

Gedik, Ayse

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Trends in migration between different settlement types: Turkey, 1965-90

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TRENDS IN MIGRATION BETWEEN DIFFERENT SETTLEMENT TYPES: TURKEY, 1965-90

Ayşe Gedik

Profösör Dr. Ayşe Gedik
Pehir ve Bölge Planlama Bölümü
Mimarlık Fakültesi
Orta Doğu Teknik Üniversitesi
Ýnönü Bulvarı, 06531 Ankara, Turkey
Fax:(+90-312) 210 12 50, 210 1105, 1108
E-mail: gedik @ vitruvius.arch.metu.edu.tr

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1. Introduction

Migration between different settlement types and the resultant national population distribution have significant effects on the country's environment, resource use, and ethnic and minority issues as well as on the various socioeconomic factors and on the national development indices: such as, education levels, fertility rates, infant mortality rates, women's development and rights, and type of the economic activity, etc. This is particularly relevant for the developing countries. For example, these indices of national development are highest in the urban and lowest in the rural areas.

The purpose of this paper is to describe the macro trends and the related changes in the internal migration in Turkey between different three settlement types according to the administrative definition: ie., villages, district centers (towns), and province centers (urban centers). The migration is studied for Turkey in aggregate, and not desegregated according to the regions or provinces.

The analysis is carried out firstly in terms of "city" and "village" areas which are considered as "urban" and "rural", respectively (according to one of the definitions for "urban" in Turkey). Subsequently, "city" areas are desegregated as "province centers" (urban centers), and as "district centers" (towns).

Descriptive analysis is carried out by indicating the changes and the sources of these changes through the 1965-90 period : (1) changes in the size of the permanent

resident population of the three different settlement types; (2) net migration to/from each settlement type, as the source of these population changes; (3) exchanges of net migration between each settlement type; (4) in- and out- migration as two components of the net migration; and (5) plausible hypotheses for the underlying patterns.

2. Data

The migrant is defined as those who changed their “permanent residency” during five-years between two consecutive population census days. It excludes those in 0-4 ages, and those who died during the period.

The data are from the Population Censuses (P.C.) of 1970, 80, 85, and 90. Thus it covers the four five-year periods of 1965-70, 75-80, 80-85, and 85-90. The migration data from the 1975 P.C. is not available. Therefore, the 1970-75 period is not included. The migration data are compiled from the publications of the State Institute of Statistics (DIE, 1985 and 1989). The data for the 1970 and 1990 P.C., are from the unpublished results.

3. Descriptive Analysis

3. 1. Size and Share of the Permanent Resident Population

During the period of 1970-90 P.C., there is a striking change in size and share (in the total national population) between “village” and “city” areas (see Table 1). While in 1970 P.C., village areas comprised about 62%, and city areas comprised about 38% of the total national population. They had the equal shares in 1980-85 period approximately the same time when the level of urbanisation reached 50%. Subsequently, in the 1985-90 period, the proportions are reversed, such that by 1990 P.C., the permanent resident population of the city areas was 59%, and the respective proportion was only 41% for the villages.

Throughout the period, the city population increased. On the other hand, village population started to decrease even in absolute numbers after the 1980 P.C., and the village areas began to be depopulated. For example, while the population of the villages was 21.5 million in the 1980 P.C., it was 20.4 million in the 1990 P.C. (see Table 1).

The largest shift in population between city and village areas took place during 1980-85 period, when the level of urbanisation reached approximately 50%. On the other hand, the population shift was lowest in the 1975-80 period during which Turkey

experienced economic stagnation with minus economic growth, social instability, and political violence.

When we desegregate the city areas, during 1970-90, the share of the “province centers” increased significantly from 24% to 39%; whereas, the increase was relatively minor for the “district centers” which was only from 15% to 20% (see Table 1). Therefore, the large increase in the population size and share of the “city” areas, was largely due to the “province centers”.

3.2. Net Migration in Each Settlement Type

In this section, the net migration, defined as the change in permanent resident population during two consecutive P.C., is discussed (see Table 2; and Figures 1 and 3).

3.2.1. City versus Village. During the entire period of 1970-90, “city” areas always had net in-migration; whereas the “villages” had net out-migration (see Table 2). Exception is the unusual period of 1975-80 during which the villages even had net in-migration from the city areas, although it was very low (82,750 (0.4%)).

Both the number and rates of net migration were the largest in 1965-70, and gradually decreased until 1985-90 with a dip in 1975-80. In 1965-70, there was a shift of 475,544 net migrants between city and village areas, and the net migration rates for the city and village areas were 4.3% and -2.6%, respectively. After the low levels in 1975-80, net migration between city and village areas again increased. During 1980-90, when the two last periods are compared with each other, we see that the net migration rate slowed down in the last five-year period of 1985-90. The number of net migrants between city and village areas decreased from 369,804 (1980-85) to 289,188 (1985-90). Likewise, the net migration rates decreased from 1.6% to 1.0% for the city areas, and from -1.8% to -1.4% for the village areas (see Table 2).

3.2.2. Province Centers. When the city areas are desegregated, “province centers” and the “district centers”, exhibit opposite trends except in 1965-70 (See Table 2; and Figures 1 and 3). “Province centers” always had net in-migration all through the entire period. They had the largest net in-migration “rate” of 7.2% in the initial period of 1965-70 (473,853 (7.2%)); and the largest “number” of net in-migrants in the last period of 1985-90 (855,372 (4.6%)). On the other hand, similar to the trend for the city areas as a whole as indicated above, province centers

had the lowest net in-migration rates (1.9%) and the lowest number of net in-migrants (196,422) in the exceptional period of 1975-80. After the 1980 P.C., during the two consecutive five-year periods, net in-migration both in terms of rates and numbers increased especially in the last period of 1985-90 (from 553,558 (3.8%) in 1980-85 to 855,372 (4.6%) in 1985-90).

3.2.3. District Centers. “District centers” after having almost zero net in-migration (1,691 (0.04%)) in 1965-70, they had significant net out-migration in all the subsequent three five-year periods, which especially intensified in the last period of 1985-90 (-279,172 (-4.4%), -183,754 (-2.2%) , and -566,184 (-5.5%), respectively) (see Table 2; and Figures 1 and 3).

The available data indicate to us firstly that net in-migration to “cities” was not observed both in the province and district centers. In fact the trends in these two settlement types were opposite to each other. Secondly, since the district centers started to have significant net out-migration beginning with the 1975-80 period, we may expect that in near future district centers will also lose population in absolute numbers and will experience depopulation--similar to villages¹.

Thirdly, the data shows that in times of severe national economic, social, and political hard times, such as in 1975-80, mobility (eg., net migration rates) decreased. For example, the net migration rates for the villages and the province centers decreased to lowest levels. On the other hand, the district centers were the hardest hit, and were affected seriously with significant amount of net out-migration (-279,172 (-4.4%)) (see Table 2).

3.3. Exchanges of Net Migration Between Settlement Types

Exchanges of net migrants between the three settlement types were in favour of “higher” order settlement type. For example, net migration between “village and province center”, and “district and province centers” was such that province centers had net in-migration whereas villages and district centers had net out-migration. Likewise, net migration between “villages and district centers” were in favour of the district centers, except in the 1975-80.

