for land in underdeveloped local authorities into real land, it did result in the redistribution of tax resources. Put differently, after the permanent geographic commissions initiated the process, the more underdeveloped communities and local authorities demanded more land, the more they were compensated by greater allocations of tax resources, resulting in larger tax revenues, which cohered with reduced spatial inequality. There is only one exception to this pattern as follows: politicization. When the mayor was affiliated with the Ministry of the Interior, even when the process was initiated by the permanent geographic commissions, they were unable to transform more demands for land into compensation in the form of a greater redistribution of tax resources.

Given the results, we stress that there are many obstacles—political and structural—to reducing spatial inequality, both under the boundary commissions between 2013 and 2016 and under the later mechanism of permanent geographic commissions between 2016 and 2022. A close examination of the decisions made in 2002–2016 by the boundary commissions indicates the importance of timing and its effects on spatial inequality. Thus, the later a recommendation was made after the 2002 decision, the more likely it is that the relative proportion of land transferred was smaller. Apparently, the more time that went by, the less underdeveloped land was available for transfer. Nevertheless, despite the decrease in available land and in the size of the transferred territory, over the years, consistent amounts of land continued to be transferred to local authorities with lower socio-economic status or those politically affiliated with the minister.

Therefore, one might argue that low socio-economic status or politically affiliated communities benefited from a policy seeking to minimize spatial inequality. (Note, however, that these communities suffered from spatial inequality from the outset. Therefore, it is difficult to determine the degree to which spatial inequality was diminished). Nevertheless, simultaneous models are the most important ones because they provide a deeper and clearer look at the dynamics of spatial inequality and the mechanisms aimed at tackling it. For instance, in 2003–2016, Arab municipalities received less land. Three of our variables explain this variation as follows: these populations are geographically located in the periphery, rarely affiliated with the minister’s party, and are politically identified with the Palestinians in the context of the Israeli–Palestinian conflict. In other words, we can generalize and say that during these years, Israel implemented a policy that minimized spatial inequality depending upon the political affiliation of the mayor in power, the socio-
economic status, and the ethnicity of the community that would be the recipient local authority.

Between 2002 and 2016, the boundary commissions adopted a more responsive spatial policy to deal with reductions in government support, widespread budgetary and operational crises, and petitions to the boundary commissions to redistribute land [52–54]. However, our findings are consistent with the claim that even though professional considerations are taken into account in shaping the local government map, this process is not free of political considerations and the structural attributes of local communities. Its outcomes depend on socio-economic status, geographic location, ethnicity, and political affiliation, which in many cases preserve spatial inequality.

Similar political and structural factors influenced the relationship between the demand for and the transfer of land from the permanent geographic commissions in 2016–2022. Moreover, contrary to the basics of good governance and contrary to policy makers who see inequality as undesirable and unfair [1,2,18], during this period, in many cases, financially sound local authorities won more land, and their demands were met to a greater extent. Apparently, in many cases, spatial inequality was preserved as many decisions related to land transfers favored local authorities that enjoyed better spatial, economic and political conditions and resources from the outset.

We provide three explanations for these dynamics. First, the Minister of the Interior appoints the ad hoc boundary and permanent commission heads and members, thus heightening the impact of their identity and their ethnic, socio-economic, and political affiliations. Second, the members appointed might feel an affinity with and commitment to the minister and the groups s/he represents. Third, the Minister of the Interior is entitled to accept or reject the commission’s recommendations, and the commission might want to benefit certain groups. Thus, one possible recommendation that stems from this dynamic is to delegate at least some authority to professional regional and municipal planners. They can propose policies and actions aimed at reducing spatial inequality. Examples include improving land use and assets, exhausting land rights and changing the designation of land use in ways that could be more beneficial and less politicized.

No less interesting is the shift from land transfers to the more preferred solution of permanent geographic commissions after 2016—the redistribution of tax resources. The weight and value of municipal land, as opposed to tax money, and its symbolic, social, historical, cultural and political consequences are negotiable, e.g., [41,55]. One possible explanation for this change in the approach of the permanent geographic commissions is that the redistribution of tax resources is a better method than land transfers for reducing spatial inequality for two reasons. First, its effects are immediate. Second, it is impossible to guarantee that weak local authorities will utilize the land transferred to them in a manner that reduces social inequality. Another possible explanation for the change in approach is the fact that land in Israel is scarce. As a result, institutional regulators are less autonomous in their decisions about where to award it [55]. Apparently, the permanent geographic commissions reflect the essence of the Israeli government’s policy, far beyond a specific party or minister, which prefers the values of neoliberalism, nationalism, and ethnicity over the value of reducing spatial inequality [45,56]. Thus, even though the central government has always stated the need to reduce spatial inequality [23], Arab municipalities have usually received the least amount of land because they score low on all of the following explanatory variables: location, partisanship, political identity, socio-economic status, financial soundness, the size of their population and ability to demand more land. Although these variables may describe and explain the situation, they do not excuse the continuation of spatial inequality. Thus, given that the current centralized regulatory mechanisms aimed at reducing spatial inequality are affected by political and structural factors, they require further thought as to whether they are adequate, effective, and just.

