

NOT FOR QUOTATION
WITHOUT PERMISSION
OF THE AUTHOR

MIGRATION AND SETTLEMENT IN THE
GERMAN DEMOCRATIC REPUBLIC

Gerhard Mohs

March 1979
WP-79-17

Working Papers are interim reports on work of the International Institute for Applied Systems Analysis and have received only limited review. Views or opinions expressed herein do not necessarily represent those of the Institute or of its National Member Organizations.

INTERNATIONAL INSTITUTE FOR APPLIED SYSTEMS ANALYSIS
A-2361 Laxenburg, Austria

G. Mohs is Deputy Director of the Institute for Geography and
Geoecology of the Academy of Sciences of the German Democratic
Republic.

PREFACE

To promote international scientific cooperation and to disseminate research results, the Migration and Settlement Task of the Human Settlements and Services Area at IIASA initiated a comparative analysis of patterns of interregional migration and spatial population growth in National Member Organization countries. To carry out the study, a network of national scholars was established, an integrated methodology for multiregional demographic analysis was developed and a package of computer programs to implement this methodology was written. The contributors were invited to prepare reports on migration and settlement in their respective countries. A common outline was provided and computer analysis was done by IIASA.

The emphasis of the study was on the demographic analysis and interpretation of components, patterns, and dynamics of multiregional population change, using a common methodology. To limit the scope of the project, it was not intended to perform an in-depth investigation of the socioeconomic variables and processes underlying the demographic changes.

The results of the various case studies were discussed at the conference on Multiregional Population Analysis: Techniques and Applications, held at IIASA in September 1978.

Professor Gerhard Mohs, of the Institute of Geography and Geoecology, Academy of Science of the German Democratic Republic, analyzes in this report the dynamics of multiregional population change in the German Democratic Republic. A system of five long-term economic planning regions constitutes the framework for the analysis. The author shows that the population distribution is closely related to the pattern of industrial development and the national manpower policy.

Frans Willekens
Leader
Migration and Settlement Task

ABSTRACT

This paper is part of IIASA's comparative study of migration and settlement patterns in its member nations. The study of migration and settlement in the German Democratic Republic is based on the data of 1975. The multi-regional demographic analysis of fertility, mortality, and internal migration, performed for a system of five long-term economic planning regions, reflects the behavior of the population in 1975 and the consequences of the multi-regional development of the GDR's population. The results give a detailed insight into current spatial population dynamics and are discussed with regard to the population distribution policy of the GDR.

ACKNOWLEDGEMENTS

This study on migration and settlement in the German Democratic Republic is based on the multiregional demographic models developed by Andrei Rogers, Chairman of the Human Settlements and Services Area at IIASA, and Frans Willekens, leader of the Migration and Settlement Task within this research area.

In particular, we are most grateful to Frans Willekens for his help in the field of demographic theory and methodology and for the interpretation of the mathematical approach.

The main data are taken from the Directorate of Statistics of the GDR. We are indebted to Brigitte Grossner and Hannelore Koch from the Institute of Geography and Geoecology of the Academy of Sciences for their assistance in the preparation of the data.

CONTENTS

I.	INTRODUCTION	1
II.	CURRENT PATTERNS OF SPATIAL POPULATION DEVELOPMENT	7
	II.1 Regional Disaggregation	9
	II.2 Components of Multiregional Demographic Development	11
	II.3 Age Group Structures and Regional Composition	25
III.	MULTIREGIONAL POPULATION ANALYSIS	28
	III.1 The Multiregional Life Table	28
	III.2 Multiregional Population Projection	32
	III.3 Fertility and Migration Analysis	34
IV.	POPULATION DISTRIBUTION POLICY	38
REFERENCES		41
APPENDICES		
Appendix I.	Model Migration Schedules	43
Appendix II.	Tables A1 to A11	46
A1	Observed Population Characteristics (1975)	46
A2	Observed Fertility Rates (1975)	51
A3	Observed Death Rates (1975)	51
A4	Observed Outmigration Rates (1975)	52
A5	Probabilities of Dying and Migrating	55
A6	Expected Number of Survivors at Exact Age x in Each Region	58
A7	Number of Years Lived in Each Region by A Unit Birth Cohort	61
A8	Expectations of Life by Place of Birth	64
A9	Expectations of Life by Place of Residence	67
A10	Survivorship Proportions	70
A11	Multiregional Population Projection	73
Appendix III.A	Demographic Data for the GDR, 15 Regions (1975)	79
Appendix III.B	Demographic Data for the GDR, 5 Regions (1975)	87
Appendix III.C	Aggregations from 15 Regions to 10 and 5 Regions	89

Migration and Settlement in the German Democratic Republic

I. INTRODUCTION

With 108,000 square kilometers and about 17 million inhabitants, the German Democratic Republic is a relatively small country. However, it is a highly industrialized country with an advanced agriculture and a high rate of urbanization. The situation of the present territorial structure and development is based on both the development under socialistic conditions during the postwar period and the historical conditions of the prewar capitalistic development.

From the 19th century onwards a sharp contrast has arisen in the development of the southern and the northern part of the country. The south has been moving towards a high level of industrialization while the north has been lagging behind, thus affecting population density and contributing to strong discrepancies in the development of settlements, infrastructure, and services in general.

One of the main goals of the planned territorial development under the postwar socialistic conditions has been to eliminate the antagonistic regional contrasts and, step by step, to overcome the regional differences in working and living conditions. The population distribution policy in the GDR and the development of migration and settlement in general have been determined to a high degree by these aims. The development of migration and settlement in the GDR is closely connected with the development of the territorial structure of the national economy. Therefore this study should not only be demographic in nature but also should emphasize the economic and geographic background of migration and settlement.

For the purposes of this study we will look at the 15 administrative districts (Bezirke) of the GDR; Berlin, the capital, being one of these districts. The southern part of the country

is characterized by the higher industrialized districts of Halle, Leipzig, Dresden, and Karl-Marx-Stadt (Figure 1).

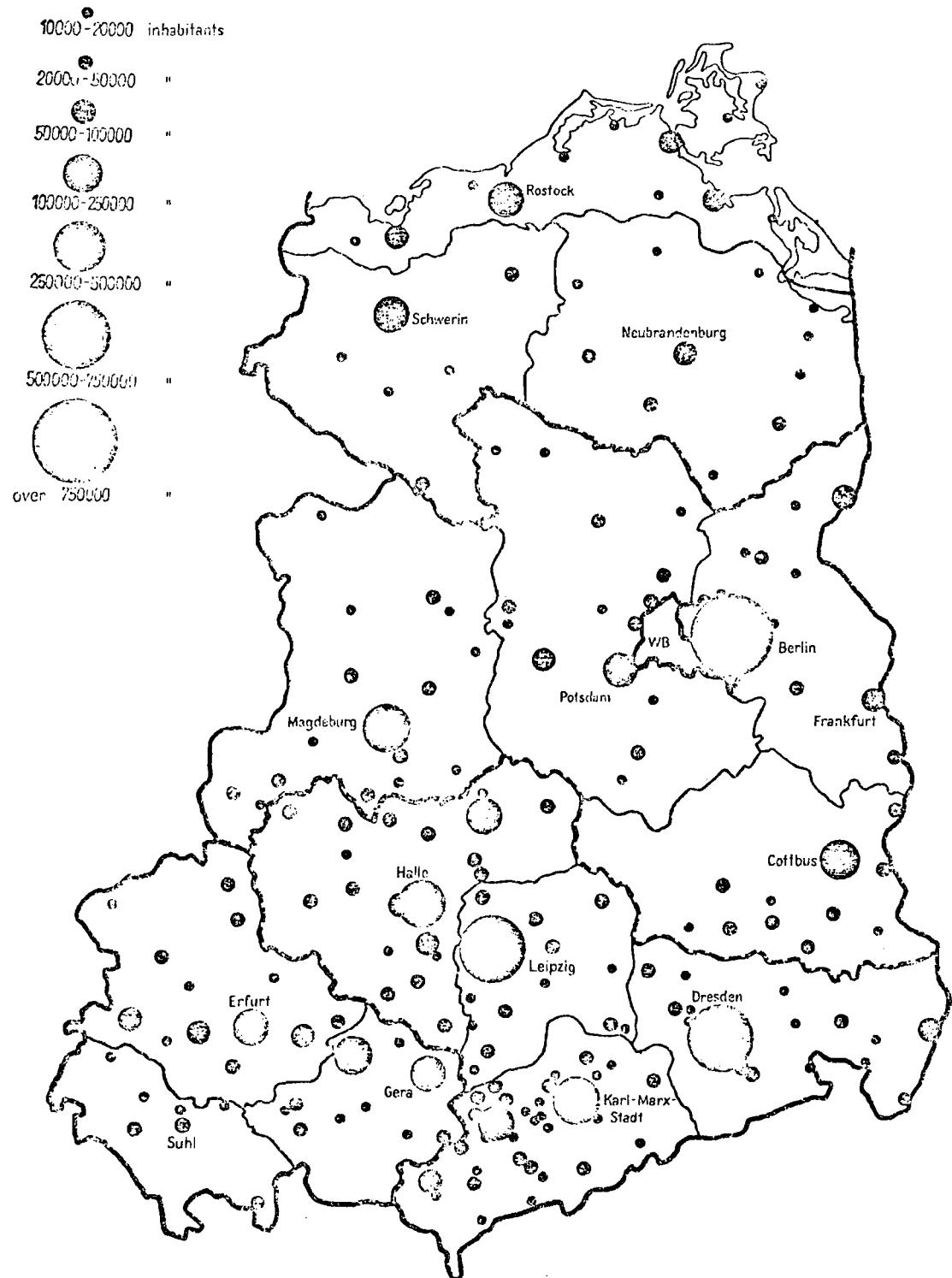


Figure 1. Groups of districts and towns of the GDR.

These areas qualify as "agglomeration areas" because of their maximum density of population, towns, infrastructure, and production forces. In this sense Berlin and its surroundings (especially some parts of the district of Frankfurt) are also considered an agglomeration. The districts of the northern part of the GDR are still more agricultural in structure, particularly Schwerin and Neubrandenburg. In the northernmost district of Rostock an important industrialization process was introduced in the fifties. One of the most changed districts is the Cottbus district which, based on its richness in brown coal, has become the first place of energy production in the last two decades. The districts of Magdeburg and Potsdam have developed industrial centers and a highly developed agriculture as well. Therefore, the economic basis of their territorial structure is mixed. The districts of Gera, Erfurt, and Suhl are also mixed economically.

Table 1 shows the ratio between persons employed in industry and agriculture during the last half century in the GDR. The prewar disparities have declined remarkably in the present districts of both the northern and the southern parts of the GDR. This change in the economic base has affected an evident development of the material and cultural living conditions, particularly in the regions of the northern part of the GDR that formerly were lagging behind.

In connection with the changing economic base of the districts, the regional population distribution has been modified particularly within the 1950s and 1960s. As shown in Figure 2, in the early sixties large flows of internal migration were directed to centers and regions of industrialization.

During the last two decades the general level of individual migration has been decreasing (Table 2) and the pattern of inter-regional migration has shifted toward local migration over shorter distances (Table 3). The reason for this phenomenon is very complex. Luedemann and Heinzmann (1978) note three main causes:

Table 1. Persons employed in industry and agriculture (percent).

District	1925		1939		1950		1956		1959	
	Ind.	Agric.								
Rostock	34.3	55.7	45.4	54.6	48.4	51.6	57.4	42.6	65.3	33.7
Schwerin	29.5	70.5	32.5	67.5	34.1	65.9	42.5	57.5	59.7	43.3
Neubrandenburg	29.7	70.3	33.4	66.3	24.7	75.3	31.4	68.6	51.2	48.8
<hr/>										
Halle	61.5	38.5	69.4	30.6	73.6	26.2	78.7	21.3	83.7	16.1
Leipzig	76.6	23.4	80.4	19.6	78.9	21.2	80.9	19.1	85.1	14.9
Karl-Marx-Stadt	86.3	13.7	86.4	14.0	85.7	14.3	88.3	11.7	91.2	8.8
<hr/>										
GDR	65.5	34.5	69.9	30.1	68.6	31.4	74.3	25.7	71.2	18.8

Source: Luedemann and Heinzmann (1978)

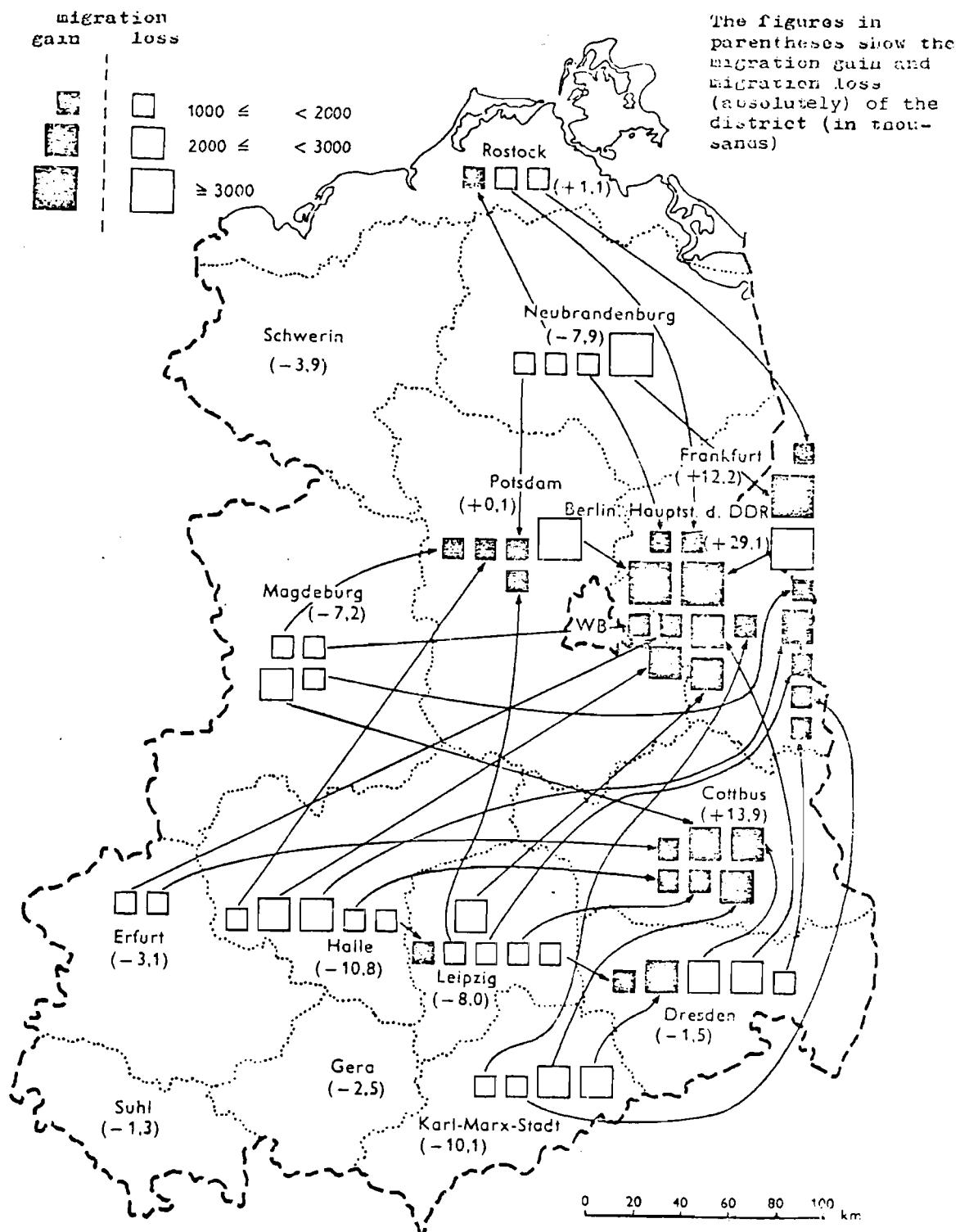


Figure 2. Migration gain and migration loss between the districts of the GDR (1963-1965).

