THE DETERMINANTS OF MIGRATION FROM ISRAELI DEVELOPMENT TOWNS 1975-1979[1]

STUART GABRIEL and AMNON LEVY
Ben Gurion University of the Negev

Most initial inhabitants of Israeli development towns were allocated their place of residence upon arrival in the country. The viability of these towns is then critically dependent upon the nature of the subsequent population adjustment mechanism. This analysis depicts population out-migration from Israeli development towns as a function of local population propensity to migrate, multiplied by differences in attractiveness between those towns and the country's primary metropolitan area. The empirical context evaluates proxies of those effects and tests for further differences in migratory phenomena between goegraphical regions. Results of the analysis lend credence to the theoretical specification and suggest the importance of distinct regional phenomena.

INTRODUCTION

Israel's policy of new-town development, dating from 1948, was motivated by the combined pressures of large-scale population in-migration and the necessity of establishing sovereignty over uninhabited hinterland areas. At the inception of this policy, Israel's population was concentrated primarily in the narrow coastal plain. While agricultural settlements did exist in the northern and southern regions, they were small in number and limited in their dispersion.

In the wake of the creation of the state, Israel's Jewish population approximately tripled, to reach 2.3 million by the mid-sixties. Many of the arriving immigrants, particularly those lacking formal education, skills, or financial resources, were directed to those new agricultural and urban settlements in development areas. These immigrants were often inadequately prepared to meet the challenge of new-town development. Further, veteran Israelis were often absent from these new settlements. Unemployment, coupled with a process of negative population selection, led to the out-migration of dynamic and stronger elements to the country's urban centers. As a result, many development towns experienced sporadic growth and remained politically and economically weak relatively to the established metropolitan areas. In contrast, agricultural settlements in development areas were better off due to a superior endowment of productive capital as well as increased opportunities for private entrepreneurship.

As late as 1969, unemployment rate was the predominant factor explaining the differences in development town migration patterns (Comay and Kirschenbaum, 1973). The problem of unemployment was gradually eased and finally eliminated as a result of government-assisted industrialization of these areas (Silberberg, 1973; Smith, 1972), and in the early and mid-seventies, the socio-economic composition of the development towns' population became the most important factor explaining the differences in their 'migration balance' and 'in-migration' rates (Ya'ar and Heller, 1977; Borukhov and Werczberger, 1981).

The maintenance of an opportunity and amenity differential between development towns and the country's major metropolitan area catalyzes continued out-migration from new towns. Migration is further determined by the mobility characteristics of the development town population. While improvements in population mobility have occurred over the years due to the standardization of the country's educational system, development of communications and transportation networks, and obligatory military service, the attractiveness differential between the country's center and periphery remains wide (Shachar and Lipshitz, 1980). In the absence of an adequate government policy response, both these factors should contribute to continuing and substantial rates of 'out-migration'.

The objective of this paper is then to evaluate the role of those opportunity and amenity differentials as well as population mobility characteristics in determining development town out-migration rates.[2] The research benefits from the important works on Israeli development town migration during earlier periods by Comay and Kirschenbaum (1973), Ya'ar and Heller (1977), and Boruchov and Werczberger (1981), as well as studies by Shachar and Lipshitz (1980), Stern and Sonis (1980), and Stern (1981), on changes in the geographic distribution of Israel's population during the fifties, sixties and seventies. The analysis further tests various kinship and informational determinants of migration, as described in works on Colombia (Fields, 1982), Egypt (Greenwood, 1969; Seifelnasr, 1981) and India (Greenwood, 1971), as well as security and environmental attributes unique to the Israeli context.

Our theoretical framework combines two well-known approaches purporting to explain migration. One is the neoclassical theory of investment, which has appeared largely in works of the Chicago School (Schultz, 1962; Sjasstad, 1962), which suggests that a difference in the discounted net pecuniary and non-pecuniary income stream between two places may precipitate migration, provided that the total costs of migration are sufficiently small. The other approach is associated with the Harvard School and particularly with Simon Kuznets (Kuznets and Thomas, 1958). This approach emphasizes the importance of human capital characteristics in delineating the relationship between internal migration and economic development. The migrants come from selective groups endowed with a higher propensity to migrate.

The plan of this paper is as follows. Section II presents a stock adjustment model of migration. Sections III and IV describe the econometric evaluation of this model, including variable definitions, model hypotheses, and empircal results. Finally, conclusions and policy implications are contained in Section V.