To conclude, this study can be viewed as a continuation of recent work discussing spatial inequality in the contemporary neo-liberal era, e.g., [1,18,19,55,56]. In line with
Neil Smith [57] and Paasi [27], who discussed the politics of scale, here we use a unique regulatory, political mechanism. Contrary to customary scales [58], this scale operates in the space between the interests of the local and central governments. This analysis of the political and historical events and the judicial rulings that have shaped spatial inequality, alongside policies that preserve or reduce it, sharpens the unique characteristics of municipal territoriality. In this study, municipal territoriality involves numerous demands, petitions, negotiations, compromises, recommendations, and resolutions on behalf of local and central actors, all operating within a multi-channel hierarchy. They compete with one another, make demands of their superiors, and make decisions on behalf of those subordinate to them regarding territory, boundaries, and land. Our study demonstrates Yilmaz’s [31] claim that territoriality is a tool for conveying political messages. In other words, it is much more than just a tactic for increasing land resources. Its political and strategic objectives are to expand influence over assets, residents, and business owners (local politics) that can help politicians be reelected (local and national politics). Another goal is to preserve the state’s exclusive ownership of the land and its exclusive power to settle local land disputes through a centralized ‘divide and conquer’ policy (national politics).

Therefore, we stress that borders still have effects on regional inequality dynamics. Our analysis and explanation of reducing spatial inequality are unique to municipal territoriality. We identify three major characteristics of municipal territoriality that make it a concept distinct from the notion of territoriality prevalent in international relations. First, most discussions about territoriality in international relations include the possibility of violent struggle. In contrast, the struggle between local authorities and communities located in the same democratic country is usually restrained (save for a civil war). This struggle involves a wider range of political action, compromises and procedural claims without threats and the use of armed forces. Second, in international relations, there is no clear body that has the power and legitimacy required to regulate spatial inequality. At the local level, in contrast, it is the government and many other legislative, quasi-legislative, political and civil society bodies at the local and central levels that regulate land policy [23]. The existence of a clear political actor that has the power, legitimacy and authority to regulate spatial inequality facilitates a political dynamic of compromises without a clear resolution. Third, unlike the international scene, the Western world has built-in structural and spatial trends, such as networking and regionalism [59,60]. However, the land reforms that are reshaping the interrelations between municipal actors tend to lack the tools needed for appropriate research and analysis.

Many argue that the political picture is complex and the Israeli discourse on spatial inequality has never differentiated between the personal, cultural, and social spheres and the political, ideological, and geographic spheres. In this regard, these findings also raise broader questions related to Israeli identity politics. Since the late 1970s, the major ruling party in Israel has been the Likud, many supporters of which come from peripheral, low socio-economic, financially weak municipalities that are mainly populated by Jewish Mizrahim/ Sephardim populations. The same populations support the Shas party, which claims to represent Jewish Mizrahim/ Sephardim populations and controlled the Interior Ministry for more than 20 years between 1989 and 2022. Thus, following Smith [61], we expand this topic even further and suggest that future studies deal with the questions of ‘who gets what, where, how and from whom?’.

8. Limitations and Future Studies

These complex, dual, contradictory trends pose methodological challenges that both limit our research and provide recommendations for further research. For example, the mechanisms of boundary commissions and permanent geographic commissions are only two tools of many that can be used to help reduce spatial inequality. Considering only these mechanisms provides only a partial picture. Future research should examine additional means of handling social gaps. In addition, choosing an approach—such as land transfers
or tax transfers—to help reduce spatial inequality is a policy matter. Understanding which policy is more efficient would provide a clear value and should be further investigated in future studies.

**Supplementary Materials:** The following supporting information can be downloaded at: [https://www.mdpi.com/article/10.3390/urbansci8020025/s1](https://www.mdpi.com/article/10.3390/urbansci8020025/s1).


**Funding:** This research received no external funding.

**Data Availability Statement:** The raw data supporting the conclusions of this article will be made available by the authors on request.

**Conflicts of Interest:** The authors declare no conflicts of interest.

**References**


25. Elden, S. Contingent sovereignty, territorial integrity and the sanctity of borders. *SAIS Rev.* 2006, 26, 11–24. [CrossRef]


28. Shah, N. The territorial trap of the territorial trap: Global transformation and the problem of the state’s two territories. *Int. Political Sociol.* 2012, 6, 57–76. [CrossRef]


39. Falah, G. Land fragmentation and spatial control in the nazareth metropolitan area*. *Prof. Geogr.* 1992, 44, 30–44. [CrossRef]


50. Alfas, N.; Migdalovich, E. Losing faith in planning, *Land Use Policy* 2020, 97, 104790. [CrossRef]


52. Beeri, I.; Razin, E. Local Democracy in Israel: Decentralization, Localism, Participation and Local Politics; Floersheimer Studies at the Hebrew University of Jerusalem; Hebrew University of Jerusalem: Jerusalem, Israel, 2015.


55. Hananel, R. The Land Narrative: Rethinking Israel’s National Land Policy. *Land Use Policy* 2015, 45, 128–140. [CrossRef]


**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.