

PATTERNS OF INTERNAL MIGRATION IN THE GERMAN DEMOCRATIC REPUBLIC

Egon Weber

*Sektion Geographie der Ernst-Moritz-Arndt-Universität Greifswald,
German Democratic Republic*

Résumé — Cette étude de la migration interne pour le période 1955-75 utilise les données de l'enregistrement continue de tous les mouvements entre les communes ("Gemeinde"). Les taux élevés de migration après la Deuxième Guerre Mondiale furent causés par le réajustement de la population et par le mouvement de la population rurale et des réfugiés vers les villes. Le déclin de la mobilité depuis le milieu des années 50 fut associé aussi avec un accroissement des déplacements pendulaires. Au milieu des années 70 le taux de migration (24 pour 1000) était considérablement plus bas que celui de la République Fédérale Allemande (R.F.A.) (60 pour 1000). Les configurations spatiales apparaissant sur les cartes indiquent des gains par la capitale nationale et par les zones récemment industrialisées alors que les principaux perdants sont les vieux districts industriels du Sud ainsi que ceux du Nord rural. La migration nette est reliée à la taille des communes, les centres majeurs connaissant des gains croissants alors que les petites communes (moins de 2000) furent les plus grandes perdantes. Parmi 8868 communes, un cinquième a connu des gains durant la fin des années 60. Les dernières étaient situées un peu partout dans le pays bien qu'il y ait eu de plus grandes concentrations autour de Berlin et dans les districts de Cottbus et Frankfurt. Des autres communes, un tiers a subi des pertes migratoires dépassant 10 pour cent pour la période 1965-70. L'auteur fait aussi rapport sur les études spécifiques faites en République Démocratique Allemande (R.D.A.) par Bose (1975, 1976), Andrea et Beyer (1969) ainsi que par Grünberg et Niemann (1977).

Abstract — The study of internal migration during 1955-75 utilizes data of continuous registration of all moves among communities (*Gemeinde*). In the early years after World War II, the high migration rates were caused by re-adjustment of distribution patterns and concentration of rural (and refugee) population in the urban areas. The declining mobility since the mid-1950s was associated with the increase in commuting. In the mid-1970s, the rate of migration (24 per 1000) was considerably lower than that in the Federal Republic of Germany (60 per 1000). Spatial patterns shown on the maps indicate gains by the capital city Berlin and by the newly industrialized areas, while the principal losers are the rural north and the old industrial districts in the south. Net migration is related to the size of communities, with the largest centres enjoying increasing gains while small communities (below 2000) were the greatest losers. It appears that of 8,868 communities, one-fifth experienced gains during the late 1960s. These were scattered all over the country with greater concentrations around Berlin and in the Cottbus and Frankfurt districts. Of the remaining communities, one-third suffered migration losses exceeding 10 per cent during five years. The author also reports on specific studies made in the German Democratic Republic by Bose (1975, 1976), Andrea and Geyer (1969) and Grünberg and Niemann (1977).

Key Words — German Democratic Republic, internal migration, community size, migration types, migration motives

Introduction

The German Democratic Republic (G.D.R.), a socialist state, is a highly developed industrial nation with a very mobile population. This holds true for occupational, social and spatial mobility. The occupational mobility is reflected in changes in the structure of the labour force. The number of persons employed in agriculture and forestry has declined from 2.24 million (30 per cent of the total labour force) in 1949 to 878,000 (11 per cent) in 1976. Un-

til the 1960s, workers released from agriculture generally found work in the secondary sector, but during the past few years many have also entered the tertiary sector. Social mobility often finds its expression in, among other things, the rising level of worker qualification. From 1955 to 1971, the number of unskilled and semi-skilled labourers decreased from 70 per cent to 34 per cent, while the skilled workers and professional people more than doubled.

The following analysis of spatial mobility is restricted to internal migration. For a correct assessment of the development of migration, a brief reference to commuting is necessary. From 1964 to 1971 — the time period between the last two censuses in the G.D.R. — the percentage of commuters crossing a *Kreisgrenze* (boundary of a "*Kreis*", an administrative unit) on their daily or weekly journey to work rose from less than 10 per cent to over 15 per cent of the total labour force; since 1971, commuting has increased even more. One of the main reasons for this is that the territorial concentration of production has progressed more rapidly than the concentration of population in larger settlements.