Source: Weber (1970)

Table 2. Internal migration across county boundaries (per thousand people).

1955	43.0	1970	15.9
1960	36.1	1975	16.5
1965	29.3		

Source: Statistisches Jahrbuch der DDR (1976)

Table 3. The distribution of interregional migration by category of region.

Year	Districts	Counties	Communities	Total
1963	41.0	30.0	29.0	100.0
1964	40.4	30.1	29.5	100.0
1965	40.6	30.6	28.8	100.0
1966	38.1	30.4	31.5	100.0
1967	36.0	30.7	33.3	100.0
1968	34.0	30.3	35.7	100.0
1969	34.9	32.6	32.5	100.0
1970	34.6	32.9	32.5	100.0
1971	34.7	33.6	31.8	100.0
1972	34.4	34.6	31.0	100.0
1973	33.7	34.4	32.0	100.0

Source: Bose (1975), Neumann (1978)

1. During the 1950s and 1960s a large number of industrial plants were established in former agrarian regions, causing an intensification and rationalization of industry.
2. Since the end of the 1960s the transition to industry-like production methods in agriculture has achieved a high level. With such changes as the expanding cooperations among cooperative farms, the establishment of large production units for

animal husbandry, and large service and repair centers, there has been a notable decrease in the number of persons employed in agriculture, which in turn has caused a trend towards concentration in the rural settlement network.

3. The overcoming of regional disparities in the material and living conditions of the people negatively affects internal migration and, to a certain degree, causes a stabilization of the settlement system.

In this way the internal migration and settlement patterns in the GDR have been highly dependent on the evolutionary process of the development of the regional structure, although the migration of people is determined both by objective factors and by the subjective behavior of the people.

II. CURRENT PATTERNS OF SPATIAL POPULATION DEVELOPMENT

In order to analyze the current patterns of the spatial population development in the GDR according to the observed population characteristics in 1975 (see Table A1), it is necessary to take into consideration several preconditions.

First, it is important that one understand the tendencies of the population development in the GDR during the last decades. The actual age structure of the population and their founding conditions must be considered. According to the influence of two wars and a temporary relatively high outmigration rate in the first years after World War II, the age structure of the GDR population has been strongly deformed. The population pyramid (Figure 3) on the one hand, shows an abnormally high percentage of old-age pensioners, and on the other hand, a relatively small portion of population in working age groups. Connected with the high level of industrialization, the present population structure has led to a permanent shortage of manpower in general, and in more or less all the regions of the GDR.

Second, the data used for this study are taken from 1975. This year marked the mid-point between the census of 1971 and of

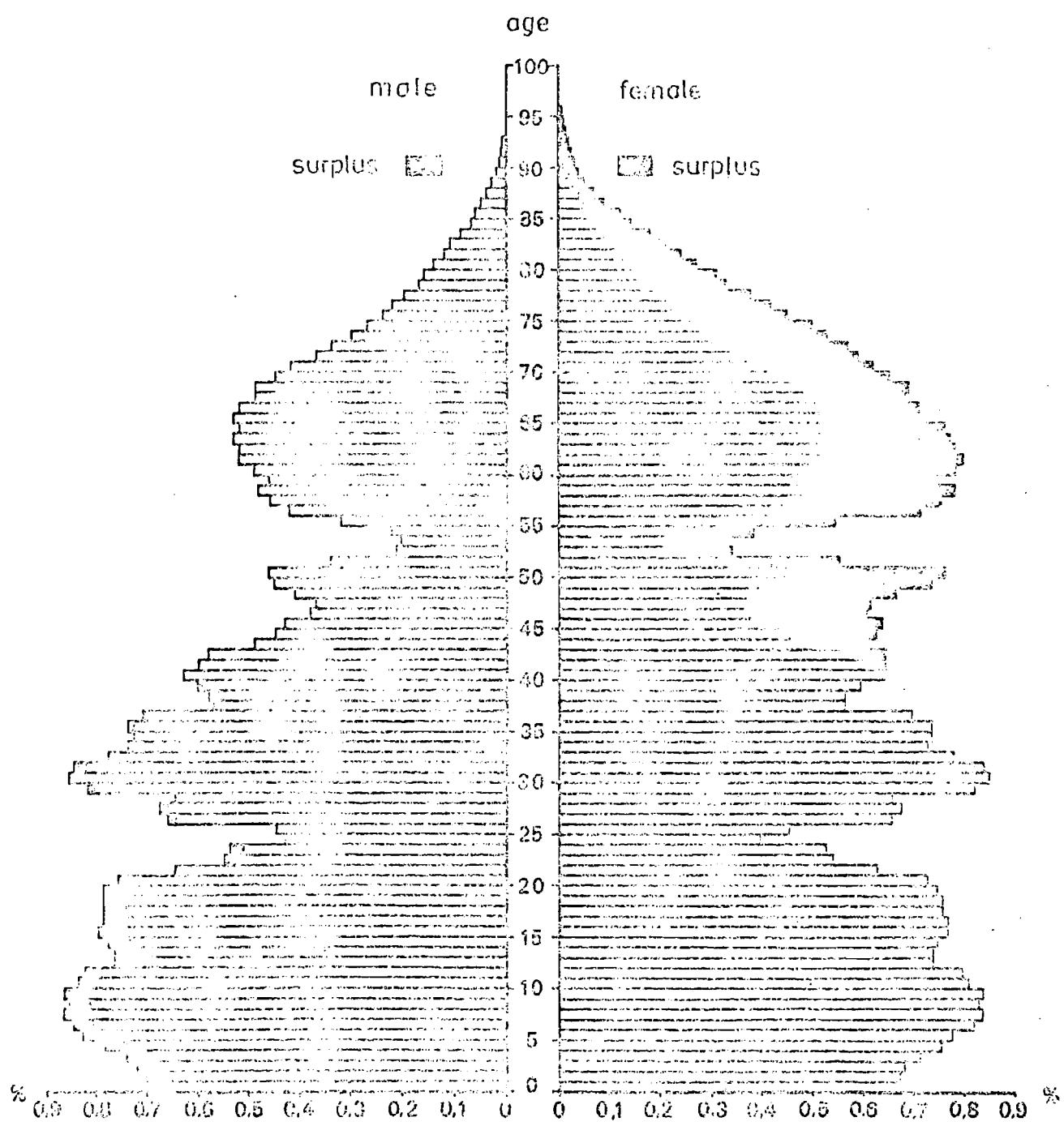


Figure 3. Age-structure of the population of the GDR (1971, percent).

1980/81. The data were given by the Directorate of Statistics of the GDR, the central bureau of statistics of the government.

In 1952 the government of the GDR decided to create a new administrative territorial scheme. From the previous historic 5 Länder, 15 districts (Bezirke) have been delineated, including Berlin as the capital of the GDR. The hierarchical system consists of the districts (Bezirke), counties (Kreise), and communities (Gemeinden). In 1975 there were 219 counties and 7634 communities. According to the structure of the state and its hierarchically administrative territorial system, the original data of births, deaths, and migrations are collected in the communities and aggregated yearly within the counties and districts (by the Regional Statistical Offices being presented in each of them) and in the country as a whole. In this way there is a continuing adjustment of statistical data. The main figures are published annually in the Statistisches Jahrbuch (Statistical Yearbook) of the GDR containing the data in general for the country and in some cases for the districts also. The required age-specific data for each district are mainly taken from the original aggregations by the Directorate of Statistics, because these are specified in the Statistical Yearbook.

II.1 Regional Disaggregation

In a socialist planned economy, the administratively defined regions from a geographical point of view are both economically and socially based: they are regional units within which the members of the society both live and work. On every level, based on regional management and planning, the development of economic and social processes is determined according to the society's goals. But an administrative territorial structure is a relatively stable one, whereas economic and social processes are dynamic. Therefore investigations of regional dynamics and development are of great importance with respect to the changing character of a country and its regions. Because of this, the dynamics of migration and settlement is one of the most important aspects in the analysis of tendencies and laws, which determine

the regional development as a whole. For this analysis, one must look at the optimal basic regional patterns and the scope of the study. Whereas regional planning at the county level depends on the basic patterns of communities, central territorial planning requires information of the basic patterns in districts or counties.

For long-term planning the State Planning Commission uses a pattern of five regions which includes:

1. Berlin, capital of the GDR
2. The North region including the districts of
Rostock
Schwerin
Neubrandenburg
3. The Middle region including the districts of
Magdeburg
Potsdam
Frankfurt
Cottbus
4. The South region including the districts of
Halle
Leipzig
Dresden
Karl-Marx-Stadt
5. The South-west region including the districts of
Erfurt
Gera
Suhl

This study originally was planned to compute the given data according to the 15 districts of the GDR. Because of computer memory space limitations, the number of regions was reduced to 10:

- 1) Berlin, capital of the GDR, 2) the Rostock district, 3) the Schwerin and Neubrandenburg districts, 4) the Magdeburg and Potsdam districts, 5) the Frankfurt district, 6) the Cottbus district, 7) the Halle and Leipzig districts, 8) the Dresden district, 9) the Karl-Marx-Stadt district, and 10) the Erfurt, Gera, and Suhl districts.

The 10 regions were then aggregated into the five planning regions. Computer analysis was done for the ten and the five-region system. Only the results for the latter system are discussed in this study. The results of computer analysis on the 10 regional units are used to assess more exactly and intensively the developing trends within the five long-term planning regions.

In 1975, the basic year of our study, the total population of the GDR was about 16,820,000. Compared with the preceding year there was a decline of the total population by roughly 70,000. After being relatively stationary with a growth rate of nearly zero during the 1960s, the population of the GDR has decreased since the early 1970s. The main reason has been the decline in the fertility rate, brought about partly by the changing age structure of the population.

Currently, the population decline is being reversed. In 1977 the population growth was positive due to a growing fertility rate. This is a result of several new benefits and facilities given by the government, particularly to mothers with more than one child, which are part of some new aspects of the current population policy of the GDR (see Section IV).

In the next section we will describe some aspects of regional differences in the observed patterns of the components of multiregional demographic growth. The comparison of the regional disaggregation given in Table 4 and in Figure 4 shows significant regional differences not only in the total number of people and the density of population in the districts and the five regions (groups of districts), but also in the population growth rates due to differing fertility, mortality, and migration rates.

II.2 Components of Multiregional Demographic Development

Fertility

The reproduction of the population of the country as a whole and its regions is determined to a high degree by the ratio of birth and death, when leaving migration out of consideration.

Table 4. Groups of districts and districts of the GDR.