3.3.1. Villages. “Villages” always had net out-migration both to the province centers and to the district centers (see Table 3; and Figure 1). However, as stated above, the exception is the unusual period of 1975-80 during which the villages had net

in-migration from district centers however slight it was (87,239 (0.41%)). As a result, in 1975-80, villages had total net in-migration (82,750 (0.40%)) (see the previous Section 3.2.1; and Table 2).

Net out-migration from the villages both to the province and to district centers, in terms of rates and numbers, were largest during 1965-70 period (-306,169 (-1.7%), and -169,357 (-0.9%), respectively). On the other hand, it was the lowest during the unusual period of 1975-80 (-4,438 (-0.02%), and 87,239 (0.41%), respectively) (see Table 3).

Another finding is that the village-to-province center net out-migration was twice or three times the size of the village-to-district center net out-migration (see Table 3). However, in the last period of 1985-90, net out-migration from villages to province centers and to district centers were almost equal to each other, and even the trend was slightly reversed (-155,322 (-53.7%), and -133,866 (-46.3%), respectively)(see Table 3).

The changes in 1985-90 (comparative to 1980-85) was such that net out-migration from “villages to province centers” *decreased* more than half (from -287,754 (-1.4%) in 1980-85 to -133,866 (-0.6%) in 1985-90). On the other hand, the respective quantities for net out-migration from “villages to district centers” *increased* and almost doubled (from -82,050 (-0.4%) in 1980-85 to -155,322 (-0.7%) in 1985-90) (see Table 3). Consequently, since the *decrease* in net out-migration to province centers (153,888) was larger than the *increase* in net out-migration to district centers (73,272), this resulted in the decrease in the “village-to-city” net out-migration (from -369,804 (-1.8%) in 1980-85 to 289,188 (-1.4%) in 1985-90) (see also the previous Section 3.2.1; and Table 2). Needless to say, in 1985-90, opposite but symmetrical trends about the villages is also observed for the province and district centers as will be discussed in detail below. For example, net in-migration rates for the province centers, decreased from 2.0% to 0.7%; whereas for the district centers, the respective rates increased from 1.0% to 1.5% (see next Sections 3.3.2. and 3.3.3; and Table 3).

3.3.2. Province Centers. Among the city areas, the “province centers” always had net in-migration both from villages and from district centers. However the trend changed from being largely from villages to being largely from district centers. While in 1965-70, 65% of the net in-migration to province centers was from villages; it was 52% in 1980-85 (when the level of urbanisation reached approximately 50% level); and it

was as low as only 16% in 1985-90 (see Table 3). On the other hand, district centre's share in the net in-migration to province centers increased from 35% in 1965-70, and it more than doubled and reached as high as 85% in 1985-90. In other words, as the level of urbanisation increased, the net in-migration to the province centers became increasingly due to the net in-migration from the district centers (35.4%, 97.7%, 48.0%, 84.4%) rather than from the villages (64.5%, 2.3%, 52.0%, 15.7%) (see Table 3).

It is interesting to note that in the unusual period of 1975-80, province centers received exceptionally low net in-migration from the villages (4,438 (0.04%)); and almost all of the net in-migrants to the province centers were from the district centers (97.7%), rather than the villages (2.3%) (see Table 3).

Likewise, in terms of quantities, province centers received increasing number of net migrants from the district centers all through the 1965-90 period (167,684 (2.5%), 191,984 (1.8%), 265,804 (1.8%), 721,506 (3.9%). The increase in the 1985-90 period is especially significant where the number of net in-migrants from the district centers tripled (from 265,804 (1.8%) in 1980-85 to 721,506 (3.9%) in 1985-90) (see Table 3).

As for the net in-migration from the villages to province centers, the pattern was different. As previously stated, the largest net in-migration from the villages was in 1965-70 (306,169 (4.6%)); whereas, it was lowest during 1975-80 (4,438 (0.04%)) (see Table 3). After the 1980 P.C., in 1980-85, net in-migration from the villages increased (287,754 (2.0%)). However, in 1985-90, the net in-migration from the villages decreased more than half (from 287,754 (2.0%) in 1980-85 to 133,866 (0.7%) in 1985-90) (see previous Section 3.3.1). In spite of the fact that the net in-migration from the villages decreased significantly; because the net in-migration from district centers to province centers almost tripled in 1985-90; consequently, total net in-migration to province centers increased during this last period (from 553,558 (3.8%) in 1980-85 to 855,372 (4.6%) in 1985-90) (see previous Section 3.2.2; and Table 2).

3.3.3. District Centers. "District centers" always had net out-migration to the province centers; and received net in-migration from villages, with the exception of the 1975-80 period when they had net out-migration to villages (see previous Section 3.3.1.). In 1965-70, the magnitude of these two flows were almost equal to each other such that district centers gained from the villages in equal amount as they lost to the province centers (169,357 (3.7%) and -167,684 (-3.7%), respectively) (see Table 3).

These equal proportions changed after 1965-70, increasingly in favour of the net out-migration to the province centers, such that net out-migration to the province centers was 2 or up to 5 times (such as in the 1985-90) the size of the net in-migration from the villages. Consequently, district centers had net out-migration beginning with the 1975-80 period which reached a peak in 1985-90 (-566,184 (-5.4%)) (see previous Section 3.2.3; and Table 2).

In terms of quantities, district centers all through the 1970-90 P.C., lost net migrants in increasing amounts to the province centers (-167,684 (-3.7%), -191,984 (-2.9%), -265,804 (-3.2%), -721,506 (-6.8%)). On the other hand, their gain of net in-migrants from the villages decreased and never reached the 1965-70 level, except in 1985-90. In 1985-90, there was a significant increase in the net in-migrants from villages which almost doubled (from 82,050 (1.0%) in 1980-85 to 155,322 (1.5%) in 1985-90), and was only slightly less than the 1965-70 level (169,357 (3.7%)) (see previous Section 3.3.1).

It is interesting to note that during the unusual period of 1975-80, although the net migration between province centers and villages were lowest among all periods between 1965-90; there was heavy net out-migration from the district centers both to villages (-87,239 (-1.3%)), and largely to the province centers (-191,984 (-2.9%)) (see Table 3). Therefore, in 1975-80 there was heavy net out-migration away from the district centers, and they were the hardest hit (-279,172 (-4.3%)) (see Section 3.2.3; and Table 2).

In summary, the available data indicates that in 1965-70, net migration was predominantly “from villages to province centers” (306,169); with district centers being the transition places with equal net in-migration from the villages (169,367), and net out-migration to the province centers (-167,357). However, in later periods, the trend was in favour of net out-migration “from district to province centers”, such that in 1985-90, it became the predominant exchange of net migrants between the three settlement types (721,506) (see Table 3; and Figure 1).

Another related change in the trend was as follows. Villages lost net migrants overwhelmingly to the province centers rather than to the district centers. However, in 1985-90, net out-migration from villages to the province centers decreased to approximately to half whereas net out-migration from villages to the district centers almost doubled. Consequently, in 1985-90, opposite to 1965-70 period, net transfer of

migrants between “villages and the province centers” (133,866 (-46.3%)) was even smaller than the net transfer of migrants between “villages and district centers” (155,322 (-53.7%)) (see Table 3).