'OUT-MIGRATION' MODEL

The theoretical context describes migration flows from Israeli development towns. In the absence of information about the migrant's destination, the model is based on

the assumption that the target destination of potential migrants is the country's major urban center -- Tel Aviv.[3]

As noted above, many initial inhabitants of development towns were allocated their place of residence upon arrival in Israel. Development town viability depends critically on the subsequent population adjustment mechanism.

The model depicts net migration from town i in period t, EM_{it}, in a partial adjustment context, in which emigration is triggered by an attractiveness differential between the town in question and its closst major urban center and amplified by the local population propensity to migrate m_{it}. This latter factor depends upon elements of geographical access, cultural, educational, age and occupational characteristics of development town population, town density, and whether the town is located in a threatened border area.[4]

This population migration mechanism can be represented mathematically by the following equations:

$$(1)\quad EM_{it} = m(X_{it})\, f(A_{it} - A_{ct})$$

where A_{it} and A_{ct} are S-dimensional vectors of the characteristics describing current attractiveness of city i and the major urban center, including agglomeration economies, economic opportunities, and recreation amenities. X is an R-dimensional vector of factors affecting population propensity to migrate.

$$(2)\quad f(A_{it} - A_{ct}) = \prod_{s=1}^{S} (A_{ist} - A_{cst})^{\beta_s}$$

which defines an attractiveness differential which is multiplicatively separable and comprised of the differences in the A characteristics. The implicit function m is defined as Cobb-Douglas

$$(3)\quad m(X_{it}) = \prod_{r=1}^{R} X_{irt}^{\alpha r}.$$

Equations (1) through (3) yield

$$(4)\quad EM_{it} = \prod_{r=1}^{R} X_{irt}^{\alpha_r} \prod_{s=1}^{S} (A_{ist} - A_{cst})^{\beta_s}$$

Through logarithmic transformation of equation (4) we obtain

$$(5)\quad \ln EM_{it} = \sum_{r=1}^{R} \alpha_r \ln X_{irt} + \sum_{s=1}^{S} \beta_s \ln(A_{ist} - A_{cst})$$

which is suitable for regression analysis. The following section describes empirical application of the model, including variable definition and hypotheses regarding the α_r and β_s elasticities.

VARIABLES AND HYPOTHESIS

The model was applied to Israeli development towns for the years 1975-1979 during which period a broad set of cross-section time-series data was available. These data were derived from the Israel Central Bureau of Statistics publication, "Local Authorities in Israel, Physical Data". Evaluation of the unified sample as well as various geographic and access-related segments was undertaken in order to test hypotheses regarding possible variation in underlying structural phenomena.

The dependent variable of the analysis is development town emigration rate. The explanatory variables are divided into two major groups indicating current population propensity to migrate and development town/major metropolitan area attractiveness differentials.

Included among those variables proxying propensity to migrate are population's ethnic origin, age and occupational structure, local stage of development, new town security, and access characteristics. Definitions and hypotheses associated with these variables are described below.

The ethnic origin variables are defined as follows:

MOR – Proportion of Israelis of Moroccan origin in total town population.
AFR – Proportion of Israelis of North African origin (excluding Moroccan) in total town population.
YEM – Proportion of Israelis of Yemenite origin in total town population.
AS – Proportion of Israelis of Middle East origin (excluding Yemenite) in total town population.
EUR – Proportion of Israelis of European origin in total town population.
AM – Proportion of Israelis of American origin in total town population.

Ethnic origin proxies the effect of variation in cultural and educational background on the propensity to migrate. In that the lifestyle of the major urban center is consistent with the cultural and educational backgrounds of Israelis of European and American origin, it is expected that transition is more easily accomplished in their case and hence the hypothesis of a greater development town emigration rate where their proportion of total population is larger, *ceteris paribus.* It is further hypothesized that the existence of information and kinship relationships encourage rural-urban population flows (Fields, 1982; Greenwood, 1969, 1971; Seifelnasr, 1981). These factors are expected to be of significance in the determination of Moroccan and North African propensity to migrate, given the substantial settlement of these groups in suburbs ringing the Tel Aviv metropolitan area. Diminished ties between recent Yemenite immigrants and their more established metropolitan-area counterparts, coupled with the stability attributes of this group, suggest a negative relationship between this group's population share and rate of emigration.