Districts Groups of districts	Area km ²	%	Total population (1000 inhabitants) and % 1955 (%)	1965 (%)	1975 (%)
BERLIN	403	0.4	1139.9	6.4	1077.2
Cottbus	3262	7.6	799.0	4.5	838.9
Frankfurt	7186	4.1	666.3	3.7	660.1
Magdeburg	11525	10.7	1445.5	8.1	1323.0
Totzdorf	12572	11.6	1208.9	6.8	1127.0
MIDDLE	39545	36.5	4119.7	23.1	3949.0
Rostock	7074	6.5	845.6	4.7	842.4
Westbrandenburg	10792	10.6	686.7	3.8	633.0
Schwerin	3672	8.0	651.3	3.7	594.5
NORTH	26536	25.1	2133.6	12.2	2069.9
Halle	8771	8.1	2055.3	11.5	1931.2
Leipzig	4966	4.6	1582.2	8.9	1510.6
Karl-Marx-Stadt	6009	5.6	2218.0	12.4	2082.1
Dresden	6738	6.2	1941.3	10.9	1887.2
SOUTH	26434	24.5	7796.8	43.7	7410.5
Erfurt	7349	6.8	1302.9	7.3	1249.0
Gera	4004	3.7	740.7	4.2	734.9
Suhl	3856	3.1	548.6	3.1	549.1
SOUTH-EAST	15205	13.6	2592.2	14.6	2533.0
GDR	108179	100.	17832.2	100.	17039.6
					100.
					16820.6

Source: Statistisches Jahrbuch der DDR (1976)

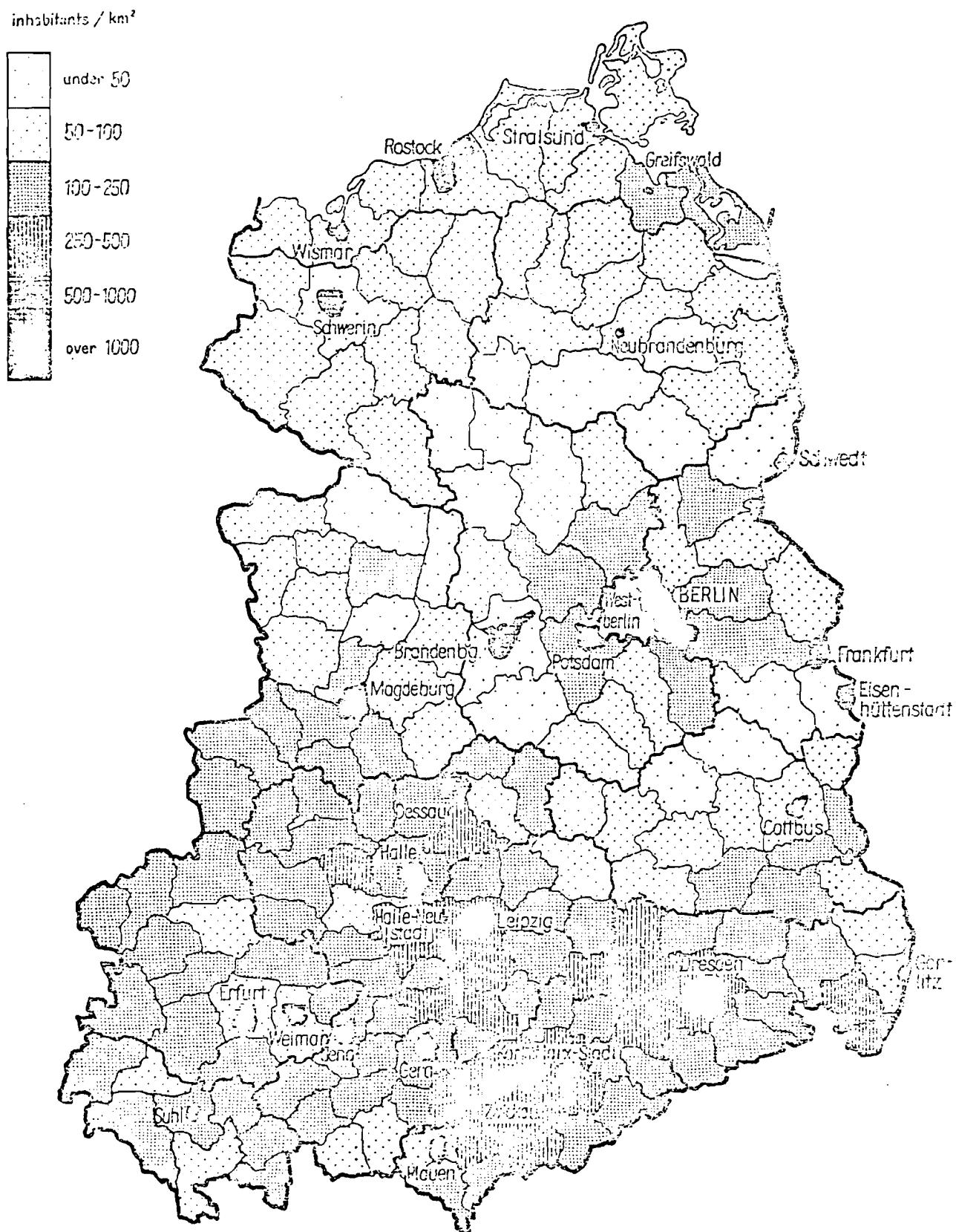


Figure 4. Density of population of the GDR.

Therefore the prediction of the population growth in many countries including the GDR, is based mainly on the estimation of the development of the fertility index, or the fertility rate respectively.

During the past two decades the number of births has strongly decreased, whereas the number of deaths has increased (Table 5). This development greatly depends on the age structure.

Table 5. Number of births and deaths in the GDR.

Year	Births	Deaths
1950	303,866	219,582
1955	293,280	214,066
1960	292,985	233,759
1965	281,058	230,254
1970	236,929	240,821
1975	181,788	240,389
1976	195,483	233,733
1977	233,157	225,239

Source: Statistisches Jahrbuch der DDR (1978)

As shown in Figure 5, the birth rates differ considerably in the various age groups. They reflect a certain behavior of the population, influenced by economic conditions, social conditions, and ethical norms. For instance, there is a close connection between the decline of the birth rate and the legalization of abortion in 1972 and a broad marketing of contraceptives. This has given the women of the GDR the possibility to decide themselves whether to have children or not and is today an important means of family planning.

Since 1976 the birth rate and with that the total number of births have greatly increased. This marks a new behavior,

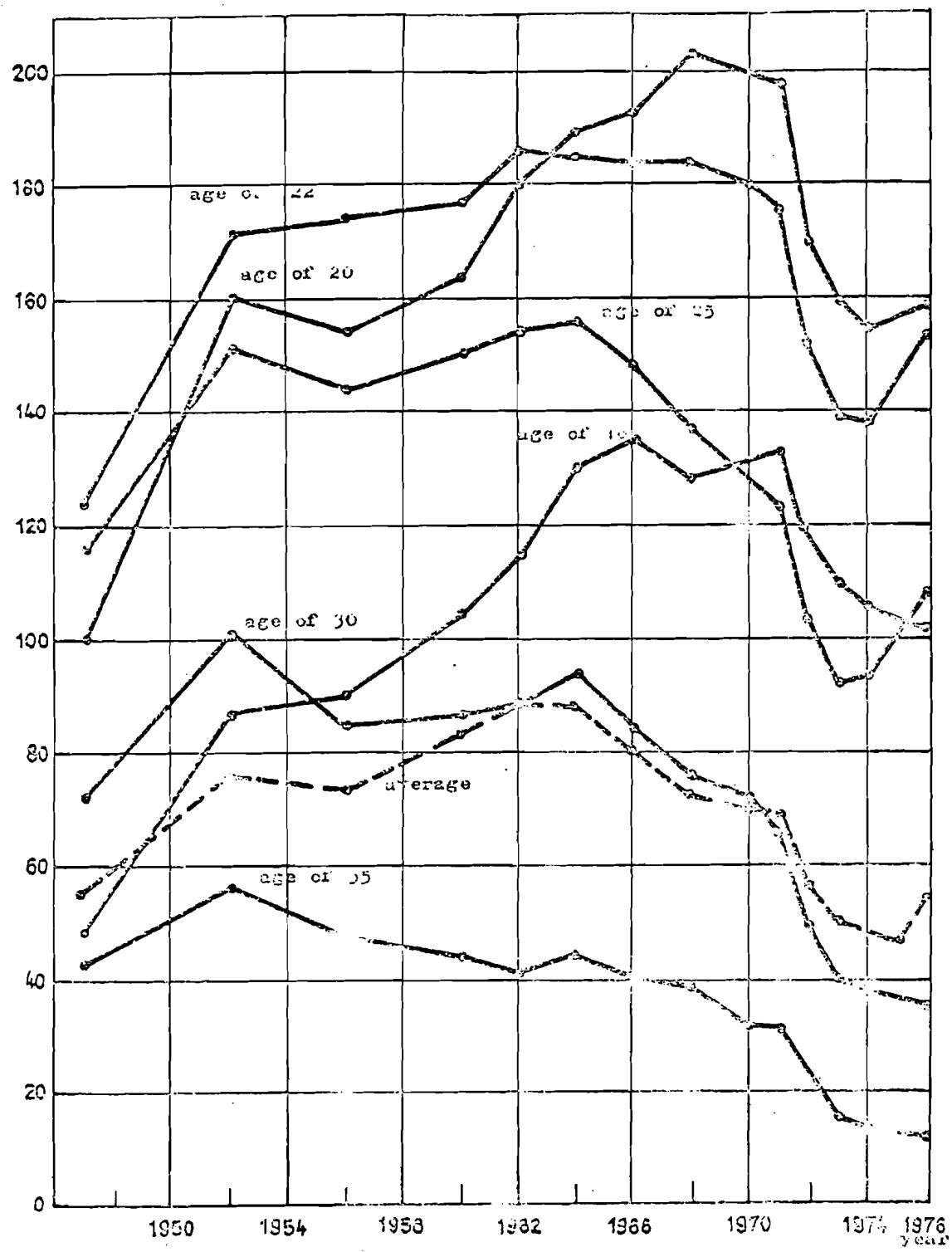


Figure 5. Births per 1000 females in a determined age.

Source: Stempell, D. (1977)

particularly with respect to younger women (age 20-25), stimulated above all by new measures in the field of social policy. The regional differences in fertility are shown by the observed fertility rates of the five regions in 1975 in Tables A1 and A2. From these, two observations may be made.

First, the mean age of childbearing lies between the age of 20.5 in the North and Middle regions and 29.6 in Berlin, followed by the South-west regions (29.2) and the South region (29.2). Similarly the crude rate has the highest level in the North region with 0.0125. The other four regions have crude rates of 0.010 to 0.011. This is an expression of the prevailing differences between the more agrarian region in the north and the more industrialized regions, particularly in the south.

Secondly, considering the districts within the regions, the crude rate is distinctly higher in the Cottbus and Frankfurt districts (0.012) than in the Potsdam and Magdeburg districts (0.010) of the Middle region. The reason for this is the increased immigration of young people in the previous two decades, due to an above-average economic development in these districts. This has also influenced the age structure considerably.

Mortality

Even more than fertility, mortality is determined by the age structure of the population. However, also age-specific mortality and life expectancy have changed in the GDR in the previous decades. Above all, the life expectancy of the 0-1 year age group has increased from 68-74 years during the period 1953-1975 for the female population, and from 65-69 years for the male. Altogether the mortality level of the GDR was 71.74 years of age in 1975. This increase in life expectancy is connected with a considerable decline of infant mortality and with an improvement of the living conditions in general.

The regional differences in the mortality levels are relatively insignificant in relation to the mean death age in the five regions (Table A3). There are differences only between

69.67 and 69.95 years. The crude rates are more diverse. The highest rates are found in the regions of Berlin and the South (0.015), the lowest one in the North region. Obviously, this is again connected with the different economic and social structures.

Migration

When describing internal migration in the GDR two main aspects have to be considered: the age patterns of the migrants and the regional patterns of migration. The given observed rates of migration in Tables A1 and A4 allow us to consider both aspects.

We agree with F. Willekens (1978) that migration is a phenomenon that links regions together to form an interdependent system. However, this statement is true only within certain conditions. As shown by the historical review, migration in the GDR has strongly declined in the last two decades, although during this time economic development and urbanization increased considerably in all districts and counties (Table 6).

Nevertheless, in many cases the migration flows reflect different developments of the regions with regard to time and space. Between 1953 and 1972 the balance of migration shows that characteristic trends of migration flows have been maintained through the decades (Figure 6). In this case the Schwerin and Neubrandenburg districts within the North region had a continuous migration loss. However, the highly industrialized districts of Karl-Marx-Stadt and Halle in the South region as well as the district of Magdeburg in the Middle region have also had a migration loss. On the other hand, the migration balance has been positive in the Potsdam, Frankfurt, and Cottbus districts in the Middle region and also in Rostock, the only district of the north. The highest migration gain was observed in Berlin. The increase of population of Berlin will be continued in the future by means of a planned inmigration.

Table 6. Degree of urbanization (percentage of inhabitants living in communities with more than 2000 people).

Region	Degree of urbanization			Development	
	1965	1970	1975	1965/70	1970/75
North	61.0	63.1	66.3	+ 2.1	+ 3.2
Middle	67.5	68.4	71.2	+ 0.9	+ 2.8
S-West	65.7	66.6	67.5	+ 0.9	+ 0.9
South	78.4	78.4	79.5	± 0	+ 1.1
GDR (without Berlin)	73.0	73.8	75.3	+ 0.8	+ 1.5
					+ 2.0

Source: Statistisches Jahrbuch der DDR (1976)

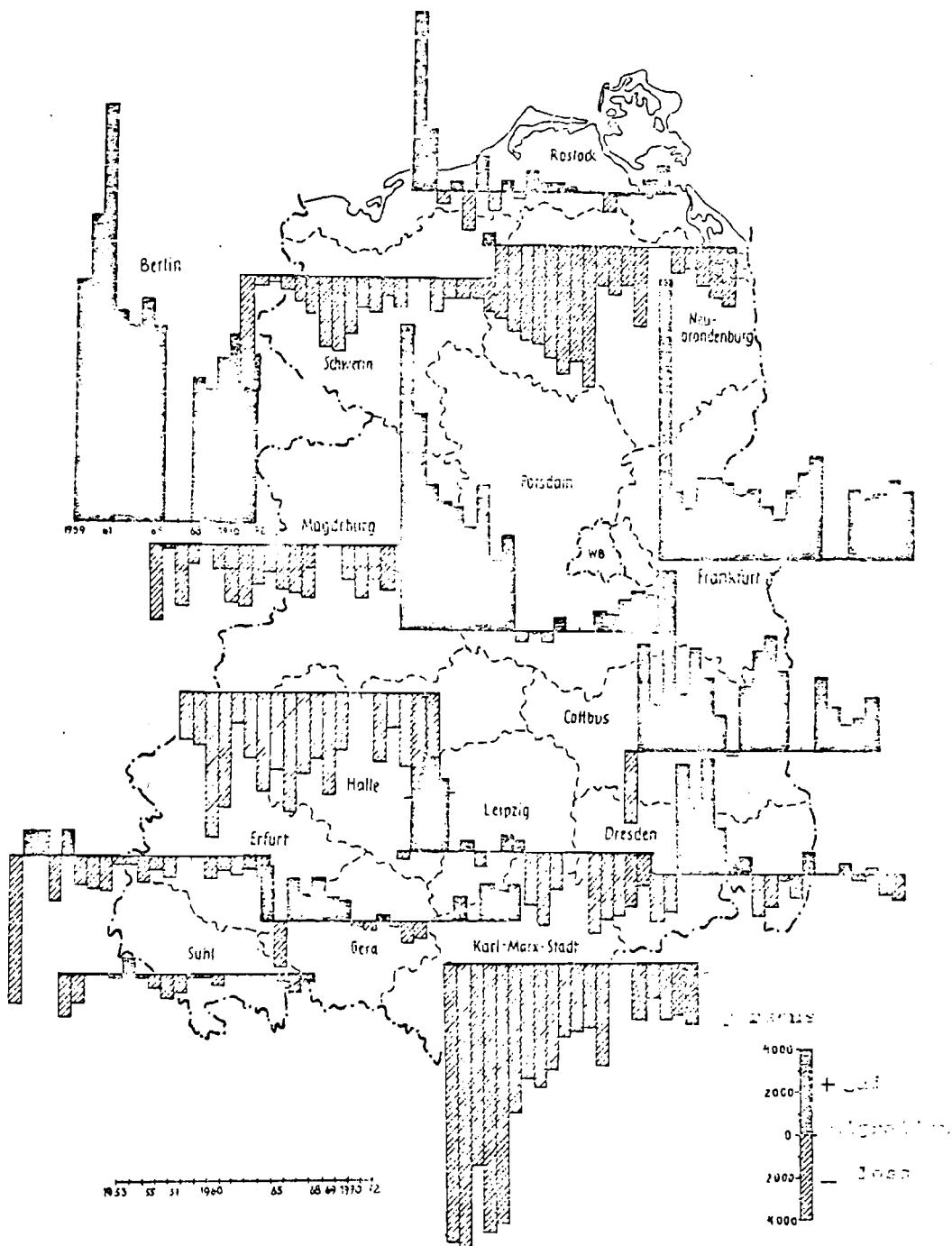


Figure 6. Development of migration between the districts of the GDR (all persons) during the period 1953-1972 (during the period 1953-1958 without migration to Berlin).