Extent of Internal Migration

Internal migration in the G.D.R. is defined as a change in residence from one *Gemeinde* (community) to another within the Republic. Migration is dealt with statistically on three administrative levels: (1) migration across district (*Bezirk*) boundaries, (2) migration across county (*Kreis*) boundaries (including migration across *Bezirksgrenzen*) and (3) migration across community (*Gemeinde*) boundaries (including migration across both *Bezirksgrenzen* and *Kreisgrenzen*). Table 1 shows the development of internal migration across *Kreisgrenzen*. Until the 1950s, internal migration had a very great influence on the redistribution of the population in the G.D.R. Large migration streams were a consequence of the growing need for workers in the regions of industrial reconstruction and development; this was mainly met by in-migration from the agrarian districts. A very high rate of net in-migration occurred at that time in certain large cities (including Dresden, Leipzig and Rostock) and particularly in those regions with important basic industries (lignite, uranium and copper mining; iron and steel foundries; shipbuilding; and port construction) (Bose, 1975:36). Among the migrants were many resettlers from the former eastern territories of Germany (now part of Poland or the U.S.S.R.), as well as evacuated persons. Many of these people were accommodated in rural areas, but they tended to move into the cities (many of which had been severely damaged in the Second World War) as soon as the reconstruction period began, in order to find better housing and working conditions.

The marked decrease of internal migration since the mid-1950s may also have been caused by the extension of public transport and an increase in private transportation. Working places outside the place of residence could now be reached faster and more conveniently so that residential changes were often no longer necessary. The sudden change between 1965 and 1966 can be explained by the introduction of a new system of registration, as a consequence of which the residential change of certain population groups (for example, construction workers, students and apprentices) was no longer included in internal migration statistics. After 1968, the annual total number of migrants between counties dropped to between 260,000 and 280,000, that is, 16 to 17 migrants per 1000 population. This value is low in comparison with other European countries. The same can be said about the rate of migration between communities (approximately 60 per 1000 in the German Federal Republic as compared to 24 per 1000 in the G.D.R.). The intensity of internal migration for males in the G.D.R. is somewhat higher than for females (Table 1).

TABLE 1. INTERNAL MIGRATION ACROSS *KREISGRENZEN* (COUNTY BOUNDARIES) IN THE GERMAN DEMOCRATIC REPUBLIC, 1955-1975

Year	Number of Migrants (in thousands)			Rate per 1,000		
	Total	Males	Females	Total	Males	Females
1955	771	453	318	43.0	56.5	32.0
1960	622	355	267	36.1	45.8	28.2
1965	499	279	220	29.3	35.9	23.8
1966	370	204	166	21.7	26.1	18.0
1970	270	136	134	15.9	17.4	14.6
1971	286	144	142	16.8	18.3	15.4
1972	262	131	131	15.4	16.7	14.2
1973	267	134	133	15.7	17.1	14.6
1974	282	143	139	16.7	18.2	15.3
1975	279	141	138	16.5	18.0	15.3

Source: Statistisches Jahrbuch der DDR 1977, p. 394.

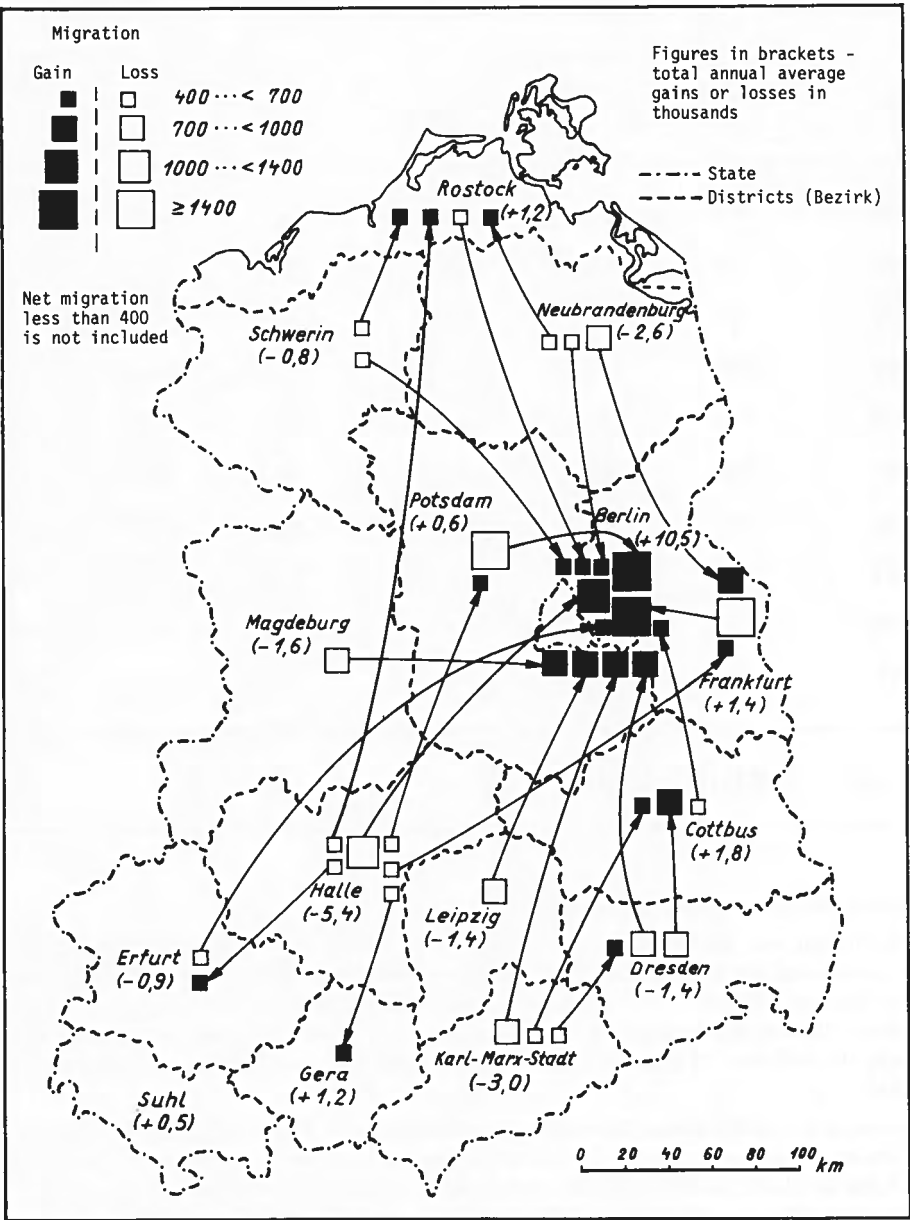
Internal Migration Across Bezirksgrenzen