Compared to the 1965-70 period, in *all* subsequent three five-year periods, villages as sources of net in-migration to province and to district centers decreased through time². On the other hand, net migration between “district and province centers” increased, even in the unusual period of 1975-80, such that it was the determining factor for the total net migration for both of them.

3.4. In- and Out- Migration

Parallel to our previous findings concerning net migration, in *all periods*, the predominant flow was forward flows³ towards the “province centers” which was initially from the “villages”; and which later starting with 1975-80 period, was from the “district centers” (see Tables 4-5). Except 1965-70 period, next largest flows were always backward flows from the province centers to villages (before 1980), and to the district centers (after 1980)⁴.

Similarly, for the different *settlement types*, largest in-migration to the province centers and to the district centers were initially from the villages. However, subsequently starting with the 1975-80 period, largest in- and out-migration flows were between each other (see Tables 4-5). For villages, the largest in- and out-migration was always from/to province centers. In the last period of 1985-90, although the out-migration to province centers (54%) was still larger than the out-migration to district centers (46%), this was a significant decrease from 63% in 1980-85.

As for the net migration *between settlement types*, since net migration was in favour of higher level settlements, “forward” flows were larger than the “backward” flows. Exception is the migration between villages and the district centers in 1975-80 during which the villages received net in-migration. Likewise, the changes through time in the net migration between settlement types were more because of changes in the forward migration flow.

4. Towards Conceptual Framework: Plausible Hypotheses

Firstly, the net migration between the different settlement types will be discussed in terms of the difference between 1965-90 in the “relative sizes” of net migration.

Secondly, net migration to/from, and between each different settlement types will be studied through time.

4.1. Changes in the Relative Sizes of Net Migration Between 1965-90

In the previous sections, we saw that the (1) significance of the villages in the net migration both to the district and province centers decreased; (2) province centers in later periods, as the level of urbanisation increased, received net migration largely from the district centers; and (3) the district centers started to have net out-migration starting with the 1975-80 period (see Sections 3.2 and 3.3; Table 3; Figure 1).

The reason is firstly statistical artefact such that as the level of urbanisation increased, the village population in aggregate (and probably the size and the proportion of young males⁵ in the villages) decreased.

The other reason is the fact that the mobility rates of the district center (and for that matter, also of the province center) population have always been 2-3 times the mobility rates of the village population⁶. This difference in the mobility rates might be because of the higher education and skill levels, more information about the opportunities in other areas, and more previous migration experience of the district center population.

Therefore, higher mobility rates of the district centers and the fact that village population have been decreasing, resulted in the above stated changes in the net migration. We predict that in the future, the district centers will also experience depopulation similar to the villages, *ceteris paribus*.

4.2. Changes in Net Migration to/from and between Each Settlement

Types Through Five-Year Periods

The changes in the net migration through time will firstly be in terms of (1) total net migration in each settlement type; and (2) secondly in terms of the net migration between the different settlement types. The respective in-and out-migration rates will be discussed in terms of “forward” flows, ie., from lower to higher order settlements. For example, for villages, out-migration rates, whereas for the province centers, in-migration rates will be discussed. This is because of the fact that “backward” flows are, as indicated previously, are the smallest in size (see Section 3.4). Furthermore, they at least partly depend on the size of the forward flows in the previous period.

We hypothesise that the three main factors have been affecting the net migration and the underlying forward migration rates. We hypothesise as their value increases, the net and forward migration rates (from lower to higher order settlements) will also increase. These three factors are as follows.

(1) National economic vitality. We hypothesise that, at least in the Turkish case under study (1965-90), the national economic vitality is because of the non-agricultural activities which are predominantly located in the higher order settlements, i.e., especially in the province centers and to a lesser degree in the district centers. Therefore, as the national economic vitality increases, net and forward migration rates will also increase, *ceteris paribus*.

(2) Per capita income differences. As differences between the lower and higher order settlement types increase, the net and forward migration rates will also increase, *ceteris paribus*.

(3) Supply of potential migrants. Since migration is age as well as sex specific, as the proportion of young, and of young males (mainly in ages 15-29) increase, the net and forward migration rates will also increase vice versa, *ceteris paribus*.

Partly, because of lack of data, the operational definition of these variables for each five-year periods, are as follows.

(1) National economic vitality is measured as the “average annual rates of change of GNP per capita”.

(2) Per capita income differences between settlement types are measured in terms of the “inter-sectoral disparities in productivity and in terms of trade between the agricultural and non-agricultural sectors”⁷ Productivity is measured as (a) ratio of product per worker in non-agriculture (industry and services) to product per worker in agriculture; and (b) ratio of product per worker in industry to product per worker in agriculture (Mutlu, 1989, p. 120). Terms of trade is the ratio of “the prices received by farmers and the prices paid by them for non-agricultural goods and services” (Mutlu, 1989, p. 122).

Here we are assuming that the non-agricultural sectors will be concentrated in the higher order settlement types such as in the province centers; and to a lesser degree and relative to the villages, in the district centers. For the 1985-90 period, the data is available only for 1986.

(3) Supply of the potential migrants is measured as the “proportion of the total population in ages 15-29 (both sexes, and only males)”. Unfortunately, the age structure data is available only for whole Turkey, and not for different settlement types. Therefore, the effect of this factor could not be included in our discussions.

The changes in the first two above stated variables that is the average annual rates of change of the GNP p.c. and the inter-sectoral disparities (in productivity and terms of trade) exhibit a V-shape with the lowest point being at the 1975-80 period which was an unusual period with low economic growth, as well as much social and political instability and chaos (see Table 6; and Figure 2).

The same consistent pattern of V-shape is also observed in the total net migration rates to/from the three different settlement types (see Table 2; and Figure 3); and in the net migration rates between settlement types; and their respective forward flows (see Tables 2-5; and Figures 3-5). Deviant cases occur (1) in the total out-migration rates from the district centers in 1980-85; and (2) in the net migration between villages and the province centers, and consequently in the total net out-migration rates from the villages during 1985-90⁸. These will be explained below.

(1) Out-migration rates from the district centers are minimum in 1980-85 (10.5%) rather than in the 1975-80 period (11.8%). When we desegregate the out-migration rates, we see that it is because of the low levels of “backward” migration from district centers back to villages (2.8%) in 1980-85 --which was less than the value in 1975-80 (5.3%). As previously stated, 1975-80 period was an unusual period when the district centers were hardest hit and when there was high levels of out-migration even back to villages (see Table 5; Figure 3b).

(2) Total net migration rates from the villages decreased in 1985-90 from -1.8% to -1.4% relative to the previous period of 1980-85 although the hypothesised economic factors (eg., rate of GNP p.c., and the inter-sectoral disparities) have increased (see Table 3; Figure 3c). The slowing down of the speed of net out-migration rate from the villages in 1985-90 could be hypothesised to be due to (1) decreased proportion of young and mobile population in villages; (2) surplus in the supply of land per household (as a result of the 50% urbanisation); (3) and improved infrastructure and facilities, etc. in the villages.

However, when the total net out-migration from the villages is desegregated, we observe that the above stated decrease is only because of the decrease in the net out-

migration from villages to the “province centers”. During 1985-90, net out-migration rate from the villages to the province centers decreased from -1.4% to -0.6% (whereas the respective rate to the district centers increased from -0.4% to -0.7%). Needless to say, as a mirror image, net in-migration rate from the villages to the province centers also decreased from 2.0% to 0.7% (see Table 3; Figures 4a-4b, and 5a-5b).