Source: Bose (1975), appendix

With regard to the observed rates of the five long-term planning regions, the pattern of migration is reduced to a simple scheme: in 1975 only the Berlin region and the Middle region have a migration gain; the other regions have a negative balance.

In fact the real migration flows are very different, because the motives for the outmigration or inmigration of people from or to towns and villages are very different. As shown in Figure 7, there were considerable flows of inmigration to the town Dresden in 1971; on the other hand, in the same year the town Leipzig had a relatively strong outmigration. Both towns are nearly the same size (Dresden has about 510,000 inhabitants and Leipzig about 580,000). The reasons for these differences are not within the realm of this paper since they include special economic and social problems, investments in industry, development of infrastructure, housing problems, and, to a certain degree, problems of environment protection.

A new geographical interpretation of the internal migration in the GDR by Neumann (1978) shows that at present there are in the GDR about 60 dominate centers (towns) which attract the main flows of migration. These centers are linked with hinterlands from which these immigrants generally come. Of course, towns like Berlin, Dresden, or Rostock have immigrants from the whole of the GDR. Altogether, however, these investigations allow one to see the fundamental regional patterns of migration in the GDR (Figure 8). Also Table 7 shows that the larger towns are the concentration points of migration.

The age structure of the migrants in the GDR is comparable to other countries (Drewe 1978, Bies and Tekse 1978, or Philipov 1978). Figure 9 shows the average value of the GDR in 1974.

The analysis of the observed outmigration rates shows differences between the five regions with regard to the crude rates (Table A4). These differences reflect the relatively strong outmigration rates from the North region, and also the above average outmigration rates of the Middle region and Berlin

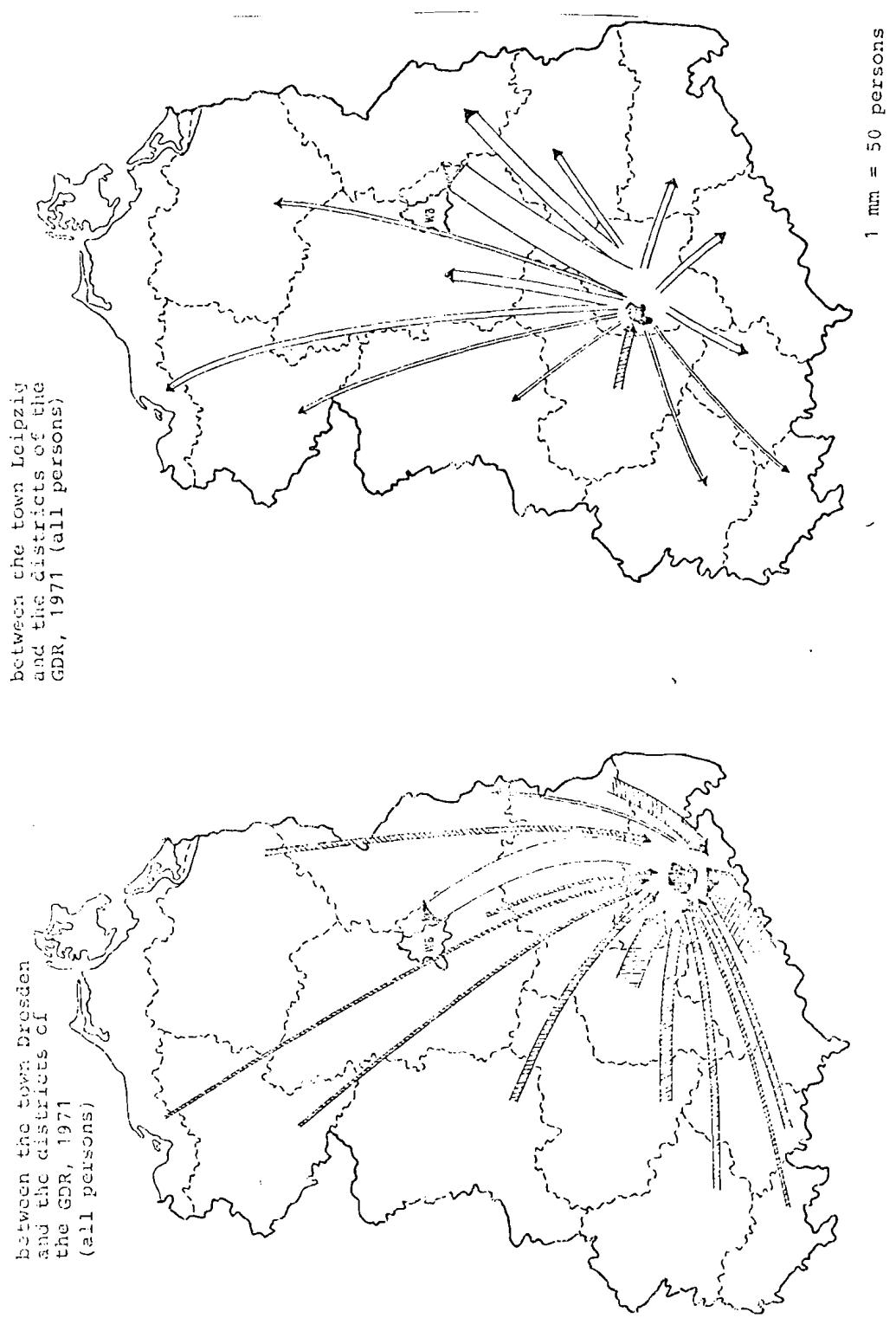


Figure 7. Aggregated flows of migration.

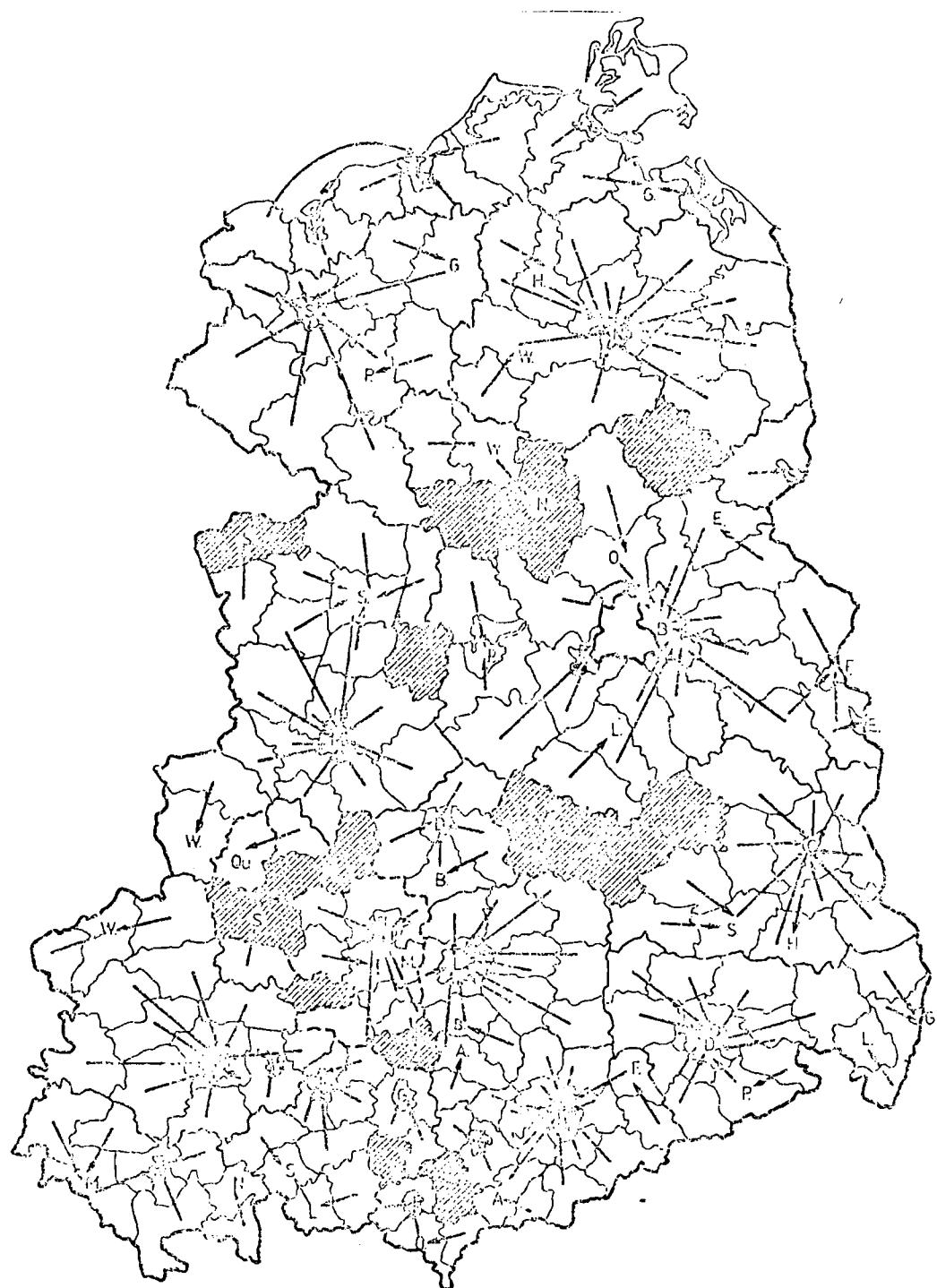


Figure 8. Dominant centers and areas of internal migration.

Source: Neumann (1978)

Table 7. Net immigration rates per thousand of population, according to size of communities.

Size of communities (Inhabitants)	1968	1970	1972	1974
less than 2 000	- 5.1	- 8.1	- 9.8	- 10.6
2 000 to 5 000	- 1.7	- 2.2	- 4.6	- 5.9
5 000 to 10 000	+ 5.3	+ 1.2	- 2.3	- 2.9
10 000 to 20 000	- 0.6	+ 1.7	+ 1.7	+ 0.6
20 000 to 50 000	+ 3.3	+ 5.8	+ 4.8	+ 3.1
50 000 to 100 000	+ 2.0	+ 7.8	+ 17.2	+ 17.7
more than 100 000	+ 2.4	+ 3.7	+ 5.7	+ 7.8

Note: calculated from data of the Directorate of Statistics of the GDR.

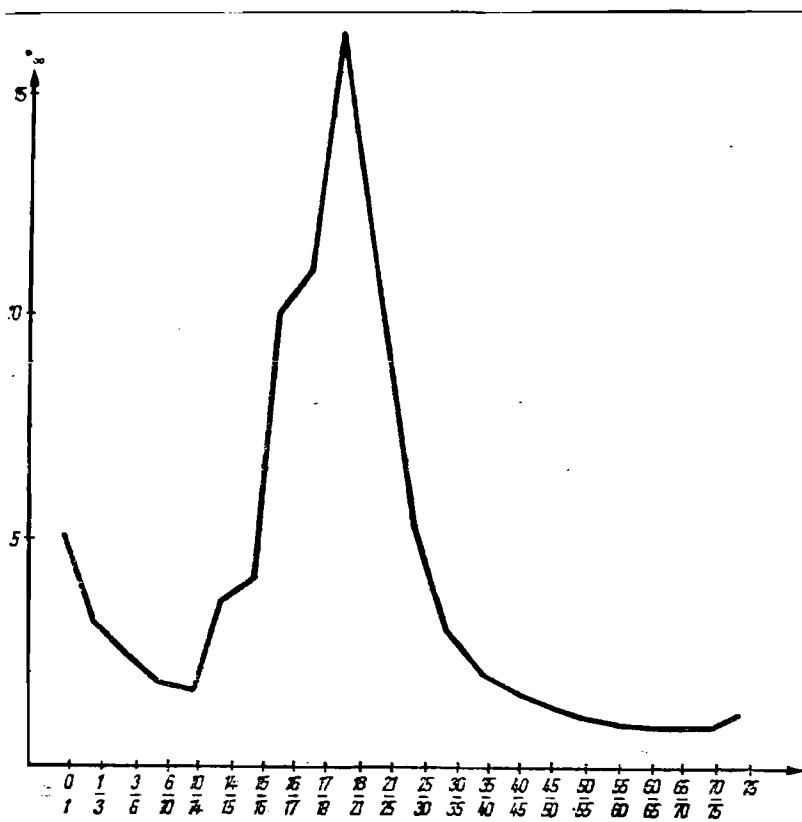


Figure 9. Average age of migrants of the GDR (1974).

Source: Boenisch/Mohs/Ostwald (1976)

(Table 8). However, as already shown, these regions have a surplus of immigrants and therefore a positive balance. The mean

Table 8. Crude rates of outmigration and mean age of migrants, five regions (1975).