In the long run, internal migration in the G.D.R. results in a considerable redistribution of the population, which becomes evident in the analysis of the migration across *Bezirksgrenzen*. Since regional differences in birth rates have diminished in recent years (the northern, more agrarian districts having relatively high, and the southern industrial districts having low birth rates), the influence of migration on the regional development of population has increased again.

Internal migration across *Bezirksgrenzen* is illustrated in Figure 1. Berlin, the capital, occupies an exceptional position. For more than ten years, it has had an annual migration gain of 8,000 to 10,000 persons, and the trend is still upwards. The transfer of labour to Berlin is necessary so that the capital can fulfill its political, economic, scientific and cultural functions, which are of national importance.

The districts (*Bezirke*) of Cottbus, Frankfurt, Gera, Rostock and Potsdam also had migrational gains from 1973 to 1975, though on a smaller scale. The migrations into the districts of Frankfurt and Potsdam are often directed to those *Kreise* located in the immediate neighbourhood of Berlin and are, in many cases, to be considered as step-wise migrations to

FIGURE 1. NET MIGRATION BETWEEN THE DISTRICTS, 1973-1975



Source: Statistisches Jahrbuch der DDR 1977

the capital. In the past, migrational gains in the districts of Cottbus and Frankfurt were much greater, owing to the expansion of the energy sector (mining and processing of lignite) and the construction of new industrial plants (for example, "VEB Petrolchemisches Kombinat

Schwedt," located in the *Bezirk* of Frankfurt). On the other hand, the districts of Halle, Karl-Marx-Stadt and Neubrandenburg had considerable migrational losses. Their economic structure is quite different. The districts of Halle and Karl-Marx-Stadt are highly industrialized; there, out-migration takes place under the condition of an acute labour shortage. In contrast, the district of Neubrandenburg has a predominantly agrarian structure and, until a few years ago, boasted the highest birth rate of all districts; even today, it has a relatively favourable natural growth (Weber, 1973). Net migration losses in Neubrandenburg — often caused by the training of apprentices from that province in the southern districts — does not yet cause severe labour problems because Neubrandenburg has a relatively favourable age structure (Weber, 1975a).

Berlin has had migrational gains from all districts of the G.D.R., particularly from neighbouring Potsdam and Frankfurt, as well as from of Halle, Leipzig, Karl-Marx-Stadt, Dresden, Magdeburg and Neubrandenburg (Figure 1). Migrational movement between the southern districts takes place predominantly from west to east.

Internal migration in the G.D.R. occurs within the context of a slight population decrease. From 1968 to the end of 1976, the population decreased from 17.1 million to 16.8 million (a decline of 1.9 per cent). The birth rate deficit in this period amounted to about 240,000. Before 1968, the population growth was only slight. Actually, the number of persons in the economically active age group (women 15-60, men 15-65) has grown considerably since 1970, so that the severe shortage of labour has been lessened to a certain degree. In practice, however, there are no regions with a surplus of labour in the G.D.R. The male labour potential is more or less fully utilized, and the rate of female participation in the labour force amounts to 87 per cent at present (Weber, 1972). Under these conditions, a further temporary aggravation of the labour situation may occur in the regions which suffer heavy migrational losses.