The age structure variables are defined as the proportions of those aged 15-29, 30-44, 45-64 and 65+ in total population. While the age breakdown of the available data is far from ideal, it is expected that the propensity to migrate is diminished among the very young and elderly population groups, *ceteris paribus.*

The occupational structure variables are defined as the proportion of specified occupational groups in total labor force. The four groups included here are: (1) unskilled, (2) construction and industry workers, (3) clerks, transportation or service

employees, and (4) a professional class. The gradation of local occupational structure from unskilled through professional classes is taken to reflect the increasing entrenchment of a local economic base. It is assumed that propensity to migrate varies positively with the proportion of unskilled and secondary labor market participants. Higher proportions of blue- and white-collar workers, including self-employed service sector participants, indicate increased dynamism in the town's development as well as the higher opportunity costs of emigration. Finally, increased mobility is typically associated with the educated professional classes.

Town density is defined in terms of population per square kilometer. We hypothesize that there exists a U-shaped relationship between propensity to migrate and town density. At lower levels of density a negative relationship is assumed to exist, given positive agglomeration effects associated with town development. At higher levels of density, congestion externalities may outweigh agglomeration effects, so as to indicate a positive relationship. In general, it is assumed that the former negative relation is relevant to the development town sample.

Security is defined as a dummy variable where one indicates a border town security hazard, and it enters equation (3) in an exponential form.[5] Over the period of analysis, this effect is expected to be of particular relevance to northern development towns in proximity to the Lebanese border. While security hazards are likely to be reflected in increased emigration, an opposing effect, associated with an increased determination to withstand security breaches, may also be detected. *A priori*, the relative strength of these effects is unclear.

Access is similarly defined as a dummy variable where the value of one is attributed to peripheral towns. The allocation is based upon the relative remoteness of the town, a problem of more serious dimensions in southern hinterlands. Various competing effects are expected here. On the one hand, access proxies relative exposure rates to urban center opportunities as well as availability of information. On the other hand, social and cultural isolation may serve to increase the propensity to migrate. To the extent that the former effect prevails, we expect diminished access to be reflected in decreased rates of out-migration.

Differences in attractiveness between development towns and the major urban center are defined in terms of agglomeration effects, the relative incidence of poverty, housing conditions, wealth, and access to recreational amenities.

Agglomeration effects differentials are captured by an index of the difference in absolute population size between the major urban center and development towns. A large difference indicates an increasing disparity in the agglomeration of economic, education, cultural, and other opportunities, and hence is related positively to emigration rate.

The relative incidence of poverty variable is defined as the development town/major urban center welfare rate differential.[6] It is assumed that this difference proxies local economic conditions, so that a higher population outflow is expected in the case where the development town incidence of poverty exceeds that of its urban center counterpart.

The housing variable indicates the extent to which average apartment size in development towns exceeds that in the urban center. These differentials reflect for the most part the highly-subsidized nature of housing in development towns. The attractiveness of development town housing conditions is a primary government policy

variable in the attempt at population dispersion. As such, we expect to find a negative relation between those superior development town housing opportunities and rate of population 'out-migration'.

The 'car ownership' variable is defined in proportionate terms (i.e. car ownership per capita) and in Israel provides an important indicator of the average wealth differential between the major urban center and the development towns. On the one hand, given the requirement of a minimum level of material resources for successful migration, a higher wealth gap is expected to impede population emigration. On the other hand, a higher 'car ownership' gap is associated with low-status towns, suggesting an intensified negative selection process (Borukhov and Werczberger, 1981).

Access to beach is defined as a dummy variable which takes on the value of one in those cases where this recreational and environmental amenity is lacking. Similarly to other dummies included in the analysis, this variable enters the regression equation in exponential form. This factor should be of particular importance in the context of Israel's arid climate. Given that Tel-Aviv, the major urban center of this analysis, is characterized by a seashore, this variable can also be interpreted as indicating the environmental attractiveness differential between the development town and the major urban center.

There are significant environmental and ecological differences between the northern and southern regions of the country. The south is expansive, arid, and sparsely populated. The north, on the other hand, is fertile and contains a large number of socially and economically established agricultural settlements which contribute to the overall development and stability of the region. Hence, in addition to the unified analysis, segmentation of the sample between these regions tests for concomitant differences in migration phenomena.