Region	Crude rate of outmigration	Mean age of migrants
South-west	0.0053	25.29
South	0.0049	24.87
North	0.0076	25.59
Berlin	0.0066	26.15
Middle	0.0070	25.53

age of the migrants in the five regions is similar except for a slightly above average age for outmigrants from Berlin and a slightly below average age for outmigrants from the South region.

A comparison of the age specific migration rates among the regions indicates that the age profile is similar in all cases (Table A4). The active migration age group is the 20-29 year old migrants. The migration in this age group is connected to a high degree with the choice of occupations or jobs at places that offer good long-term perspectives. Often these migrants are married and have children. Therefore, the migration rate of the 0-5 year age group is relatively high. The 15-20 year age group also has a rather high migration rate because vocational training is often offered at places other than the place of residence.

II.3 Age Group Structures and Regional Composition

The formation of the age group structure used in this study differs from that which is used by the official statistics of the GDR. In the Statistical Yearbook of the GDR the age groups are distinguished:

0-1, 1-3, 3-6, 6-10, 10-15, 15-18, 18-21, 21-25 years,
followed by the five-year age groups 25-30, 30-35, and so on.

This formation is important for the national economy. Today in the GDR a great proportion of preschool-age children are going to crèches (at the age of 0-3) or kindergartens (at the age of 3-6). Obligatory education in the general polytechnical school consists of the 6-15 year age group. Between 16 and 18 years of age, a child is eligible for vocational training, and within the 18-21 age group, about 25 percent of all children attend colleges and universities.

The formation of the age group structure for an economic analysis is still more distinctly classified:

Pre-labor force ages - 0-15 years

Labor force ages - 15-60 years (female) or
15-65 years (male)

Post-labor force ages - more than 60 or 65 years

The importance of the national economy is particularly significant when the development of the proportions of these age groups is considered for the whole country (Table 9).

Table 9. The age structure of the residential population of the GDR (percent).

	Pre-labor force ages	Labor force ages	Post-labor force ages
1939	21.4	67.5	11.1
1950	20.1	64.1	16.0
1960	21.0	61.3	17.6
1970	22.6	57.9	19.5
1975	20.6	59.7	19.6
1977	19.7	61.4	18.9

Source: Statistisches Jahrbuch der DDR (1978)

The figures show a definite decline in the percentage of the labor force between 1950 and 1975. Simultaneously, the proportion of the post-labor force ages has increased. In 1977

one can see that there is a change in this tendency, thus influencing the development of the age structure until the mid-1980s. During this time the proportion of the labor force will increase. However, in the following years, another decline is expected.

With respect to the analogous figures of the districts, the comparison between the age groups shows significant differences (Table 10). It is evident that the labor force population in

Table 10. The age structure of the residential population in the GDR in 1975 according to districts (percent).

Region/district	Pre-labor force	Labor force	Post-labor force
Berlin	20.6	59.9	19.5
Middle:			
Frankfurt	22.5	60.3	17.2
Potsdam	21.3	59.9	18.8
Magdeburg	20.9	59.8	19.3
Cottbus	22.3	60.1	17.7
North:			
Rostock	23.5	61.1	15.5
Schwerin	22.6	59.8	17.6
Neubrandenburg	23.1	60.3	16.6
South:			
Halle	20.4	60.5	19.1
Leipzig	19.4	59.1	21.5
Dresden	19.7	58.0	22.3
Karl-Marx-Stadt	17.8	59.0	23.1
South-west:			
Gera	20.5	60.0	19.6
Erfurt	21.3	60.3	18.5
Suhl	20.4	60.7	19.0
GDR	20.6	59.7	19.6

Source: Statistisches Jahrbuch der DDR (1976)

the districts of Dresden, Karl-Marx-Stadt, and Leipzig is below average. Simultaneously, the size of the post-labor force is particularly high and the size of the pre-labor particularly low. There are difficult problems in solving the shortage of manpower in these highly industrialized districts with many employment possibilities. The solutions to these problems affect both the economic conditions and the population distribution. In the GDR a planned production policy must be accompanied by a planned, temporary immigration of particularly younger people from the northern districts.

III. MULTIREGIONAL POPULATION ANALYSIS

In this section the computer results of the multiregional population analysis will be interpreted in accordance with the methods published by Willekens and Rogers 1976, Rogers 1978, and Willekens 1978. The approach for examining the multiregional population development is on this occasion a theoretical model of a closed population with a given regional distribution and constant age-specific rates of fertility, mortality, and migration. Corresponding to the computer program, the analysis encloses the multiregional life table, a multiregional population projection, as well as the fertility and migration analysis.

III.1 The Multiregional Life Table

By means of using a life table it is possible to describe a stationary population in which the number of births is equal to the number of deaths within a hypothetical (birth) cohort. This basic concept has been extended to a multiregional one by including the migration between a number of regions. The computer program used is based on hypothetical birth cohorts of 100,000 in each region. It gives an insight into their life history by analyzing the age-specific probabilities of dying and (out) migration of the above specified five regions (Appendix I).

The tables A5 to A10 give the most important characteristics of the five regions' life tables for the GDR. They allow one to

construct the life history of a hypothetical cohort with respect to each region. By applying this method of calculating the age-specific probabilities of dying and migrating (Table A5), we have found that of the 100,000 babies born in Berlin, 98,249 will be alive at age 5 (Table A6). In this time 92,360 will have remained in Berlin, whereas 3578 will have moved to the Middle region, 819 to the North region, and so on. Five years later, at the age of 10 years, there will be 98,060 of the initial 100,000 still living. From these, 88,840 will have remained in Berlin, whereas 5544 will live in the Middle region, etc.

Because it is impossible to interpret here the life history as a whole, an example of the age group 20-25 years only will be given. In this age group, which is one of the most active, from the initial birth cohort of 100,000 there are still 81,599 persons living in Berlin at exact age 20. During the following period of five years, 388 persons die, whereas the number of migrants to the North region are 1119, to the South-west region, 741, to the South region, 1973, and to the Middle region, 3389. However, in the same time period some of the migrants to the Middle region will be dead, according to the probability of dying in this region, and another part - exactly 161 persons - will move back to Berlin. This is similar to the other regions. The initial cohort still living in Berlin at exact age 25 is 74,258.

In Table A6, which gives the expected number of survivors at exact age x in each region by place of birth and place of residence, an aggregated life history is reflected. Taking the example of the age group 20-25 years once more, we find distinct differences between the five regions with respect to the expected number of migrants from and to each region (Table 11).

As can be seen from the observed rates in general (see above), the North region has the highest rate of outmigration within the age group 20-25 years. But in contrast to the observed rates, Berlin and the Middle region also have high rates of expected outmigration. On the other hand, besides the high rate of expected immigrants to the Middle region, there is a high

Table 11. Expected number of migrants between exact age 20 and 25 years; five regions; per regional birth cohorts of 100,000.

<u>Initial region of cohort</u>	<u>North</u>	<u>Berlin</u>	<u>S-West</u>	<u>South</u>	<u>Middle</u>	<u>Inmigrants (total)</u>
To: North	-	3420	2380	2851	4456	13 137
Berlin	4376	-	2460	2911	6787	16 534
S.West	3243	2334	-	4527	2974	13 078
South	6987	5718	9044	-	8442	30 191
Middle	9987	11337	4986	7623	-	33 933
Outmigrants (total)	24593	22809	18870	17912	22689	

rate of immigrants to the South region. This is not only for the 20-25 year age group. Other age groups have an expected high number of migrants from the other regions to the South region, as shown in Table A6. This reflects a planned trend of internal migration in the GDR.

Table A7 gives a further interpretation of the life history. The number of years lived in each region by a unit birth cohort shows the expectancy of an individual to be living in the next five years in the region of birth or in another region of residence. For example, a 20 year old person in the South region is expected to live 4.87 years of the following five years. Of these years, the person is expected to stay in the South for 4.10 years and to live in the Middle region for 0.32 years, in Berlin for 0.12 years, and so on.

Tables A8 and A9 show the expectations of life by place of birth and by place of residence, respectively. They give the total number of years which a person is expected to live after birth and after an exact age x , say 20 years for example again.

Between the regions there are no significant disparities with regard to the expectations of life at birth. This is undoubtedly an expression of the relative equal living conditions in all parts of the country within the socialist society. But at exact age 20 a person born in the South region can expect to live another 53.64 years. Of these years, the person will remain 40.24 years in the region of birth and will live 13.40 years in other regions. A person in the North region can expect to live 53.18 years, however only 36.24 years in the North region and nearly 17 years in other regions.

With respect to the expectations of life by place of residence (Table A9), the figures differ compared to the expectations by place of birth. An individual who reached an age of 20 as a resident in the South region can expect to live another 53.70 years and to remain 45.74 of those years in this region. The corresponding figures for the North region are 53.16 and 43.81 years. These slightly higher values are explained by certain

structure effects of the population of residence compared to the birth cohort.

Table A10 shows, in an aggregated manner, the proportions of survivorship and outmigration according to the five year age groups.

III.2 Multiregional Population Projection

Assuming that the multiregional population structure of the GDR will be developing with constant coefficients, a projection of a multiregional population development has been computed for 50 years in advance based on 1975 data. We will interpret the results only for the period from 1975 to 2000.

The projection of an age- and region-specific population by means of an equation system is described by Willekens and Rogers (1976). Table A11 gives the results using GDR data. They contain, in addition to the regional and total population in each age group and the age composition, the mean age (M.AG) of the population, the regional shares (SHA) of the total population, and the growth ratio (LAM) of the previous period.

The main result is that the structural effects, which are typical for the population composition in 1975, influence the development during the whole period to the year 2000. In this connection the total population of the GDR is expected to decline from 16.82 million in 1975 to 16.03 million in 2000. The reliability of this assertion to a certain degree depends on the influence of structural changes caused by the presently strong rise of the fertility rate. Without such an impact the regional share of the total population will be changing as shown in Table 12.

The main "winner" of this change is Berlin; the main "loser", the South region. The total population will be increasing in Berlin from 1.098 million inhabitants to 1.349 million, whereas the population of the South region will be declining from 7.135 million to 6.316 million.

Table 12. Changing of the regional share between 1975 and 2000 (percent).

Region	1975	1980	1985	1990	1995	2000
North	12.4	12.5	12.7	12.8	12.8	12.8
Berlin	6.5	6.9	7.2	7.6	8.1	8.4
S-west	15.1	15.1	15.2	15.4	15.5	15.6
South	42.4	41.8	41.1	40.4	39.8	39.4
Middle	23.6	23.7	23.8	23.8	23.8	23.8

For the planned economy it is more important to note the change of proportions between the labor force age groups and the pre- and post-labor force age groups.

Despite the continued decline of the total population, the number of people in the labor force will be increasing by more than one million in the 1980s. Also in the South region the strong decline in population will be compensated for by a slight increase in the total labor force. But in the last decade, particularly after 1995, a strong drop will follow. This decline will require a new manpower policy in the highly industrialized South region and a changing population distribution policy.

In general, the mean age of the population will be increasing in the next 25 years. But the regional disparities tend towards a more uniform level, as shown in Table 13.

Table 13. Changing of the mean age (1975 and 2000).

Region	1975	2000
North	34.56	38.26
Berlin	37.12	37.21
S-west	36.69	38.37
South	38.36	39.85
Middle	36.19	39.35
GDR	37.03	39.07

Only Berlin shows a nearly unchanged mean age by the year 2000 compared to 1975. This is explained by the expected high rates of immigrants during the whole period.

The tendency toward a more uniform level of the mean age touches on the problem of the population development towards a stable population. Willekens and Rogers (1976) remark that, if one projects the population with a constant growth rate for a long enough period of time, the ultimate (stable) growth ratio and the ultimate (stable) distribution are independent of the current growth rate and population distribution. Strohbach, a GDR demographer, says (1977) that in the long run the population development within a socialist or communist society will tend towards a stable population with a positive growth ratio of nearly zero.

III.3 Fertility and Migration Analysis

In this section the multiregional analysis of fertility and migration is related to the observed population distribution (Section II.2) as well as to the distribution of the life table (stationary) population (Section III.1).

Fertility Analysis

The observed fertility rates given in Table A2 show the specific rates of the age groups according to the five regions. The sums of the age-specific rates, multiplied by the age interval of five years, give the gross reproduction rates (GRR's). The word GROSS in Table A2 means the GRR.

Table 14 compares the most important regional fertility rates of the observed population in 1975.

As can be seen, the GRR is very low for the GDR as a whole and for each region. Only the South-west and the South regions are above average. Because the given rates refer to the fertility level in 1975, the rates for 1977 or 1978 will differ in accordance with the impact of a rising fertility during these years.

Table 14. Crude birth rate, gross reproduction rate, mean age of childbearing; five regions (1975).

Region	Crude birth rate	Gross reproduction rate	Mean age of childbearing
North	0.0125	0.794	24.49
Berlin	0.0107	0.776	29.62
S-west	0.0195	0.841	29.33
South	0.0102	0.816	29.28
Middle	0.0109	0.738	24.48
GDR	0.0108	0.810	27.57

It is important, therefore, to calculate the net reproduction rates (NRR's), referring to the age composition of the life table population. The NRR is derived by multiplying the observed fertility rates (Table A2) by the number of years lived in each region by a unit birth cohort (Table A7). Because not all persons survive to childbearing ages, the NRR is lower than the GRR.

Table 15 gives the results. Compared to Table 14, the ranking of the regions changes. The first rank is taken by the North region, followed by the South-west. Both regions are above the average of the whole country.

Migration Analysis

Analogous to the gross reproduction rate (GRR) is the gross migraproduction rate (GMR), which is the sum of the age-specific migration rates multiplied by five. Like the GRR, the GMR gives an insight into the behavior of the observed population: it is a measure of outmigration. In this case the GMR shows the number of outmigrations per person. The figures in Table 16 are derived from the observed rates of outmigration in 1975 (Table A4).

Table 15. Spatial fertility expectancies.

a) Net reproduction rates.