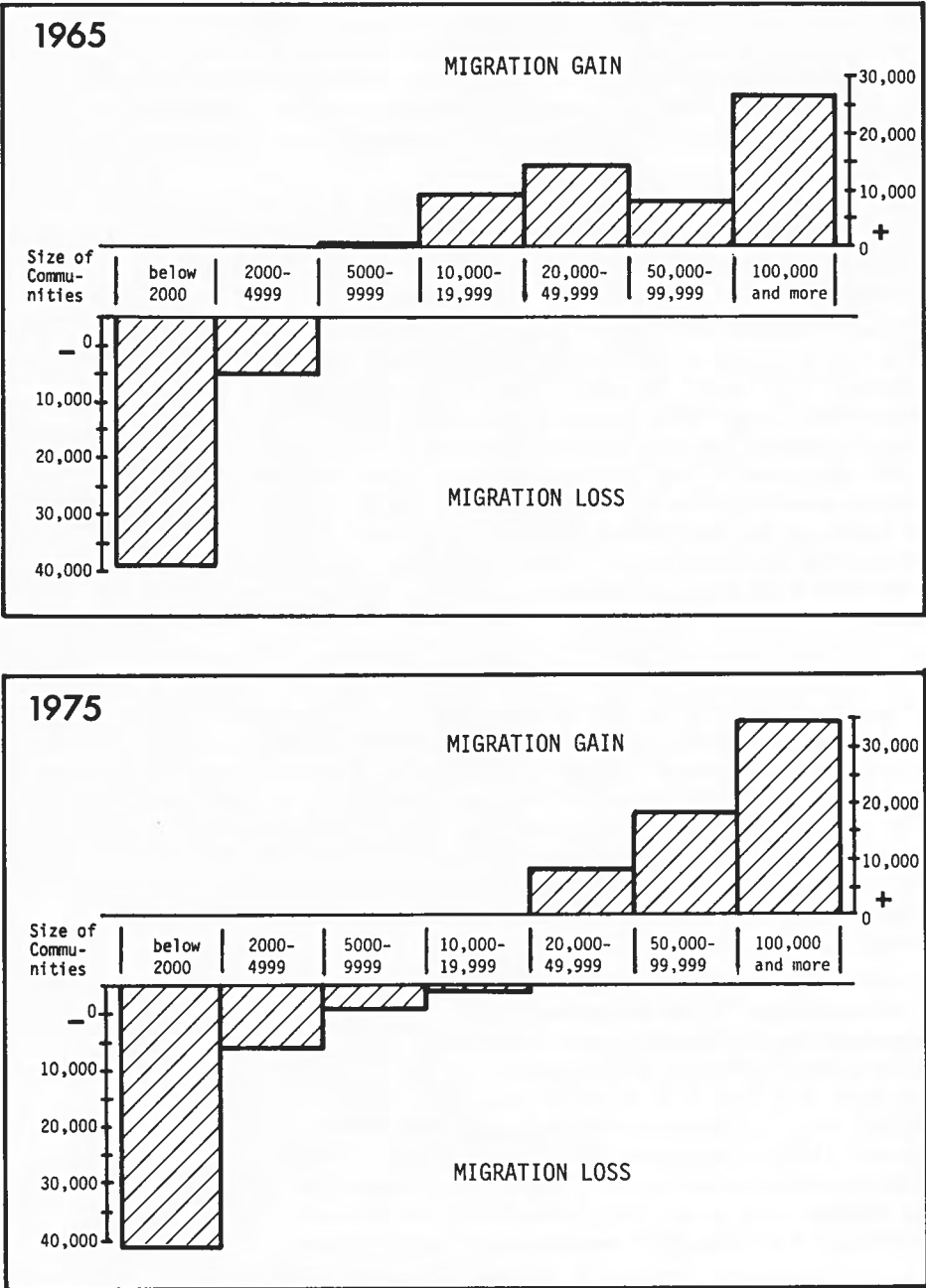
The Influence of Internal Migration on the Regional Development of the Population

Figure 1, which shows the migration streams between districts (*Bezirke*), gives only a rough sketch of internal migration in the G.D.R. The regional and local patterns of migration are essentially determined by the location and development of the means of production, and particularly by the construction of new housing. The latter has substantially increased in the 1970s: in 1971, 65,000, and in 1976, more than 100,000 new dwellings were erected. Housing construction is concentrated in urban areas (large and medium-sized cities and selected towns) which are the centres of socialist construction. This corresponds to the planning of the territorial division of labour in the G.D.R. and to the planning of the settlement system with the cities as the centres of social production and infrastructural facilities.