Tests for structural differences in the model parameters are also relevant to the case of peripheral and non-peripheral development towns. While access to the major urban center is accounted for among those determinants of propensity to migrate, segmentation by this index is expected to reveal significant differences in the underlying migration phenomena. In this regard, those peripheral development towns are typically characterized not only by geographical isolation, but by further lack of employment diversification, social amenities and policy attention. The following section then reports on results of these analyses as well.

EMPIRICAL RESULTS

Table 1 presents the ordinary least squares estimates and standard deviations of the migration parameters specified in equation (5). Estimates are provided for both the unified sample of 26 development towns and the four geographical sub-samples. The towns included in each sample are listed in the appendix. Results of the Chow Test indicate a rejection of the null hypothesis of parameter stability across the four geographic regions at the 0.01 significance level. Given the multiplicative form of the model, the regression coefficients indicate the propensity to migrate and attractiveness differentials elasticities.

Ethnic Origin

Among those variables representing the population's ethnic origin, results of the unified analysis suggest positive and significant rates of out-migration associated with higher proportions of the Moroccan and American groups. Results associated with the remaining population groups lack an appropriate level of statistical significance, but nonetheless suggest stability characteristics associated with the Middle Eastern and Yemenite populations.

Disaggregation by geographic region consistently reveals increases in emigration rate associated with the proportion of Israelis of American origin. This result is significant in all but the southern region and is particularly large in magnitude in non-periphery development towns. This outcome is consistent with model hypotheses and may further reflect the cultural, educational, and aspirational gap between members of this group and development town residents of other ethnic backgrounds.

As regards the European population, disaggregation by geographic region reveals conflicting trends. As expected, results are positive and of reasonable statistical significance in the case of non-peripheral towns, where a negative and sizeable emigration elasticity is obtained. Results indicate improved stability associated with the European group in the context of the access advantages of non-peripheral development towns.

An increased proportion of Israelis of Yemenite origin serves to improve development town stability throughout, yet the result is of sizeable magnitude and highly significant only in non-peripheral towns. In contrast, an increased proportion of Moroccans suggests a positive and significant rate of out-migration in all but the non-peripheral region. As mentioned above, this latter group enjoys important kinship advantages, given the sizeable number of Israelis of Moroccan origin in the urban center.

Age Structure

Despite the problematic nature of the age breakdown data, the unified model lends support to the hypothesis that emigration rate falls with increasing proportions of the young and elderly age groups. Nonetheless, only the negative elasticity associated with the young group is significant. Results diverge in the context of the disaggregated model and in the case of the non-peripheral region indicate important structural changes in migration propensities. The estimated elasticities here are consistently positive in sign and, with the exception of the 30-44 group, are of substantial magnitude and significance.

Occupational Structure

Results for the unskilled group are consistent throughout and indicate positive migratory propensities associated with the proportion of secondary labor market participants. In the case of the unified sample, these results are of a high level of statistical significance and suggest an emigration elasticity of approximately 0.23. These findings, in general, indicate increased out-migration in the context of limited local employment opportunities.

Results of the unified sample as regards blue- and white-collar workers indicate statistically significant and negative emigration propensities as their proportion of the

town population increases. In this case, however, the estimated elasticities are small in magnitude. These results are consistent with *a priori* expectations, and suggest increased stability of development town population in the context of diversification and intensification of the local economic base.

The representation of a professional class in development towns is quite limited, and hence the associated elasticities are generally insignificant. Increased out-migration is often associated with the increasing population share of this group, and in the northern region a significant result is obtained.

Density

Results associated with this variable in general indicate that increases in local density of settlement diminish the rate of out-migration. In the unified analysis as well as the southern and peripheral regions, a negative and significant elasticity is obtained. In the former case, a 1% increment in town density reduces emigration rate by 0.186%. The average town density ranges from 1,320 persons per square kilometer in the unified sample to values of 1,123 and 1,196 in the southern and peripheral regions respectively. Similar but insignificant results are obtained for non-peripheral development towns, where average density rises to 1,510.

Security

As expected, the security threat appears an important factor in the characterization of propensity to migrate from Israeli development towns. Results here are statistically significant in both the unified and regional samples, and in all but the non-peripheral region, negative elasticities are obtained. As such, an accounting for this factor indicates a strong determination to remain and to withstand the security threat. A similar outcome is also reported by Zuckerman-Bareli (1978) in a study on out-migration from Kiryat Shemoneh.