When net migration between villages and the province centers are studied, we observe that there was a decrease in the village to province center “out-migration” rates from 2.6% to 2.5% (which also resulted in the decrease in the respective in-migration rates to the province centers from 3.7% to 2.8%); and furthermore, backward migration from province centers to villages increased from 1.8% to 2.1%. On the other hand, the respective rates for the district centers increased from 1.5% to 2.2%, and from 3.8% to 4.2%, respectively. In fact, we see that the village out-migrants preferred the province centers less than in the previous periods. For example, while 63% of the village out-migrants preferred province centers in 1980-85, this proportion decreased to 54% in 1985-90; whereas, during the same period, the same proportion increased for the district centers from 37% to 46% (see Tables 4-5; Figures 4 and 5).

We hypothesise that the above stated changes in the migration between villages and the province centers in 1985-90 is because of the following reasons. One reason might be due to the large difference in terms of education and skill levels of the population between different settlement types. Although the national economic activity rates and per capita income disparities increased during 1985-90, the labor demand in the province centers may have required more educated and skilled people such as those in the district centers rather than in the villages. The need in the province centers for the village migrants, and their labor absorption may have reached a saturation point. Consequently, preference of the village out-migrants for the province centers might have become less than the previous years. Another reason might be that the heavy exodus of district center population to the province centers may have created labor shortage for certain jobs in the district centers, which in turn may have encouraged increased village out-migration to the district centers rather than to the province centers.

5. Conclusions

Firstly we saw that the province centers and district centers which together constitute the “city” areas (in the administrative definition of “urban” in Turkey) exhibited

very different and even opposite trends to each other. Therefore, our findings indicate that to study the city areas only in aggregate is very misleading. Unfortunately, many of the migration related studies in Turkey and some of the official data sets are only in terms of “city” areas.

The transfer of net migrants and consequently of permanent resident population from villages to “city” areas was largely towards “province centers”. Furthermore, within the “city” areas, it was increasingly from the district centers towards the “province centers”.

Therefore, between the 1970 and 1990 Population Censuses (P.C.) the proportion of the permanent resident population changed and even completely reversed from being 62% in villages and 38% in city areas; to 41% in villages and 59% in the city areas. “Villages” always lost net migration to the “city” areas (except in the unusual period of 1975-80), and began to be depopulated after the 1980 P.C.

The large increase in the “city” population was due to the increase in the province center population which almost doubled from 24% to 39% rather than the district center population which increased only slightly from 15% to 20%. In fact, the district centers starting with the 1975-80 period, had heavy total net out-migration (which was largely because of district to province center net out-migration). We may predict that in the future, similar to the villages they will experience depopulation, *ceteris paribus*.

Net migration between settlement types were in favour of the higher level settlement type. Therefore, province centers always had net in-migration both from the villages and from the district centers. On the other hand, district centers being the transition places, gained net migrants from the villages, and lost to the province centers. Except few cases, “forward” rather than the “backward” flows were the determining factor in the changes of net migration through time .

One of the main pattern of change was such that, in the initial period of 1965-70, the largest net migration and the largest migration flow was from villages to the province centers. However as the level of urbanisation increased, overwhelmingly it was from district centers to the province centers. Villages lost their importance as sources of net migration in the province centers as well as in the district centers.

The two periods of 1975-80 and the last period of 1985-90 show some deviation from the general pattern. Firstly in 1975-80 during which Turkey had unusual period of

severely adverse economic and political conditions, villages had total net in-migration due to the net in-migration from the district centers which in turn was largely because of the increased backward migration from the district centers to the villages. The mobility rates (rates for total net migration, net migration between settlement types, and out-migration to higher order settlement types) decreased to low levels. On the other hand, during the same period, district centers had the very large net out-migration to the villages, and especially to the province centers; and were the hardest hit among the three different settlement types. When the conditions improved in the country as in the 1980-85, then forward flows from village to city areas increased whereas backward flows from city to village areas decreased. Similar changes have also been observed in the other countries as well.

The second change in the main pattern was observed in the last period of 1985-90, between the migration from the “villages” to the province-centers and to the district centers. Village net out-migration in preference to province centers decreased from 64-78% in the previous periods to 46%, and thus became even slightly in favour of the district centers (54%). Village out-migrants while still preferring province centers (54%), it was a decrease from previous levels (58%-63%). Net out-migration rates from villages to province centers decreased approximately to half (from -1.4% to -0.6%); whereas, village to district center net out-migration rates almost doubled (from -0.4% to -0.7%). Because of these changes in the out-migration rates, the net migration rates between villages and the province centers, and consequently the total net out-migration rate from the villages decreased in 1985-90 (from -1.8% to -1.4%).

Plausible hypotheses for the observed patterns is firstly discussed for the trend in the change of the relative “sizes” of migration between settlement types during 1965-90. It is hypothesised that it is due to the (1) statistical artefact such as decreasing size of the village population of especially the young males, and (2) the much larger mobility rates of the population in the district centers relative to the population in the villages.

In our study about the plausible hypotheses underlying the trends, we saw that the net and forward migration “rates” (ie., the in-, out-, and net migration) all exhibited a V-shape which was very similar to the trend observed in the average annual growth rate of GNP p.c., and in the inter-sectoral disparities. The lowest point of the V-shape corresponded to the unusual period of the 1975-80. There were only few exceptional cases, and they were related either to the 1975-80 period, or to the unusual changes in

the backward migration. The changes in the slope in the migration rates during 1985-90 period between villages and province centers is hypothesised to be because of the differences in the education and skill levels of the population in the villages versus the district centers; and the migration history of Turkey.

Besides, the above stated economic factors (ie., national economic activity, and inter-sectoral disparities), we also hypothesised that the migration rates were related to the age structure of the population, especially those in ages 15-29. The available data about the age structure was only for all Turkey, and not desegregated for different settlement types, except in 1985-90 period. Therefore, the effect of this important factor could not be discussed.

As for the future research, we plan (1) to include, if the data is available, the other factors such as the government price and subsidy policies⁹ regarding agriculture and non-agriculture activities (Mutlu, 1989, p.131; Shefer, 1987); (2) to indicate and analyse regional differences; and (3) to carry out the same analyses when (a) only the inter-provincial migration is considered; and (b) when province centers are desegregated at least in terms of the three largest metropolitan areas of Istanbul, Ankara, and Izmir, and the rest of the province centers¹⁰.

Acknowledgments. I would like to thank Professor Toshinori Nemoto, and Mr. Satoshi Nakagawa for their constructive comments. I also thank to Dr. Peter Kitin for helping me in drawing my figures; and to my student Mr. Metin Penbil for helping me to obtain some of the data.

ENDNOTES

1. The fact that the district centers would have net out-migration was predicted in our earlier study in 1978 (Gedik, 1978, p 72).
2. The fact that the village out-migration to district and to province center would decrease was predicted in our previous study in 1978 (Gedik, 1978, p. 71).
3. "Forward" flows are from lower level settlement type to higher level settlement type, such as from villages to district and to province centers, and from district to province centers. "Backward" flows are from the higher to lower level settlement type, such as from province centers to the district centers and to the villages, and from district centers to the villages.