Internal migration graded according to the size of the communities reflects this process quite clearly (Figure 2). The large cities (100,000 inhabitants and more) have by far the greatest migrational gain; it amounted to over 140,000 persons from 1970 to 1975 and is still growing. This population growth of such magnitude has been primarily caused by migrational gains over many years (out of 14 cities with more than 100,000 inhabitants, Leipzig, Halle and Zwickau had a population loss in this period). Only Rostock — a seaport with 217,000 inhabitants (1976) — has experienced both a migrational gain from its agrarian hinterland and a sizeable natural population growth (5,000 persons between 1970 and 1975). In contrast, Berlin and the large cities in the highly industrialized and urbanized regions, including Leipzig, Dresden and Karl-Marx-Stadt, had considerable natural deficits.

Medium-sized cities (20,000 to 100,000 inhabitants) with important administrative (*Bezirksstädte*) and/or industrial functions also enjoyed migrational gains worthy of note,

FIGURE 2. NET MIGRATION BY COMMUNITY SIZE IN 1965 AND 1975



Source: Statistisches Jahrbuch der DDR 1967 and 1977

whereas communities with less than 2,000 inhabitants suffered the greatest migrational losses (more than 256,000 persons from 1970 to 1975). Moreover, Figure 2 shows that migrational gains are increasingly more confined to the larger communities. Until 1970, all communities with 5,000 and more inhabitants had migrational gains; since 1971, only those above 10,000; and since 1975, exclusively those above 20,000 inhabitants have experienced gains. The actual development is not exactly represented in Figure 2 insofar as some of the first-ranking targets of in-migration now have larger population and are in a higher population size category. The cities with the largest population growth from 1965 to 1970 are shown in Figure 3.

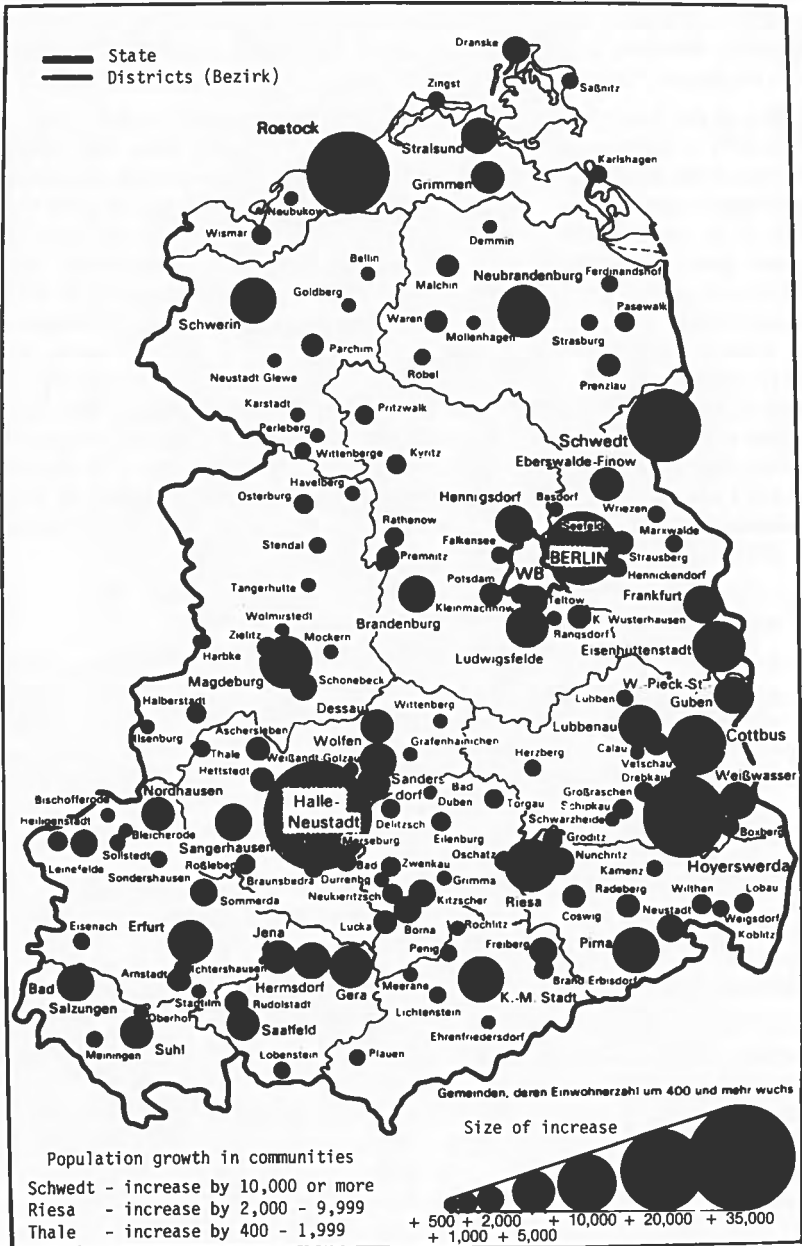
According to this author's estimates, one-fifth of the communities in the G.D.R. — a total of 8,868 in 1971 — had migrational gains; more than 20 per cent of these had gains exceeding 10 per cent, and the rest had smaller gains. On the other hand, four-fifths of all communities had migrational losses; of these, more than one-third had severe losses of more than 10 per cent. Most of the communities with net migrational gains are situated in the southern districts which have great agglomerations of industry and population. The migrants originate predominantly from populous residential areas within the community regions of the southern cities; many of these residential areas show very high migrational losses. The districts of Cottbus and Frankfurt — with their important industries (lignite mining, power generation, chemical production, metallurgy) — also contain some cities with an extensive in-migration. In the rest of the G.D.R., locations with net in-migration are scattered. Only in the Berlin metropolitan area are communities of this kind so numerous that they can be characterized as in-migration regions. Here we find some fast-growing industrial towns such as Hennigsdorf (steelworks), Ludwigsfelde (truck production) and Teltow (electrical equipment, electronics). A comprehensive study of internal migration in the G.D.R. from 1953 to 1972 was published by Bose (1975, 1976).