Region of residence	Region of birth				
	North	Berlin	S-west	South	Middle
North	0.593	0.025	0.017	0.021	0.035
Berlin	0.041	0.552	0.024	0.028	0.061
S-west	0.030	0.021	0.630	0.043	0.028
South	0.064	0.053	0.083	0.622	0.078
Middle	0.066	0.078	0.033	0.052	0.554
Total	0.794	0.729	0.787	0.766	0.756

Net reproduction rate of the GDR: 0.766 (dominant eigenvalue of the matrix).

b) Net reproduction allocations.

	North	Berlin	S-west	South	Middle
North	0.747	0.034	0.022	0.028	0.046
Berlin	0.051	0.757	0.030	0.037	0.081
S-west	0.038	0.030	0.801	0.056	0.037
South	0.081	0.072	0.105	0.812	0.103
Middle	0.083	0.107	0.042	0.067	0.733
Total	1.000	1.000	1.000	1.000	1.000

The GMR's confirm the assertion of Section II.2. They reflect the migration flows and are in accordance with the relative mobility of the population. In this connection the mobility of the South-west and the South regions is clearly below the GDR average.

The net migraproduction rate (NMR), like the net reproduction rate, is derived from the life table population. Compared

Table 16. Gross migraproduction rates; five regions (1975).

Region of residence	Region of birth				
	North	Berlin	S-west	South	Middle
North	---	0.070	0.048	0.058	0.099
Berlin	0.098	---	0.051	0.060	0.169
S-west	0.063	0.040	---	0.096	0.058
South	0.140	0.111	0.191	---	0.183
Middle	0.228	0.277	0.096	0.160	---
Total	0.529	0.498	0.386	0.374	0.509

Gross migraproduction rate of the GDR: 0.437

to the GMR's, the values of the NMR's differ according to the life table characteristics. Table 17 gives the aggregated results.

The net migraproduction rates in Table 17a show the expected number of migrations out of each of the five regions that an individual makes during his lifetime. The column sum denotes the total expected number of migrations to be made by a person born in region i (Willekens and Rogers, 1977).

In general, the values in Table 17a correspond to the values in Table 16. The lowest number of moves is expected for a person born in the South region as well as for those born in the South-west region. The reason for this is the different economic conditions in the regions. Whereas the South-region is highly industrialized, the economic structure of the South-west region is in a certain equilibrium. On the other hand, the more agrarian North region has a high rate of outmigrants. Besides a relative high rate of inmigration, the Middle region has a relative high rate of outmigration, mainly to Berlin.

Table 17. Spatial migration expectancies.

a) Net migraproduction rates.

Region of residence	Region of birth				
	North	Berlin	S-west	South	Middle
North	0.396	0.015	0.010	0.013	0.020
Berlin	0.019	0.379	0.011	0.013	0.029
S-west	0.010	0.007	0.309	0.014	0.010
South	0.021	0.017	0.027	0.304	0.026
Middle	0.041	0.048	0.020	0.031	0.388
Total	0.487	0.466	0.377	0.375	0.473

Net migraproduction rate of the GDR: 0.456 (dominant eigenvalue of the matrix).

b) Net migraproduction allocations.

	North	Berlin	S-west	South	Middle
North	0.813	0.032	0.027	0.034	0.043
Berlin	0.038	0.812	0.028	0.034	0.061
S-west	0.021	0.015	0.819	0.039	0.020
South	0.044	0.037	0.072	0.809	0.056
Middle	0.084	0.104	0.054	0.084	0.820
Total	1.000	1.000	1.000	1.000	1.000

IV. POPULATION DISTRIBUTION POLICY

In the GDR the population policy, including the population distribution policy, is based on the socialist system. As formulated in the VIII and the IX Congress of the Socialist Unity Party of Germany and several times by the government of the GDR, the aim of both the economic and the social policy is the further development of the advanced socialist society. This means that a constant improvement of the material and cultural living

conditions of the people exists, but that a constant development of the material production is required.

Against this background the present population policy in the GDR is characterized by a comprehensive program of measures in the field of the social policy. This program includes laws for the benefit of young married people, for the benefit of mothers with more than two children, for increased maternity allowance paid by the state for every child born, for children's allowance paid by the state to households with four or more children, as well as for special facilities for working women with children, for large families, and so on. The result of this social policy has been a strong increase in the birth rate during the last years.

As shown in Section II, the direction of the migration flows has been relatively constant over several decades, although pre-conditions such as the population distribution policy have been changed.

After World War II the main task of the population policy was to safeguard the life of the people. By the 1950s there were already important results in the development of the health service system. This led to a distinct decline in the mortality rates. The infant mortality rate had a particularly strong decline. Today the GDR belongs to the group of countries with an extremely low infant mortality rate.

Beginning in the 1950s and continuing in the 1960s, an important goal of the economic and social policy was to reduce the disparities of the development level between the regions within the GDR. Two main results have been achieved:

- a) In the regions that were formerly lagging behind, the social infrastructure was greatly improved, particularly the education system and the health service system. Today this social level is assimilated to a high degree between the regions.
- b) The former agrarian regions have been developed by extended industrialization. In connection with this a direct impact on the population distribution policy can be observed. With

the creation of many new jobs and with the construction of residential buildings in new industrial centers, particularly in the North and in the Middle regions, strong migration flows were initiated. Skilled workers from the highly industrialized regions and from regions with certain manpower reserves were encouraged to go to new industrial centers.

Since the 1960s, particularly because of the decline of the labor force population, a significant shortage of manpower has arisen, especially in the more industrialized regions and in the industrial centers. This development has been partly compensated for by enlarging the number of women workers. Today nearly 50 percent of the workers in the GDR are women; 86 percent of the women of labor force age were employed in 1976.

Along with significant trends to a more intensive economic development both the concentration of production and the concentration of settlement have been increased in the last decade. This is connected with a general decline of the internal migration and with the tendency of migrating over shorter distances. At the same time the number of commuters between places of residence and places of work has been increased.

In the future the planning bodies of the government and of the districts will be faced more and more with the problem to meet the shortage of manpower, particularly in the South region and in Berlin. Whereas the attractiveness of Berlin needs only indirect population distribution policy measures, the supply of manpower especially to the agglomeration areas in the South region needs more active measures. Therefore, a temporary increase of migration flows to the South region is planned, including the migration of young people from the North region.

REFERENCES

- Bies, K., and K. Tekse (1978), *Migration and Settlement in Hungary*, WP-78-20, International Institute for Applied Systems Analysis, Laxenburg, Austria.
- Boenisch, Mohs, and Ostwald (1976), *Territorialplanung* (Territorial Planning), Berlin.
- Bose, G. (1975), *Ergebnisse und Tendenzen der Binnenwanderung in der Deutschen Demokratischen Republik im Zeitraum 1953-1972* (Results and Tendencies of Migration in the German Democratic Republic during 1953-1972), Diss. (B), M.-Luther University, Halle.
- Drewe, P. (1978), *Migration and Settlement in the Netherlands*, WP-78-17, International Institute for Applied Systems Analysis, Laxenburg, Austria.
- Lüdemann, H., and J. Heinzmann (1978), On the Settlement System of the German Democratic Republic: Development Trends and Strategies, in Hansen, N., ed., *Human Settlement Systems: International Perspectives on Structure, Change and Public Policy*, Ballinger, Cambridge, Mass., 121-143.
- Neumann, H. (1978), *Hauptrichtungen der Bevölkerungsmigration über die Kreisgrenzen* (Geographic Directions of Interregional Migration between District Boundaries), Informationen d. Forsch.-Leitst. f. Terr.-planung, Berlin.
- Philipov, D. (1978), *Migration and Settlement in Bulgaria*. RM-78-36, International Institute for Applied Systems Analysis, Laxenburg, Austria.
- Rogers, A. (1978), *The Formal Demography of Migration and Redistribution: Measurement and Dynamics*, RM-78-15, International Institute for Applied Systems Analysis, Laxenburg, Austria.
- Rogers, A., R. Raquillet, and L. Castro (1977), *Model Migration Schedules and their Applications*, RM-77-57, International Institute for Applied Systems Analysis, Laxenburg, Austria.
- Statistisches Jahrbuch der DDR (1976 and 1978).
- Stempell, D. (1977), *Zur Entwicklung der Fruchtbarkeitsziffer in der DDR* (The Development of Fertility in the GDR), Petermanns Geogr. Mitt., Gotha, H. 4.
- Stempell, F., und D. Tollkühn (1977), *Bevölkerungsprognose - Möglichkeiten und Grenzen* (Population Forecast - Possibilities and Limits), Wissenschaft und Fortschritt, Berlin, H. 12.
- Strohbach, E. (1977), *Methodische Grundlagen der Analyse der Bevölkerungsreproduktion* (Methodological Basis for the Analysis of Population Reproduction), *Beiträge zur Demographie*, 1, Berlin.
- Weber, E (1970), *Bevölkerung* (Population), in *Ökonomische Geographie der Deutschen Demokratischen Republik*, Gotha, Leipzig.

Willekens, F. (1978), *The Comparative Migration and Settlement Study*,
WP-78-10, International Institute for Applied Systems
Analysis, Laxenburg, Austria.

Willekens, F., and A. Rogers (1976). *Computer Programs for Spatial
Demographic Analysis*, RM-76-58, International Institute for
Applied Systems Analysis, Laxenburg, Austria.

Willekens, F., and A. Rogers (1977), *More Computer Programs for Spatial
Demographic Analysis*, RM-77-30, International Institute for
Applied Systems Analysis, Laxenburg, Austria.

APPENDIX I. MODEL MIGRATION SCHEDULES

Among the various analytical and practical applications of the model migration schedule concept described in Rogers, Raquillet, and Castro (1977), is the interpolation of the observed age-specific migration rates.

In this way, for a given set of 5-year age groups, say, the model migration schedule is computed by fitting the following expression to the observed data:

$$M(x) = a_1 e^{-\alpha_1 x} + a_2 e^{-\alpha_2(x-\mu_2)} - e^{-\lambda_2(x-\mu_2)} + c ,$$

and then it is used to obtain the desired migration at some specific age x .

The problem with the GDR data is slightly different. Here one must find the number of migrants $k_{ij}(x)$ for the common 5-year age groups aggregation, since the original source uses the age groups < 1, 1-3, 3-6, 6-10, 15-18, 18-21, and 21-25. In order to distribute the original number of migrants to the conventional age groups in such a way that the absolute number of migrants in the other correct age groups would not change, it is necessary to employ the following interpolation procedure.

First, the original migrants and the population in age groups were aggregated into four compact age groups, 0-6, 6-10, 15-21, and 21-25, and their corresponding migration rates were estimated.

A model migration schedule was then fitted to these rates, scaled to a GMR = 1, by assuming 5-year age groups. The parameters obtained for each outmigration flow from each region are presented in Table IA.

Single-year age groups of migration rates were computed with the parameters and were then aggregated to 5-year age groups. In other words:

$$\hat{M}(0 - 5) = \sum_{x=0}^4 \hat{M}(x + 0.5) ,$$

$$\hat{M}(5 - 10) = \sum_{x=5}^9 \hat{M}(x + 0.5) ,$$

and so on for the other two age groups.

From these estimated 5-year age groups, weights, w , which help to obtain the desired number of migrants, k_{ij} , in each 5-year age group were computed. So,

$$w_0 = \hat{M}(0 - 5) / (\hat{M}(0 - 5) + \hat{M}(5 - 10)) ,$$

$$w_5 = \hat{M}(5 - 10) / (\hat{M}(0 - 5) + \hat{M}(5 - 10)) ,$$

$$w_{15} = \hat{M}(15 - 20) / (\hat{M}(15 - 20) + \hat{M}(20 - 25)) ,$$

$$w_{20} = \hat{M}(20 - 25) / (\hat{M}(15 - 20) + \hat{M}(20 - 25)) ,$$

and finally:

$$\hat{k}_{ij}(0 - 5) = w_0 k_{ij}(0 - 10) ,$$

$$\hat{k}_{ij}(5 - 10) = w_5 k_{ij}(0 - 10) ,$$

$$\hat{k}_{ij}(15 - 20) = w_{15} k_{ij}(15 - 25) ,$$

$$\hat{k}_{ij}(20 - 25) = w_{20} k_{ij}(15 - 25) ,$$

where

$$k_{ij}(0 - 10) = k_{ij}(0 - 3) + k_{ij}(3 - 6) + k_{ij}(6 - 10) ,$$

and

$$k_{ij}(15 - 25) = k_{ij}(15 - 18) + k_{ij}(18 - 21) + k_{ij}(21 - 25) .$$

Table IA. Model migration schedules parameters for the German Democratic Republic. GMR = 1.0.

PARAMETER	REGION									
	1	2	3	4	5	6	7	8	9	10
a_1	0.029	0.031	0.026	0.024	0.025	0.028	0.025	0.023	0.022	0.022
α_1	0.151	0.128	0.060	0.052	0.051	0.060	0.057	0.063	0.062	0.063
a_2	0.093	0.083	0.092	0.078	0.079	0.077	0.092	0.086	0.083	0.087
μ_2	19.37	19.34	19.31	19.26	19.37	16.99	16.87	16.19	15.84	15.54
α_2	0.160	0.153	0.231	0.199	0.210	0.163	0.171	0.158	0.157	0.155
λ_2	7.644	8.082	12.273	26.877	26.877	0.755	0.487	0.739	1.133	1.282
c	0.003	0.003	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.002

Notes: Region 1 = Berlin
2 = Rostock
3 = Schwerin and Neubrandenburg
4 = Magdeburg and Potsdam
5 = Frankfurt
6 = Cottbus
7 = Halle and Leipzig
8 = Dresden
9 = Karl-Marx-Stadt
10 = Erfurt, Gera, and Suhl

Table A1. Observed population characteristics (1975).