4. This is because of the large respective forward flows, ie., as Lee stated every migration stream has counter stream (Lee, 1966).
5. Unfortunately data for age structure is available only for all Turkey, and not for each of the different settlement types such as villages, except 1985-90 period.
6. Mobility rates are estimated by dividing the number of out-migrants by the permanent resident population in the origin in the initial year of the five-year period ($M_{t,t+n}/P_t$). The mobility rates for the village versus district center (and province center) population in 1965-70, 1975-80, and 1980-85 are 9.6% vs 20.5% (19.3%); 5.3% vs 16.8% (12.9%); and 5.6% vs 14.6% (9.7%), respectively (Gedik, 1996, pp. 3, 24).
7. "The regional income disparities appear to be function of sectoral productivity and terms of trade differentials between agriculture and non-agricultural activities" (Mutlu, 1989, p.118; Hirschman, 1958; Myrdal, 1957). Even when only one of these variables are regressed on the regional (provincial) per capita income (product) disparities (weighted coefficient of variation) between 1975-86, the coefficient of determination is 0.848, and 0.507, respectively (Mutlu, 1989, pp. 118, 119).
8. Other deviant cases are observed for two of the "backward" flows which are as indicated previously are the smallest in size (see Section 3.4). For such backward flows, the lowest point was in 1980-85. These are : (1) from the district centers to villages; and (2) from the province centers to villages.
The reason is the small size of the respective forward migration in the unusual previous period of 1975-80.
9. This point was brought up by Professor Toshinori Nemoto (Hitotsubashi University), Tokyo, December 1997.
10. This was suggested by Satoshi Nakagawa (National Institute of Population and Social Security Research), Tokyo, December 1997.

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Table 1. Permanent Resident Population of Different Settlement Types¹:
1970, 80, 85, and 90 Population Censuses (in thousands)

Year of Pop. Census	Province Center	District Center	City (Sub-total)	Villages and Sub-district	Total
1970 Pop.Cen 1965	6,592.1	4,534.6	11,126.7	18,984.3	
1970	7,065.9 (23.5)	4,536.3 (15.1)	11,602.2 (38.6)	18,508.8 (61.5)	30,111.1 (100.0)
1980 Pop.Cen 1975	10,455.9	6,532.0	16,987.9	21,395.4	
1980	10,652.3 (27.8)	6,252.8 (16.3)	16,905.2 (44.1)	21,478.1 (55.9)	38,383.3 (100.0)
1985 Pop.Cen 1980	14,576.7	8,384.3	22,960.9	21,111.0	
1985	15,130.2 (34.3)	8,200.5 (18.6)	23,330.7 (52.9)	20,741.2 (47.1)	44,071.9 (100.0)
1990 Pop.Cen 1985	18,708.6	10,557.2	29,265.8	20,721.8	
1990	19,564.0 (39.1)	9,991.0 (20.0)	29,555.0 (59.1)	20,432.6 (40.9)	49,986.0 (100.0)

Source: Various publications of S.I.S. Ankara: Turkey.

Notes: (1) Province centers are "areas within the municipal boundaries of the province centers; district centers are "areas within the municipal boundaries of the district centers; cities are total of the province and district centers.

Table 2. Number of Net Migrants and Net Migration Rates (%) in Different Settlement Types¹:
1970, 80,85,and 90 Population Censuses (in thousands)

Year of Pop. Census	Province Center	District Center	City (Sub-total)	Village and Sub-district
1970 (1970-65)	473.9 ² (7.2) ³	1.7 (0.04)	475.5 (4.3)	-475.5 (-2.6)
1980 (1980-75)	196.4 (1.9)	-279.2 (-4.3)	-82.8 (-0.5)	82.8 (0.4)

1985 (1985- 80)	553.6 (3.8)	-183.8 (-2.2)	369.8 (1.6)	-369.8 (-1.8)
1990 (1990- 85)	855.4 (4.6)	-566.2 (-5.5)	289.2 (1.0)	-289.2 (-1.4)

Source: Table 1.

Notes: (1) See Table 1; (2) Number of net migrants is calculated as the difference in population during 5-year period at a particular population census; (3) Values in parentheses are the net migration rates. They are calculated by dividing the number of net migrants by the permanent resident population in the initial year of the 5-year period : $(M/P(t)) * 100$. For example: $7.2 = (473.9 / 6592.1) * 100$. The value of 6592.1 is the permanent resident population of the province centers in 1965 which is obtained from the 1970 Population Census (see Table 1).

Table 3. Origin and Destination of the Net Migration (Numbers and Rates (%), and Proportions (%))
Between Different Settlement Types¹: 1970, 80, 85, and 90 Population Censuses (in thousands)

Year of Pop. Cens.		Province Center	District Center	City (Sub-total)	Village and Sub-district
1970 (1970-65)	Prov.C	.....	-167.7 (-3.7) (-99.2)		-306.2 (-1.7) (-64.4)

	Dist. C.	167.7 ² (2.5) ³ (35.4)	....		-169.4 (-0.9) (-35.6)

	Village	306.2 (4.6) (64.6)	169.4 (3.7) (10.0)	475.5 (4.3)	....
Total	473.9 (7.2) (100.0)	1.7 (0.04) (100.0)		-475.5 (-2.6) (100.0)	
1980 (1980-75)	Prov C.	.....	-192,0 (-2.9) (-68.8)		-4.4 (-0.02) (-5.4)

	Dist C.	192.0 (1.8) (97.7)	.....		87.2 (0.41) (105.4)

	Village	4.4 (0.04) (2.3)	-87.2 (-1.3) (-31.3)	-82.8 (0.5)	.....
Total	196.4 (1.9) (100.0)	-279.2 (-4.3) (100.0)		82.8 (0.40) (100.0)	
1985 (1985-	Prov C.	.....	-265.8 (-3.2) (-144.7)		-287.8 (-1.4) (-77.8)

Table 4. Origin and Destination of the In-Migration (Numbers, Rates (%), and Proportions (%))
From Different Settlement Types¹: 1970, 80, 85, and 90 Population Censuses (in thousands)

Year of Pop. Census		Province Center	District Center	City (Sub-total)	Village and Sub-district
1970 (1970-65)	Prov.C	.....	282.1 (6.2) (40.4)		373.9 (2.0) (60.2)

	Dist. C.	449.8 (6.8) (39.8)	.....		246.9 (1.3) (39.8)
	.....	.....	..... 416.3 (9.2) (59.6)	—	.....
	Village	680.0 ² (10.3) ³ (60.2)	.....	1,096.0 ⁴ (9.9)	.....
—	—	—	—	—	—
Total	1,129.8 (17.1) (100.0)	698.3 (15.4) (100.0)	620.8 (3.3) (100.0)		
1980 (1980-75)	Prov C.	.....	234.5 (3.6) (47.8)		349.8 (1.6) (50.5)

	Dist C.	426.5 (4.1) (54.6)	.....		343.1 (1.6) (49.5)
	—
	Village	354.2 (3.4) (45.4)	255.9 (3.9) (52.2)	610.1 (3.6)	.....
—	—	—	—	—	—
Total	780.7 (7.5) (100.0)	490.4 (7.5) (100.0)	692.9 (3.2) (100.0)		
1985 (1985-	Prov C.	.....	377.7 (4.5) (54.3)		255.1 (1.2) (52.0)

80)	. Distr C.	643.5 (4.4) (54.2) .....	.... .....	..... .....	..... 235.6 (1.1) (48.0)
	. Village	542.9 (3.7) (45.8)	317.6 (3.8) (45.7)	860.5 (3.8)	..... .....
	— Total	1, 186.4 (8.1) (100.0)	695.3 (8.3) (100.0)		490.7 (2.3) (100.0)
	1990 (1990- 85)	Prov C.	501.8 (4.8) (52.9) .....	.....	390. 0 (1.9) (57.3) .....
. Dist. C.	1,222.7 (6.5) (70.0) .....	.....	.....	.....	..... 290.5 (1.4) (42.7)
. Village	524.0 (2.8) (29.9)	445.9 (4.2) (47.0) .....	.....	969.9 (3.3)	..... .....
. Total	1,746.7 (9.3) (100.0)	947.7 (9.0) (100.0)			680.5 (3.3) (100.0)

Source: See Table 1.