Access

As is consistent with the hypothesis of hardship imposed by isolation, peripheral location results in positive and statistically significant rates of out-migration from northern development towns. The opposite result, while not significant, was obtained for development towns of the south.

City Size

Results here in general indicate that differences between the major urban center and development towns in the agglomeration of social amenities and economic opportunity, as proxied by population differentials, serve to increase out-migration. This finding is statistically significant in all but the northern region. In the case of peripheral development towns, a relatively large emigration elasticity of 0.38 was obtained.

Welfare Rate

A positive incidence of poverty differential serves to increase emigration from periphery development towns, whereas the opposite holds true for non-peripheral

towns. Both of these results are statistically significant. In the former case, the lack of proximate alternatives, coupled with local poverty, leave little alternative to population out-migration.

Average Apartment Size

Evaluation of this variable indicates the desired policy effect, in that improved development town housing conditions result in lower rates of emigration. This is particularly evident in peripheral towns, where the coefficient is relatively large in magnitude, and significant. Here a one percent increment in the average apartment size differential between the peripheral towns and Tel Aviv serves to reduce the rate of out-migration by 0.236 percent.

Car Ownership

Elasticity coefficients associated with the car ownership variable, indicating wealth differentials, are negative and significant in all but peripheral towns. These results are then compatible with the notion of a minimal amount of material resources requisite for emigration to the urban center.

Access to Beach

Results of the unified sample as well as for the northern and southern regions indicate that access to the Mediterranean Sea results in increased development town stability. These findings are significant for the unified sample and the southern region.

CONCLUSIONS

This paper contains a theoretical description and empirical evaluation of a stock adjustment model of migration flows. The model depicts emigration from Israeli development towns as a function of local population migration propensities multiplied by differences in attractiveness between these towns and the country's primary metropolitan area. The empirical context evaluates various proxies of those effects and tests for further structural differences in migratory phenomena between geographical regions. Results of the analysis lend credence to the theoretical specification and suggest the importance of distinct regional phenomena.

Model findings have further implications as regards social policy. The goal of new town development requires continued focus on extant disparities in housing, employment opportunities, and recreational amenities. Results of this study suggest that government housing incentives have the intended effect. Yet out-migration occurs due to lack of appropriate employment and recreational opportunities. The creation of skilled and semi-skilled job opportunities should be undertaken and be coupled with amenity development. Successful population dispersion will then be accomplished in the context of diminished urban center/development town quality-of-life differentials.

FOOTNOTES

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[2] The rate of 'out-migration' from the set of 26 development towns evaluated in this study was 3.7 percent over the 1975-1979 period. Segmentation of the sample by access to the country's metropolitan center and by northern and southern regions yields remarkable stability in this rate, which varies from 3.8 to 3.5 in those periphery and non-periphery areas respectively, to 3.7 in the north and 3.6 in the south.

[3] In support of this assumption, the reader may refer to Shachar and Lipshitz (1980). It is argued that inter-regional migration in Israel can be analyzed meaningfully within a center-periphery context. The empirical findings indicate the dominant attractiveness of the coastal plain around Tel Aviv over the country's other centers (Jerusalem, Haifa and Beer-Sheva) for potential migrants.

[4] In the Israeli context, the local security situation is an important factor in locational choice.

[5] Security situation, as measured by a dummy variable, can alternatively be regarded as representing a certain component of the attractiveness differential between border development towns and the relatively secure Tel Aviv metropolitan area.

[6] This variable also proxies unemployment effects, which are absent from our data set.

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TABLE 1

Ordinary Least Squares Estimated Emigration Elasticities for Israel Development Towns, 1975-79 for Unified Sample and by Region