Selected Aspects of Internal Migration

Selected topics to be examined here include the motivation of internal migration, its effects on the distribution and structure of population and other problems. The following example is given to highlight the influence of migration on the structure of the population. In 1975, some 32 per cent of the migrants were 21 to 30 years of age; the percentage of this age group amounts to only 12 per cent of the entire population. The large proportion of young people in internal migration has been a dominant feature for a long time. Due to this pattern, the proportion of young population has increased in the places of in-migration (especially in large cities) while it tended to decline in the places affected by out-migration (especially rural communities). As a consequence, quite a few towns enjoy a much more favourable natural growth than do the vast majority of rural communities. Extreme cases are the cities of Halle-Neustadt, Schwedt and Neubrandenburg, which have a surplus of births over deaths of 10 to 14 per thousand (1975).

The following discussion is based on three special studies of migration. Andrea and Geyer (1969) propose a method of integrating migration into programmes of population forecasting. Their field of investigation is the district of Cottbus, which, in the 1960s, had a very strong in-migration from almost all other districts of the G.D.R.: in the period from 1962 to 1965, the migrational gains accounted for 92 per cent (1964) of the natural growth. According to the authors, net migration rates alone are not sufficient for a forecast of population development; certain migrational regularities can only be derived from an exact knowledge of the sex and especially the age of the migrants. To this end, so-called migration trees modelled on the well-known diagrammatical representations of the age-pyramid were introduced, and the following basic migration types were distinguished:

FIGURE 3. PRINCIPAL CENTRES OF GROWTH IN THE GERMAN DEMOCRATIC REPUBLIC, 1965-1970



Source: Bendemann und Roubitschek 1977, Fig. 1

1. Basic types of economically conditioned migration (Figure 4):
 - a. In-migration of workers
 - b. Labour self-sufficiency
 - c. Out-migration of workers
2. Special migration types (Figure 5):
 - a. Migration to restore the balance in the sex structure (following an earlier period of lopsided in-migration of men or women, respectively)
 - b. Migration conditioned by training and education
 - c. Migration complementing a preceding in-migration of workers (so-called parental-pull)
 - d. Migration especially characterized by the migration of old-age pensioners.

The actual migration type of a region results from the interaction between economically conditioned migration and combinations of special migration types. Its determination assumes an exact knowledge of the specific features of the territorial units in question, which the authors illustrate by means of several examples. Finally, a method is discussed concerning how to integrate net migration into a computational model for the forecast of population development.