Notes: (1) See Table 1; (2) Number of in-migrants from the village areas to the province centers during also the last column in Table 6); (3) See note no. 3 in Table 3. For example, $10.3 = (680.0 / 6592.1) * 100$ 6592.1 is the permanent resident population of the province centers of 1965 which is obtained from the 19 Census (see Table 1); (4) Number of the in-migrants from the village areas to the city areas (see also last c

Table 5. Origin and Destination of the Out Migration (Numbers and Rates (%)) To Different Settlement Types, 1970, 80, 85, and 90 Population Censuses (in thousands)

Year of Pop. Census		Province Center	District Center	City (Sub-total)	Village and Sub-district
1970 (1970-65)	Prov.C	.....	449.8 (9.9) (65.0)		680.0 (3.6) (62.0)

	Dist. C.	282.1 (4.3) (43.0)	.....		416.3 (2.2) (38.0)

	Village	373.9 ² (5.7) ³ (57.0)	246.9 (5.4) (35.4)	620.8 ⁴ (5.6)	..
Total	655.9 (10.0) (100.0)	696.7 (15.4) (100.0)		1,096.3 (5.8) (100.0)	
1980 (1980-75)	Prov C.	.....	426.5 (6.5) (55.4)		354.2 (1.7) (58.1)

	Dist C.	234.5 (2.2) (40.0)	.....		255.9 (1.2) (41.9)

	Village	349.8 (3.4) (60.0)	343.1 (5.3) (44.6)	692.9 (4.1)	....
Total	584.2 (5.6) (100.0)	769.6 (11.8) (100.0)		610.1 (2.9) (100.0)	
1985 (1985-	Prov C.	.....	643.5 (7.7) (73.2)		542.9 (2.6) (63.1)

80)	. Distr C.	377.7 (2.6) (59.7)	.....	.....	..... 317.6 (1.5) (36.9)

	. Village	255.1 (1.8) (40.3)	235.6 (2.8) (26.8)	490.7 (2.1)	.....
	— Total	632.8 (4.3) (100.0)	879.1 (10.5) (100.0)	.....	860.5 (4.1) (100.0)
1990 (1990- 85)	Prov C.	.....	1,222.7 (11.6) (80.8)	.....	524.0 (2.5) (54.0)

	. Dist. C.	501.8 (2.7) (56.3)	.....	.....	445.9 (2.2) (46.0)

. Village	390.0 (2.1) (43.7)	290.5 (2.8) (19.2)	680.5 (2.3)	.....
.....	
. Total	891.9 (4.8) (100.0)	1,513.2 (14.3) (100.0)	.....	969.9 (4.7) (100.0)	

Source: See Table 1.

Notes: (1) See Table 1; (2) Number of out-migrants from the province centers to the villages during 19 last column in Table 5); (3) See note 3 in Table 3. For example, $5.7 = (373.9 / 6592.1) * 100$. The value of permanent resident population of the province centers of 1965 which is obtained from the 1970 Population (see Table 1); (4) Number of out-migrants from city areas to villages (see also the last column in Table 5).

Table 6. Average Annual Rate of Change in GNP p.c., Inter-Provincial Per Capita Income Disparities, and Age Structure of the Population: 1965-90.

	1965-70	1970-75	1975-80	1980-85	1985-90
GNP p.c. (rates) ^{1, a, *}	3.66	3.44	-0.08	2.16	3.48
Inter-sectoral Disparity (Agric. vs Non-Agric.) ^{2, *}	5.94	5.24	4.98	5.69	6.10 **
Labor Productivity ^b					
PWNA / PWA ³	6.27	5.51	5.12	6.10	5.55 **
PWI / PWA ⁴	.....	.....	.....	.....	.....
.....	97.75	127.29	145.46	116.52	135.69
.....					**
Terms of Trade ^{5, c}					
Turkey: Ages 15-29 ^e					
Nos.: both sexes					15,178,903
% : both sexes	8,138,920 24.27	9,718,454 25.54	11,510,819 27.02	13,312,509 27.89	28.32
.....
Nos. : males	4,170,171	5,052,694	5,966,359	6,795,345	7,708,400
% : males	12.43	13.26	14.01	14.25	14.38

Source: (a) D.I.E. (1996), p. 429; (b) In Mutlu (1989) p.120: data for 1962-72, DIE (1973), pp. 106-107, for 1973-74, DPT (1979), for 1975-86, DPT (1988), p. 2; (c) Mutlu (1990) in Mutlu (1989) p. 122; (d) DIE (1996), p. 6; (e) DIE (1996) pp. 10-12;

Notes: (1) At constant prices. In another source, the respective rates are cited to be 6.6% for 1963-67, 7.1% for 1968-71, 6.4% for 1973-77, 2.1% for 1978-83, 6.25% for 1984-87, ICI, 1988, p. 26, in Mutlu, 1989, p. 110; (2) For the annual rates, see Table 16; (3) Ratio of "product per worker in non-agriculture (industry + services)" to "product per worker in agriculture" (Mutlu, 1989, p. 120); (4) Ratio of "product per worker in industry" to "product per worker in agriculture" (Mutlu, 1989, p.120); (5) "Terms of trade between the prices received by farmers and the prices paid by them for non-agricultural goods and services" (Mutlu, 1989, p. 122); (6) See note 1 in Table 1; (*) Values are arithmetic averages between 1966-70, 71-75, 76-80, 81-86; (**) The data is available only for the year of 1986.

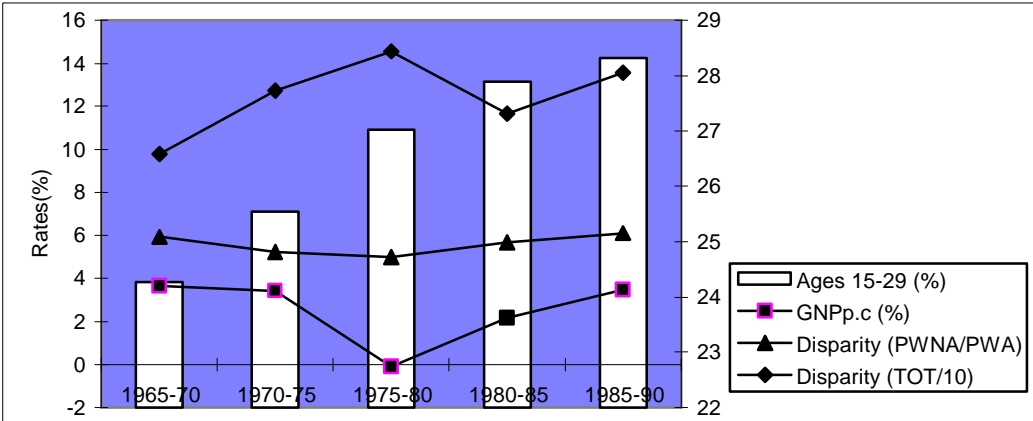


Figure 2. National Economic Activity, Inter-Sectoral Disparity, and Age Structure

Notes: Source Table 6.