Explanatory Variables	Unified Sample	Southern Region	Northern Region	Peripheral Towns	Non-Peripheral Towns
Propensity to Migrate					
1. Ethnic Origin					
MOR	.1288 (.0460)	.1666 (.0633)	.6598 (.3032)	.2167 (.0607)	−.7105 (.2931)
AFR	.0648 (.0512)	.2740 (.0624)	−.6171 (.1965)	.0829 (.1200)	.2822 (.2954)
YEM	−.0377 (.0318)	−.0455 (.0449)	−.0278 (.1074)	−.0457 (.0404)	−.4483 (.1610)
AS	−.0264 (.0499)	.0659 (.1309)	*	−.2321 (.0773)	.7691 (.3338)
EUR	.0799 (.0628)	.3836 (.0633)	−.0402 (.3162)	.2003 (.1319)	−1.4136 (.5334)
AM	.0924 (.0516)	.0749 (.0506)	1.0576 (.5983)	.1439 (.0599)	1.5984 (.3962)
2. Age Structure					
15-29	−1.3845 (.6911)	−.0177 (2.2363)	−2.8544 (2.4921)	−1.7632 (1.0310)	3.9054 (1.6210)
30-44	−.2354 (.4809)	−.0946 (.8406)	−7.4189 (2.4813)	−.0179 (.9698)	.5642 (1.6646)
45-64	.1787 (.2668)	−.4524 (.7519)	−2.2692 (1.1117)	.6139 (.5472)	3.6967 (1.8313)
65+	−.1819 (.1472)	−.5084 (.5006)	.5509 (.7369)	−.6887 (.3902)	*
3. Occupation					
Unskilled	.2268 (.1144)	.0813 (.0756)	.2082 (.8823)	.1076 (.1853)	.0179 (.0975)
Construction & Industry	−.0789 (.0317)	−.0112 (.0420)	.0357 (.0847)	−.0297 (.0416)	.0400 (.0547)
Clerks, Transportation & Services	−.0466 (.0296)	−.0627 (.0303)	−.0260 (.0285)	−.0545 (.0307)	.0157 (.0807)
Professional	−.0003 (.0129)	−.0010 (.0139)	−.0269 (.0118)	−.0167 (.0145	−.0011 (.0137)
4. Density	−.1861 (.0492)	−.1178 (.0420)	.0399 (.1237)	−.1593 (.0699)	−.0712 (.0785)
5. Security	−.0120 (.0050)		−.0273 (.0107	−.0261 (.0065)	.0896 (.0381)
6. Access	.0152 (.0038)	−.0051 (.0078)	.0194 (.0079)		

Table 1 (continued)

Explanatory Variables	Unified Sample	Southern Region	Northern Region	Peripheral Towns	Non-Peripheral Towns
Attractiveness Differential					
7. Population	.2835 (.0516)	.0641 (.0346)	−.5114 (1.6077)	.3793 (.2208)	.1649 (.0564)
8. Welfare Rate	.0635 (.0314)	−.0773 (.0557)	−.0092 (.0413)	.1754 (.0436)	−.2554 (.0765)
9. Average Apartment Size	−.1082 (.0470)	−.1377 (.0891)	.0318 (.0834)	−.2359 (.0661)	−.0331 (.0391)
10. Car Ownership	−.8749 (.2449)	−.3628 (.2213)	−1.0348 (.3090)	−.3617 (.2996)	−.5842 (.2490)
11. Access to Beach	.0132 (.0048)	.0493 (.0092)	.0185 (.0131)	−.0285 (.0110)	−.0636 (.0342)
CONSTANT	10.1090 (3.9462)	3.4367 (9.3250)	46.8275 (19.1138)	7.1189 (6.4572)	-43.0052 (114269.36)
ADJUSTED R^2	.796	.961	.822	.852	.952
SAMPLE SIZE	130	70	60	75	65

a. Standard deviations of the estimates are contained in parenthesis.
* Insufficient tolerance level.

APPENDIX

List of Development Towns in the Sample*

Southern Region	Northern Region	Peripheral Towns	Non-Peripheral Towns
Arad	Acco	Arad	Acco
Ashdod	Afula	Beit Shean	Afula
Ashqelon	Beit Shean	Carmiel	Ashdod
Be'er Sheva	Carmiel	Dimona	Ashqelon
Beit Shemesh	Hazor	Eilat	Be'er Sheva
Dimona	Kiryat Shemoneh	Hazor	Beit Shemesh
Eilat	Maalot	Kiryat Shemonah	Kiryat Gat
Kiryat Gat	Migdal H'emek	Maalot	Kiryat Malachi
Kiryat Malachi	Nahariya	Migdal Ha'emek	Nahariya
Netivot	Safed	Netivot	Tiberias
Ofakim	Tiberias	Ofakim	Upper Nazareth
Shderot	Upper Nazareth	Safed	Yavne
Yavne		Shderot	
Yerucham		Yerucham	

* Although Be'er Sheva, Ashqelon and Ashdod are no longer formally listed as development towns and have sizeable populations, they are relatively new cities and demographically, socially and culturally different from the country's major urban centres, Tel Aviv, Jerusalem and Haifa. These cities contribute to the diversification of the sample.