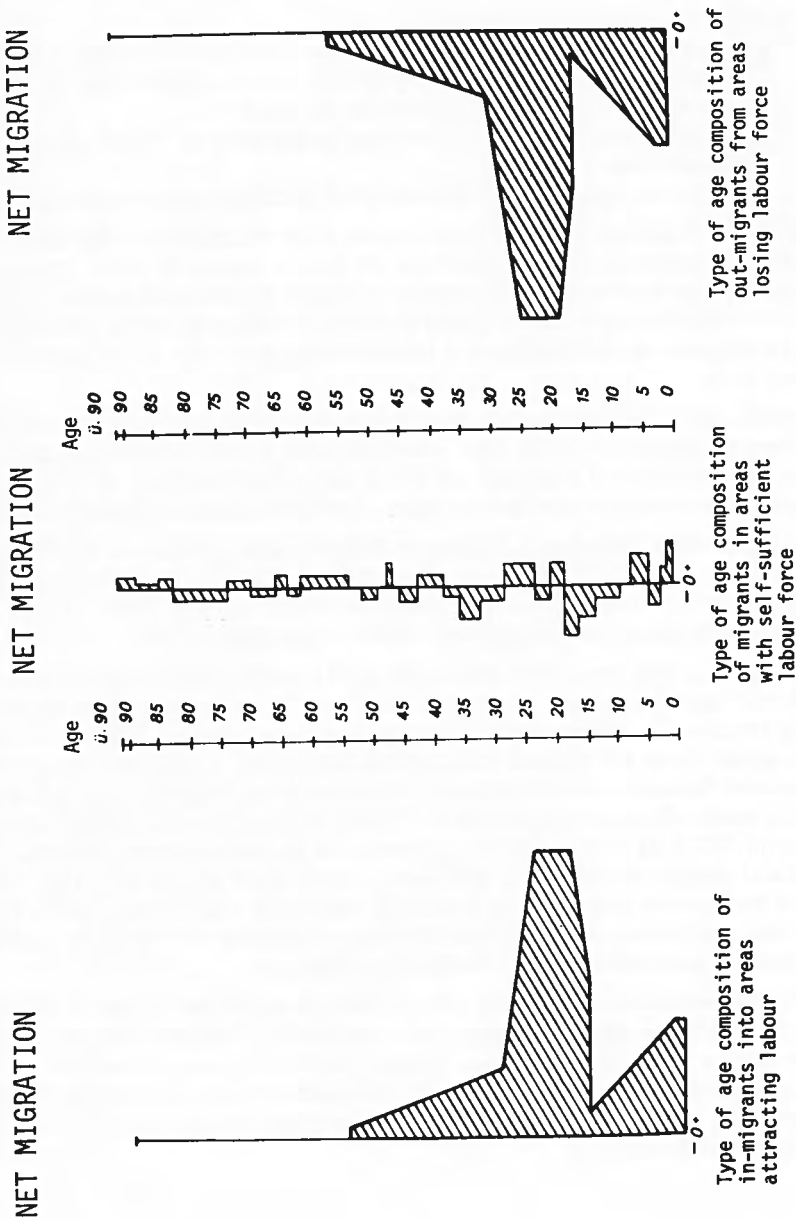
Another interesting investigation from the methodological point of view was published by Grünberg and Niemann (1977). They concentrated on (1) the structure and development of motivation complexes of migration and (2) the migrational behaviour of the population as a function of the social structure and the regionally differentiated working and living conditions.

For this purpose, more than 7,000 persons living in selected communities of up to 10,000 inhabitants in the district of Dresden were interviewed. Migration motivation was analysed according to the following motivational complexes: family reasons, better housing conditions, closer to work, higher income and better occupational opportunities.

Figure 6 (left side) shows that with regard to in-migration, the factors concerning housing and living conditions have become more and more important, whereas the influence of factors arising from family reasons has decreased in importance. Income, educational and professional opportunities and regional peculiarities in the number of job openings are of much less importance "because under the socialist conditions of production in the G.D.R. the basic rights to work, education and personal fulfillment are fundamental principles" (Grünberg and Niemann, 1977:115). With regard to the motivation for out-migration (Figure 6, right side), residential changes related to jobs and higher income are of greater importance than for the case of in-migration. The study dealt not only with actual migration but also with migration propensity. Depending on certain types of housing conditions, there exists an inverse relationship between potential and actual readiness for migration.

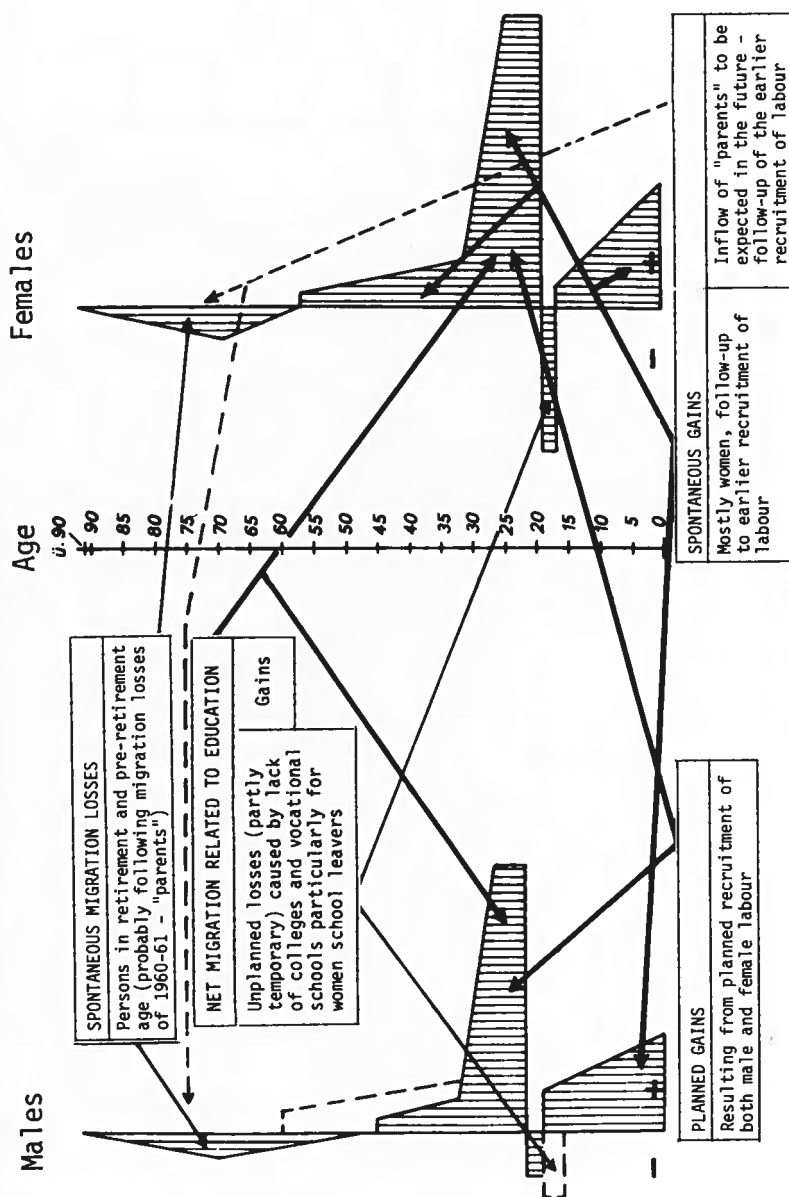
A third investigation by Thürmer (1975) will only be mentioned briefly. On the basis of data from 70 cities in the district of Potsdam, he used modern statistical methods to show the interdependence of migration balance, housing construction, intra-urban factors (including housing according to intensity of utilization, size and condition; natural population growth; job openings) and geographical location. He then offered methodological suggestions regarding migration forecasting.