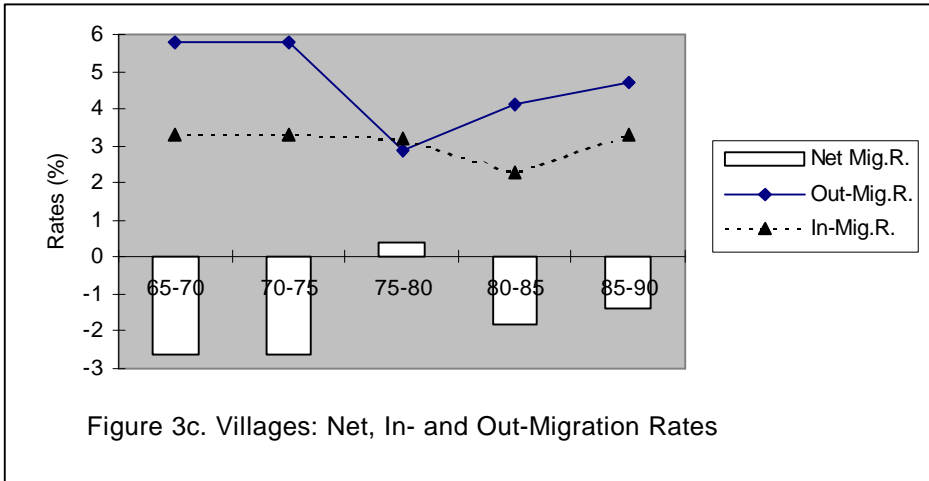
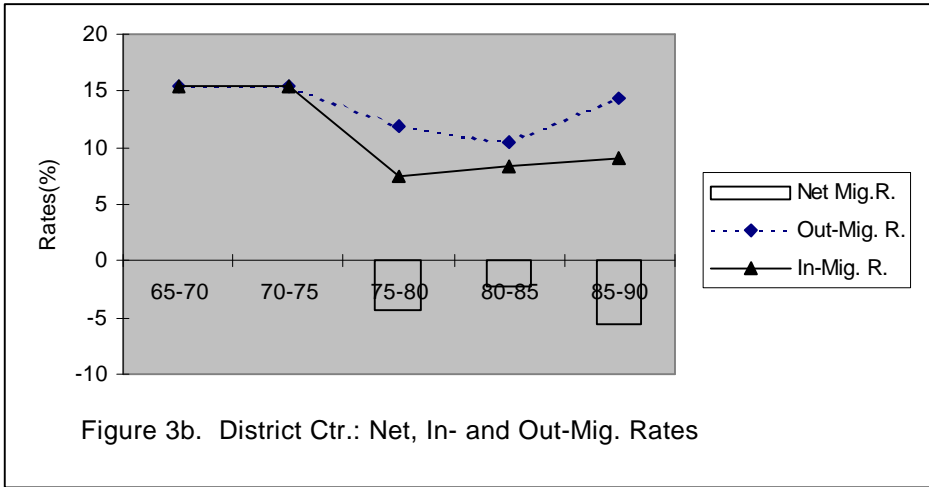
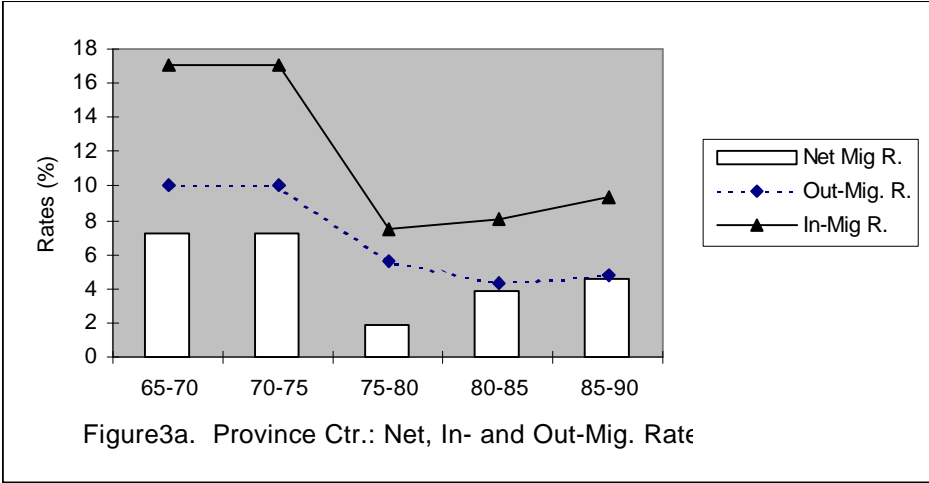


Figure 3: Total Net In- and Out-Migration Rates
Source: Tables 3, 5 and 6; Solid line: „forward“ flow, Dashed line: „Backward“ flow