APPENDIX II. TABLES A1 TO A11

A.	<u>REGION BERLIN</u>	AGE	POPULATION	BIRTHS	DEATHS	MIGRATION FROM NORTH BERLIN	BERLIN TO S.WEST	SOUTH	MIDDLE
	0	62653.	0.	221.	108.	0.	56.	135.	481.
	5	79009.	0.	30.	83.	0.	42.	103.	367.
	10	92259.	0.	53.	99.	0.	82.	164.	359.
	15	73156.	2.	69.	105.	0.	67.	181.	315.
	20	72651.	1428.	216.	132.	0.	137.	368.	643.
	25	66688.	5451.	62.	112.	87.	62.	191.	406.
	30	90215.	2840.	164.	60.	0.	54.	187.	443.
	35	100196.	1426.	212.	36.	0.	33.	115.	324.
	40	76735.	505.	287.	19.	0.	21.	65.	193.
	45	62934.	89.	357.	11.	0.	12.	32.	134.
	50	48528.	0.	453.	4.	0.	12.	27.	84.
	55	38995.	0.	1171.	18.	0.	3.	19.	42.
	60	56860.	0.	2194.	14.	0.	3.	14.	75.
	65	64747.	0.	3005.	9.	0.	4.	14.	61.
	70	52249.	0.	8338.	20.	0.	6.	14.	42.
	75	60299.	0.			0.	5.	18.	79.
TOTAL		1098174.	11741.	16758.	1021.	0.	592.	1647.	4048.

Table A1 continued.

B. REGION MIDDLE		AGE	POPULATION	BIRTHS	DEATHS	MIGRATION FROM NORTH	MIDDLE TO S.WEST	SOUTH	MIDDLE
0	2322948.		293763.	0.	864.	620.	856.	302.	1036.
5	293763.		361577.	0.	138.	468.	647.	229.	779.
10	361577.		327065.	3.	147.	407.	532.	215.	692.
15	327065.		324810.	7715.	280.	1209.	2000.	806.	2247.
20	324810.		219846.	22286.	341.	812.	1357.	547.	1561.
25	219846.		256253.	7927.	214.	657.	1185.	368.	1173.
30	256253.		3451.	3451.	361.	437.	757.	220.	791.
35	3451.		324814.	1549.	598.	314.	568.	153.	571.
40	324814.		260360.	301.	761.	181.	315.	100.	332.
45	260360.		229616.	10.	954.	103.	225.	57.	209.
50	229616.		195077.	0.	1333.	69.	167.	40.	127.
55	195077.		138687.	0.	1381.	30.	75.	18.	75.
60	138687.		199906.	0.	3688.	33.	108.	35.	105.
65	199906.		215871.	0.	6465.	50.	133.	28.	134.
70	215871.		180240.	0.	9734.	48.	101.	32.	103.
75	180240.		211208.	0.	27527.	73.	166.	60.	136.
TOTAL	3972041.		43242.		54786.	5511.	9192.	3210.	10071.

Table A1 continued.

C.	<u>REGION</u>	<u>NORTH</u>	AGE	POPULATION	BIRTHS	DEATHS	MIGRATION FROM NORTH BERLIN	NORTH TO S.WEST	SOUTH	MIDDLE
		0	130449.	0•	519•	0•	337•	247•	532•	865•
		5	164503•	0•	76•	0•	188•	139•	298•	488•
		10	204645•	1•	51•	0•	130•	126•	225•	499•
		15	189898•	5100•	167•	0•	270•	191•	417•	598•
		20	188590•	13550•	196•	0•	876•	615•	1364•	1933•
		25	116643•	4452•	119•	0•	421•	211•	491•	1742•
		30	124046•	1896•	172•	0•	228•	128•	304•	450•
		35	168270•	887•	313•	0•	150•	91•	201•	369•
		40	140364•	196•	423•	0•	75•	50•	111•	213•
		45	117915•	3•	501•	0•	51•	31•	71•	142•
		50	96209•	30•	676•	0•	31•	18•	42•	92•
		55	66299•	0•	651•	0•	11•	6•	23•	53•
		60	95490•	0•	1765•	0•	34•	20•	35•	65•
		65	100051•	0•	3033•	0•	35•	23•	38•	95•
		70	84113•	0•	4544•	0•	22•	12•	29•	54•
		75	97898•	0•	12783•	0•	38•	21•	47•	115•
		TOTAL	2085383.	26085•	25989•	0•	2897•	1929•	4228•	6773•

Table A1 continued.

D. REGION		SOUTH	AGE	POPULATION	BIRTHS	DEATHS	MIGRATION FROM NORTH	SOUTH TO BERLIN	SOUTH TO S.WEST	SOUTH	MIDDLE
0	384605•	0•	1296•	583•	512•	902•	0•	0•	1590•	0•	1236•
5	485010•	0•	183•	452•	396•	701•	0•	0•	887•	0•	887•
10	554272•	0•	196•	327•	299•	553•	0•	0•	2345•	0•	2345•
15	535508•	10•	390•	839•	863•	1385•	0•	0•	3181•	0•	3181•
20	531815•	11636•	560•	1158•	1132•	1960•	0•	0•	1875•	0•	1875•
25	407753•	36483•	357•	727•	1008•	1187•	0•	0•	1184•	0•	1184•
30	466059•	14898•	555•	458•	531•	707•	0•	0•	785•	0•	785•
35	537937•	6811•	839•	268•	328•	448•	0•	0•	498•	0•	498•
40	436268•	2658•	1178•	183•	151•	298•	0•	0•	314•	0•	314•
45	429621•	481•	1772•	126•	107•	187•	0•	0•	228•	0•	228•
50	396536•	0•	2551•	75•	59•	129•	0•	0•	124•	0•	124•
55	282475•	0•	2610•	35•	51•	65•	0•	0•	162•	0•	162•
60	406848•	0•	7021•	69•	48•	101•	0•	0•	190•	0•	190•
65	445774•	0•	12854•	55•	38•	104•	0•	0•	188•	0•	188•
70	383328•	0•	19309•	50•	48•	93•	0•	0•	282•	0•	282•
75	451037•	0•	56259•	68•	84•	183•	0•	0•	0•	0•	0•
TOTAL	7134846•	72977•	107930•	5473•	5655•	9003•	0•	0•	15069•	0•	15069•

Table A1 continued.

AGE	REGION	S.WEST	BIRTHS	DEATHS	MIGRATION FROM			S.WEST TO S.WEST	SOUTH	MIDDLE
					NORTH	BERLIN	S.WEST			
0	147410.	0.	583.	162.	155.	0.	0.	675.	334.	
5	185894.	0.	72.	128.	123.	0.	0.	530.	263.	
10	212098.	0.	75.	97.	67.	0.	0.	388.	180.	
15	203787.	4.	157.	227.	233.	0.	0.	874.	461.	
20	202382.	4777.	187.	446.	459.	0.	0.	1718.	906.	
25	153362.	13731.	113.	220.	331.	0.	0.	875.	435.	
30	158742.	5490.	221.	135.	146.	0.	0.	503.	252.	
35	197410.	2445.	330.	87.	88.	0.	0.	303.	155.	
40	153749.	1057.	421.	43.	51.	0.	0.	195.	99.	
45	149926.	200.	514.	28.	49.	0.	0.	146.	67.	
50	139022.	0.	844.	23.	21.	0.	0.	85.	42.	
55	95091.	0.	889.	10.	8.	0.	0.	36.	22.	
60	137037.	0.	2407.	20.	19.	0.	0.	72.	36.	
65	141890.	0.	4360.	15.	10.	0.	0.	82.	39.	
70	118205.	0.	6325.	12.	8.	0.	0.	60.	28.	
75	133800.	0.	17446.	17.	22.	0.	0.	113.	56.	
TOTAL	2529805.	27704.	34944.	1670.	1790.	0.	0.	6655.	3375.	

Table A2. Observed fertility rates (1975).

AGE	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.000000	0.000000	0.000000	0.000000	0.000000
5	0.000000	0.000000	0.000000	0.000000	0.000000
10	0.000005	0.000000	0.000000	0.000000	0.000008
15	0.026857	0.000027	0.000020	0.000019	0.023589
20	0.071849	0.019636	0.023604	0.021880	0.068612
25	0.038168	0.081739	0.089533	0.089473	0.036057
30	0.015285	0.031480	0.034584	0.031966	0.013467
35	0.005271	0.014232	0.012385	0.012661	0.004769
40	0.001396	0.006581	0.006875	0.006093	0.001156
45	0.000025	0.001414	0.001334	0.001120	0.000044
50	0.000000	0.000000	0.000000	0.000000	0.000000
55	0.000000	0.000000	0.000000	0.000000	0.000000
60	0.000000	0.000000	0.000000	0.000000	0.000000
65	0.000000	0.000000	0.000000	0.000000	0.000000
70	0.000000	0.000000	0.000000	0.000000	0.000000
75	0.000000	0.000000	0.000000	0.000000	0.000000
GROSS	0.794279	0.775648	0.841677	0.816056	0.738510
CRUDE	0.012508	0.010691	0.010951	0.010228	0.010887
M.AGE	24.4954	29.6155	29.3318	29.2807	24.4815

Table A3. Observed death rates (1975).

AGE	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.003979	0.003527	0.003955	0.003370	0.003709
5	0.000462	0.000380	0.000387	0.000377	0.000470
10	0.000249	0.000325	0.000354	0.000354	0.000407
15	0.000879	0.000724	0.000770	0.000728	0.000856
20	0.001039	0.000950	0.000924	0.001053	0.001050
25	0.001020	0.000930	0.000737	0.000876	0.000973
30	0.001387	0.001241	0.001392	0.001191	0.001409
35	0.001860	0.001637	0.001672	0.001560	0.001841
40	0.003014	0.002763	0.002738	0.002700	0.002923
45	0.004249	0.004560	0.003428	0.004125	0.004155
50	0.007026	0.007357	0.006071	0.006433	0.006833
55	0.009819	0.011617	0.009349	0.009240	0.009958
60	0.018484	0.020594	0.017565	0.017257	0.018449
65	0.030315	0.033886	0.030728	0.028835	0.029948
70	0.054023	0.057513	0.053509	0.050372	0.054006
75	0.130575	0.138278	0.130389	0.124733	0.130331
GROSS	1.341894	1.431409	1.319837	1.266013	1.336586
CRUDE	0.012462	0.015260	0.013813	0.015127	0.013793
M.AGE	69.6746	69.9519	69.9769	69.8918	69.7359

Table A4. Observed outmigration rates (1975).

AGE	MIGRATION FROM NORTH TO					MIDDLE
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	
0	0.015186	0.000000	0.002583	0.001893	0.004078	0.006631
5	0.006766	0.000000	0.001143	0.000845	0.001812	0.002967
10	0.004789	0.000000	0.000635	0.000616	0.001099	0.002438
15	0.007773	0.000000	0.001422	0.001006	0.002196	0.003149
20	0.025388	0.000000	0.004645	0.003261	0.007233	0.010250
25	0.015989	0.000000	0.003609	0.001809	0.004209	0.006361
30	0.008948	0.000000	0.001838	0.001032	0.002451	0.003628
35	0.004820	0.000000	0.000891	0.000541	0.001195	0.002193
40	0.003199	0.000000	0.000534	0.000356	0.000791	0.001517
45	0.002502	0.000000	0.000433	0.000263	0.000602	0.001204
50	0.001902	0.000000	0.000322	0.000187	0.000437	0.000956
55	0.001403	0.000000	0.000166	0.000090	0.000347	0.000799
60	0.001613	0.000000	0.000356	0.000209	0.000367	0.000681
65	0.001909	0.000000	0.000350	0.000230	0.000380	0.000950
70	0.001391	0.000000	0.000262	0.000143	0.000345	0.000642
75	0.002257	0.000000	0.000388	0.000215	0.000480	0.001175
GROSS	0.529171	0.000000	0.007888	0.063479	0.140100	0.227704
CRUDE	0.007589	0.000000	0.001389	0.000925	0.002027	0.003248
M.AGE	25.5857	0.0000	26.0198	24.5382	24.7935	26.1784
AGE	MIGRATION FROM BERLIN TO					MIDDLE
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	
0	0.012450	0.001724	0.000000	0.000894	0.002155	0.007677
5	0.007531	0.001051	0.000000	0.000532	0.001304	0.004645
10	0.007631	0.001073	0.000000	0.000889	0.001778	0.003891
15	0.009131	0.001435	0.000000	0.000916	0.002474	0.004306
20	0.018775	0.002973	0.000000	0.001886	0.005065	0.008851
25	0.011861	0.001979	0.000000	0.000930	0.002864	0.006088
30	0.008546	0.000964	0.000000	0.000599	0.002073	0.004910
35	0.005310	0.000599	0.000000	0.000329	0.001148	0.003234
40	0.004105	0.000469	0.000000	0.000274	0.000847	0.002515
45	0.003019	0.000302	0.000000	0.000079	0.000508	0.002129
50	0.002761	0.000227	0.000000	0.000247	0.000556	0.001731
55	0.001744	0.000103	0.000000	0.000077	0.000487	0.001077
60	0.001935	0.000317	0.000000	0.000053	0.000246	0.001319
65	0.001436	0.000216	0.000000	0.000062	0.000216	0.000942
70	0.001359	0.000172	0.000000	0.000115	0.000268	0.000804
75	0.002023	0.000332	0.000000	0.000083	0.000299	0.001310
GROSS	0.498081	0.069677	0.000000	0.039815	0.111441	0.277148
CRUDE	0.006655	0.000930	0.000000	0.000539	0.001500	0.003686
M.AGE	26.1459	25.1516	0.0000	23.6328	25.7421	26.9192

Table A4 continued.