FIGURE 4. TYPES OF ECONOMIC MIGRATION



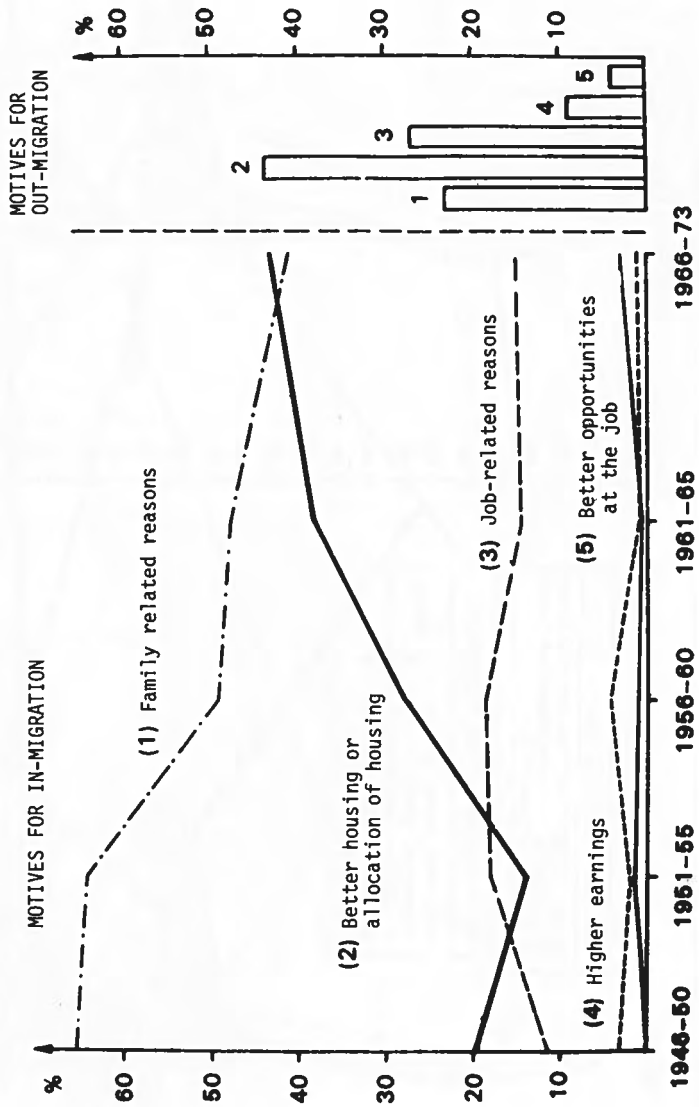
Source: Andrea and Geyer 1969, Fig. 5

FIGURE 5. COMBINED MIGRATION TREE



Source: Andrea and Geyer 1969, Fig. 4

FIGURE 6. CHANGES IN THE MOTIVES OF MIGRANTS ARRIVING IN SMALL COMMUNITIES (-10,000) DURING 1946-1973 AND OF POTENTIAL OUT-MIGRANTS FROM THE SAME COMMUNITIES AFTER 1973



Source: Grunberg and Niemann 1977, Fig. 1

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Received May, 1978; revised October, 1982.