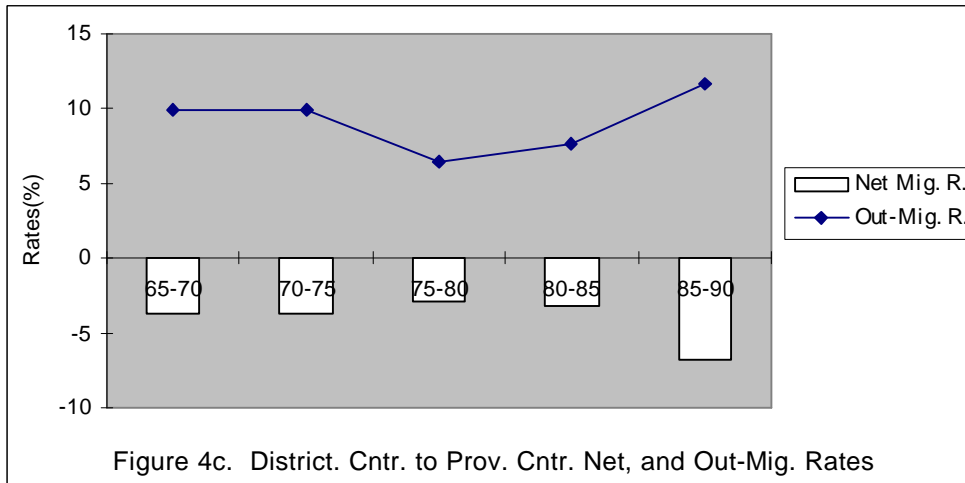
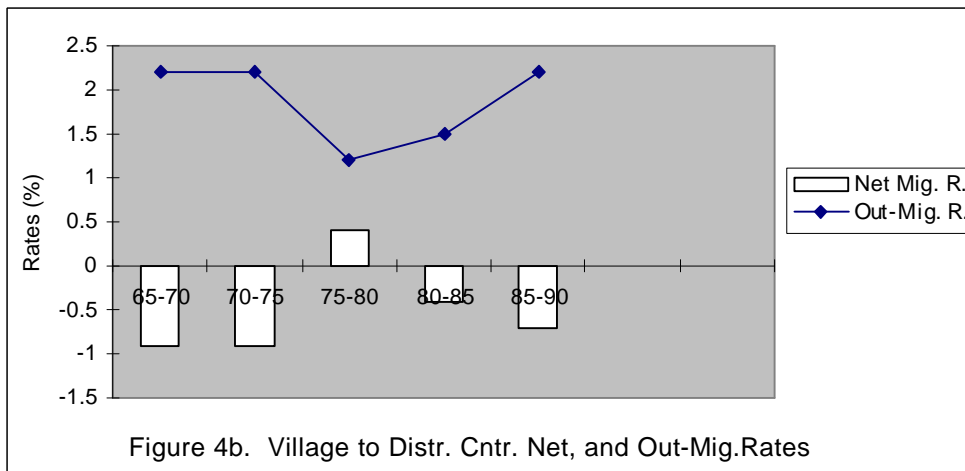
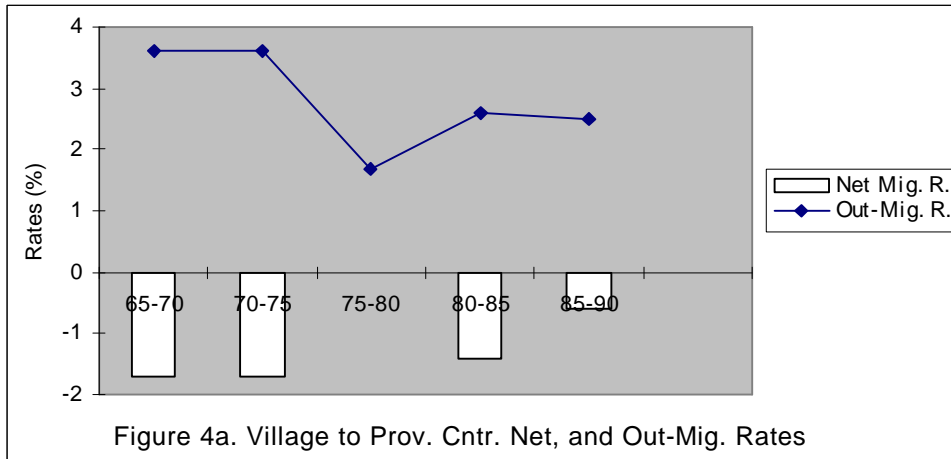


Figure 4: Net Out-Migration and Out-Migration Rates between different Settlement Types

Source: Tables 4 and 6

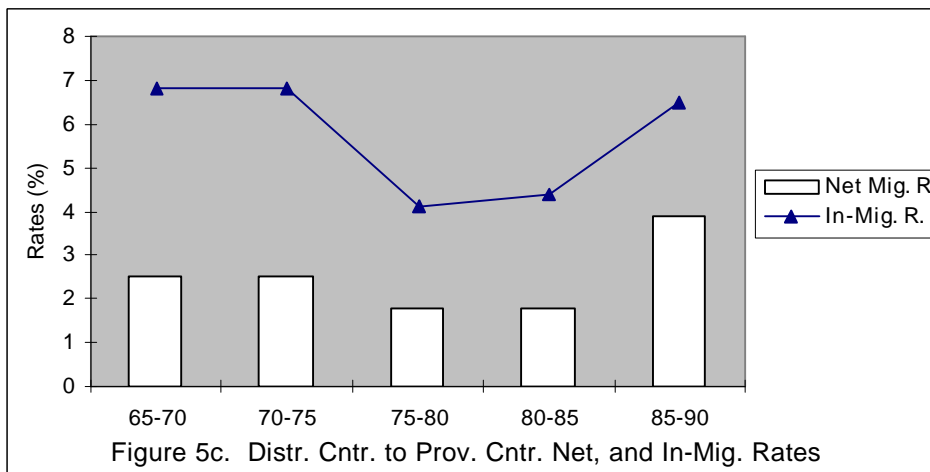
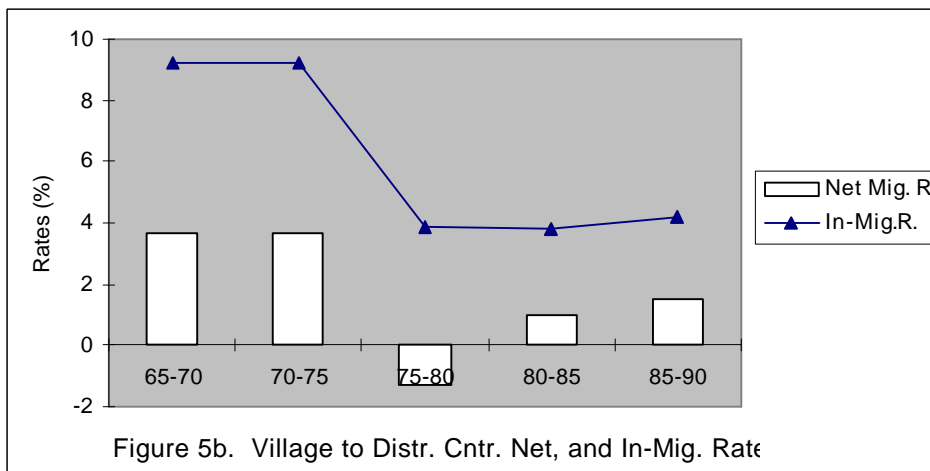
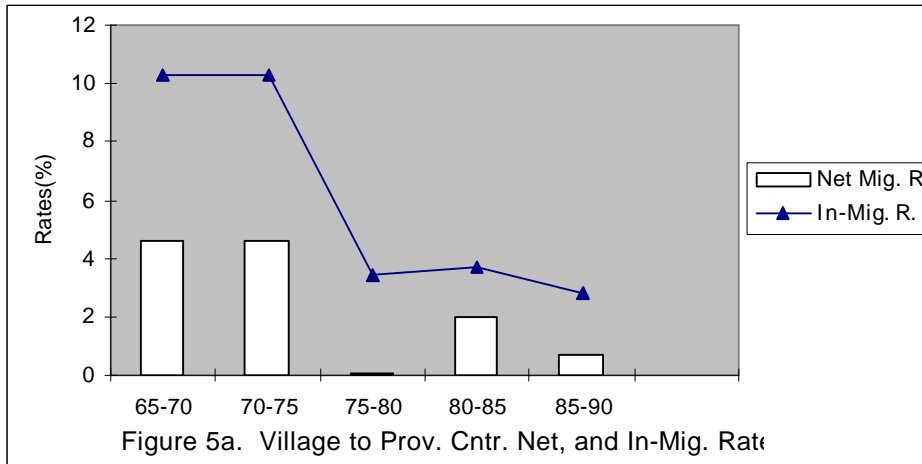


Figure 5: Net In-Migration and In-Migration Rates between different Settlement Types

Source: Tables 4 and 5