AGE	MIGRATION FROM S.WEST TO					
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.008995	0.001099	0.001051	0.000000	0.004579	0.002266
5	0.005616	0.000689	0.000662	0.000000	0.002851	0.001415
10	0.003451	0.000457	0.000316	0.000000	0.001829	0.000849
15	0.008808	0.001114	0.001143	0.000000	0.004289	0.002262
20	0.017437	0.002204	0.002268	0.000000	0.008489	0.004477
25	0.012135	0.001435	0.002158	0.000000	0.005705	0.002836
30	0.006526	0.000850	0.000920	0.000000	0.003169	0.001587
35	0.003207	0.000441	0.000446	0.000000	0.001535	0.000785
40	0.002524	0.000280	0.000332	0.000000	0.001268	0.000644
45	0.001934	0.000187	0.000327	0.000000	0.000974	0.000447
50	0.001230	0.000165	0.000151	0.000000	0.000611	0.000302
55	0.000799	0.000105	0.000084	0.000000	0.000379	0.000231
60	0.001073	0.000146	0.000139	0.000000	0.000525	0.000263
65	0.001029	0.000106	0.000070	0.000000	0.000578	0.000275
70	0.000914	0.000102	0.000068	0.000000	0.000508	0.000237
75	0.001555	0.000127	0.000164	0.000000	0.000845	0.000419
GROSS	0.386164	0.047527	0.051496	0.000000	0.190669	0.096472
CRUDE	0.005332	0.000660	0.000708	0.000000	0.002631	0.001334
M.AGE	25.2894	24.7516	25.4391	0.0000	25.3664	25.3221

AGE	MIGRATION FROM SOUTH TO					
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.009326	0.001516	0.001331	0.002345	0.000000	0.004134
5	0.005742	0.000932	0.000816	0.001445	0.000000	0.002548
10	0.003727	0.000590	0.000539	0.000998	0.000000	0.001600
15	0.010144	0.001567	0.001612	0.002586	0.000000	0.004379
20	0.013973	0.002177	0.002129	0.003685	0.000000	0.005981
25	0.011764	0.001783	0.002472	0.002911	0.000000	0.004598
30	0.006179	0.000983	0.001139	0.001517	0.000000	0.002540
35	0.003400	0.000498	0.000610	0.000833	0.000000	0.001459
40	0.002590	0.000419	0.000346	0.000683	0.000000	0.001142
45	0.001708	0.000293	0.000249	0.000435	0.000000	0.000731
50	0.001238	0.000189	0.000149	0.000325	0.000000	0.000575
55	0.000974	0.000124	0.000181	0.000230	0.000000	0.000439
60	0.000934	0.000170	0.000118	0.000248	0.000000	0.000398
65	0.000868	0.000123	0.000085	0.000233	0.000000	0.000426
70	0.000989	0.000130	0.000125	0.000243	0.000000	0.000490
75	0.001368	0.000151	0.000186	0.000406	0.000000	0.000625
GROSS	0.374629	0.058229	0.060438	0.095623	0.000000	0.160339
CRUDE	0.004934	0.000767	0.000793	0.001262	0.000000	0.002112
M.AGE	24.8730	24.3090	24.9460	25.0075	0.0000	24.9701

Table A4 continued.

AGE	MIGRATION FROM MIDDLE TO					
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.012080	0.002662	0.003675	0.001296	0.004447	0.000000
5	0.007227	0.001593	0.002202	0.000780	0.002652	0.000000
10	0.005105	0.001126	0.001471	0.000595	0.001914	0.000000
15	0.019146	0.003697	0.006115	0.002464	0.006870	0.000000
20	0.013168	0.002500	0.004178	0.001684	0.004806	0.000000
25	0.015388	0.002988	0.005390	0.001674	0.005336	0.000000
30	0.008605	0.001705	0.002954	0.000859	0.003087	0.000000
35	0.004944	0.000967	0.001749	0.000471	0.001758	0.000000
40	0.003564	0.000695	0.001210	0.000384	0.001275	0.000000
45	0.002587	0.000449	0.000980	0.000248	0.000910	0.000000
50	0.002066	0.000354	0.000856	0.000205	0.000651	0.000000
55	0.001428	0.000216	0.000541	0.000130	0.000541	0.000000
60	0.001406	0.000165	0.000540	0.000175	0.000525	0.000000
65	0.001598	0.000232	0.000616	0.000130	0.000621	0.000000
70	0.001576	0.000266	0.000560	0.000178	0.000571	0.000000
75	0.002060	0.000346	0.000786	0.000284	0.000644	0.000000
GROSS	0.509735	0.099798	0.169117	0.057780	0.183039	0.000000
CRUDE	0.007045	0.001387	0.002314	0.000808	0.002535	0.000000
M.AGE	25.5258	24.1173	26.7807	25.1007	25.2685	0.0000

Table A5. Probabilities of dying and migrating.

AGE	DEATH	MIGRATION FROM			NORTH TO		
		NORTH	BERLIN	S.WEST	SOUTH	MIDDLE	
0	0.019633	0.908898	0.012213	0.008986	0.019360	0.030910	
5	0.002304	0.964601	0.005607	0.004155	0.008905	0.014429	
10	0.001253	0.975176	0.003128	0.003050	0.005458	0.011935	
15	0.004379	0.957870	0.007071	0.004982	0.010807	0.014892	
20	0.005176	0.876731	0.021496	0.015215	0.033830	0.047552	
25	0.005067	0.918836	0.017334	0.008710	0.020201	0.029852	
30	0.006901	0.949760	0.008916	0.005026	0.011946	0.017451	
35	0.009249	0.967192	0.004367	0.002656	0.005871	0.010666	
40	0.014948	0.969434	0.002613	0.001746	0.003877	0.007382	
45	0.021018	0.966818	0.002104	0.001283	0.002937	0.005841	
50	0.034519	0.956338	0.001548	0.000904	0.002106	0.004585	
55	0.047921	0.945425	0.000787	0.000432	0.001652	0.003784	
60	0.088337	0.904329	0.001609	0.000955	0.001675	0.003095	
65	0.140899	0.850898	0.001494	0.000988	0.001644	0.004078	
70	0.237969	0.756648	0.001005	0.000553	0.001346	0.002479	
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	

REGION BERLIN

AGE	DEATH	MIGRATION FROM		BERLIN TO		
		NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.017508	0.008187	0.923595	0.004373	0.010558	0.035777
5	0.001903	0.005167	0.961367	0.002645	0.006484	0.022434
10	0.001628	0.005266	0.961088	0.004374	0.008751	0.018894
15	0.003626	0.007099	0.952294	0.004581	0.012180	0.020220
20	0.004757	0.013708	0.906749	0.009082	0.024177	0.041528
25	0.004639	0.009483	0.938592	0.004622	0.013987	0.028677
30	0.006200	0.004717	0.952456	0.002964	0.010164	0.023500
35	0.008159	0.002941	0.965945	0.001633	0.005655	0.015667
40	0.013725	0.002297	0.966285	0.001348	0.004157	0.012189
45	0.022529	0.001470	0.962836	0.000395	0.002485	0.010284
50	0.036097	0.001090	0.950678	0.001191	0.002678	0.008265
55	0.056407	0.000486	0.935364	0.000366	0.002306	0.005071
60	0.097882	0.001430	0.893370	0.000242	0.001124	0.005952
65	0.156140	0.000922	0.837726	0.000265	0.000932	0.004015
70	0.251367	0.000662	0.743410	0.000443	0.001040	0.003078
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table A5 continued.

AGE	DEATH	MIGRATION FROM			S.WEST TO		
		NORTH	BERLIN	S.WEST	SOUTH	MIDDLE	
0	0.019538	0.005249	0.005096	0.937472	0.021694	0.010952	
5	0.001936	0.003399	0.003271	0.970501	0.013905	0.006987	
10	0.001766	0.002266	0.001565	0.981191	0.009002	0.004210	
15	0.003846	0.005522	0.005711	0.953449	0.020636	0.010837	
20	0.004633	0.010291	0.010867	0.912789	0.039688	0.021733	
25	0.003705	0.006931	0.010535	0.937950	0.027117	0.013762	
30	0.006928	0.004145	0.004519	0.961267	0.015362	0.007780	
35	0.008324	0.002163	0.002197	0.975928	0.007519	0.003870	
40	0.013600	0.001373	0.001626	0.974048	0.006194	0.003160	
45	0.017015	0.000913	0.001592	0.973549	0.004744	0.002188	
50	0.029911	0.000798	0.000728	0.964153	0.002950	0.001460	
55	0.045681	0.000500	0.000399	0.950516	0.001802	0.001101	
60	0.084136	0.000666	0.000630	0.910964	0.002403	0.001201	
65	0.142668	0.000455	0.000303	0.852896	0.002494	0.001184	
70	0.235967	0.000394	0.000262	0.760478	0.001981	0.000918	
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	

AGE	DEATH	MIGRATION FROM			SOUTH TO		
		NORTH	BERLIN	S.WEST	SOUTH	MIDDLE	
0	0.016754	0.007192	0.006451	0.011120	0.938911	0.019573	
5	0.001889	0.004579	0.004035	0.007052	0.970028	0.012418	
10	0.001767	0.002918	0.002655	0.004914	0.979880	0.007867	
15	0.003645	0.007715	0.008026	0.012459	0.947641	0.020514	
20	0.005242	0.010176	0.010270	0.017230	0.928576	0.028507	
25	0.004373	0.008553	0.012046	0.013827	0.939380	0.021820	
30	0.005950	0.004783	0.005587	0.007350	0.964023	0.012307	
35	0.007777	0.002446	0.003001	0.004078	0.975567	0.007132	
40	0.013416	0.002052	0.001701	0.003335	0.973929	0.005567	
45	0.020411	0.001427	0.001216	0.002120	0.971271	0.003555	
50	0.031661	0.000911	0.000719	0.001570	0.962373	0.002766	
55	0.045166	0.000589	0.000855	0.001095	0.950210	0.002085	
60	0.082729	0.000774	0.000538	0.001136	0.913006	0.001818	
65	0.134497	0.000533	0.000368	0.001007	0.861754	0.001841	
70	0.223724	0.000509	0.000486	0.000947	0.772423	0.001910	
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	

Table A5 continued.

AGE	DEATH	MIGRATION FROM		MIDDLE TO		
		NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.018361	0.012385	0.017163	0.006256	0.021024	0.924811
5	0.002340	0.007741	0.010650	0.003844	0.012910	0.962515
10	0.002025	0.005519	0.007139	0.002953	0.009404	0.972960
15	0.004250	0.017494	0.028651	0.011776	0.032252	0.905577
20	0.005228	0.011625	0.019525	0.008160	0.022985	0.932477
25	0.004843	0.014033	0.025418	0.008091	0.025288	0.922328
30	0.007004	0.008188	0.014156	0.004204	0.014941	0.951506
35	0.009152	0.004701	0.008477	0.002319	0.008584	0.966767
40	0.014503	0.003383	0.005864	0.001883	0.006217	0.968151
45	0.020563	0.002176	0.004735	0.001212	0.004423	0.966891
50	0.033593	0.001696	0.004087	0.000991	0.003133	0.956499
55	0.048584	0.001025	0.002546	0.000618	0.002568	0.944661
60	0.088181	0.000752	0.002438	0.000799	0.002396	0.905434
65	0.139331	0.000996	0.002625	0.000559	0.002681	0.853808
70	0.237906	0.001028	0.002146	0.000688	0.002226	0.756006
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table A6. Expected number of survivors at exact age x in each region.

AGE	INITIAL REGION OF COHORT	NORTH				
***	*****	*****	*****	*****	*****	
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	1000000.	1000000.	0.	0.	0.	0.
5	98037.	90890.	1221.	899.	1936.	3091.
10	97812.	87715.	1727.	1279.	2748.	4344.
15	97684.	85581.	1975.	1556.	3239.	5333.
20	97261.	82117.	2673.	2022.	4222.	6227.
25	96760.	72167.	4376.	3243.	6987.	9987.
30	96283.	66573.	5731.	3868.	8423.	11688.
35	95629.	63408.	6282.	4181.	9207.	12552.
40	94770.	61436.	6488.	4325.	9529.	12991.
45	93387.	59643.	6529.	4385.	9653.	13177.
50	91444.	57720.	6493.	4385.	9647.	13200.
55	88337.	55242.	6326.	4316.	9477.	12977.
60	84078.	52251.	6004.	4147.	9152.	12524.
65	76664.	47280.	5486.	3849.	8490.	11559.
70	65844.	40253.	4701.	3346.	7440.	10104.
75	50226.	30476.	3561.	2583.	5835.	7770.

AGE	INITIAL REGION OF COHORT	BERLIN				
***	*****	*****	*****	*****	*****	
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	1000000.	0.	1000000.	0.	0.	0.
5	98249.	819.	92360.	437.	1056.	3578.
10	98060.	1301.	88840.	693.	1683.	5544.
15	97899.	1774.	85432.	1097.	2492.	7104.
20	97538.	2455.	81599.	1561.	3673.	8250.
25	97067.	3420.	74258.	2334.	5718.	11337.
30	96617.	4071.	70139.	2733.	6829.	12845.
35	96004.	4346.	67073.	2960.	7579.	14046.
40	95205.	4492.	64956.	3073.	7941.	14742.
45	93884.	4574.	62883.	3143.	8132.	15152.
50	91840.	4562.	60642.	3126.	8150.	15359.
55	88626.	4465.	57729.	3118.	8073.	15240.
60	83908.	4272.	54048.	3005.	7856.	14727.
65	76039.	3959.	48334.	2776.	7283.	13687.
70	64652.	3432.	40536.	2399.	6372.	11913.
75	48820.	2640.	30168.	1859.	5000.	9154.

Table A6 continued.

AGE ***	INITIAL REGION OF COHORT		S.WEST			
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	100000,	0,	0,	100000,	0,	0,
5	98046,	525,	510,	93747,	2169,	1095,
10	97856,	846,	820,	91005,	3430,	1755,
15	97683,	1055,	955,	89321,	4209,	2143,
20	97307,	1581,	1522,	85251,	5924,	3030,
25	96850,	2380,	2460,	77980,	9044,	4986,
30	96474,	2898,	3408,	73339,	10819,	6010,
35	95818,	3173,	3749,	70628,	11715,	6553,
40	95019,	3292,	3881,	69005,	12056,	6785,
45	93718,	3343,	3931,	67278,	12240,	6926,
50	92022,	3332,	3947,	65539,	12258,	6947,
55	89183,	3266,	3842,	63224,	12029,	6822,
60	85047,	3135,	3649,	60115,	11576,	6571,
65	77818,	2894,	3325,	54785,	10739,	6074,
70	66784,	2502,	2826,	46744,	9415,	5296,
75	51082,	1924,	2132,	35563,	7303,	4080,

AGE ***	INITIAL REGION OF COHORT		SOUTH			
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	100000,	0,	0,	100000,	0,	0,
5	98325,	719,	645,	1112,	93891,	1957,
10	98138,	1146,	1027,	1754,	91128,	3082,
15	97964,	1410,	1258,	2185,	89355,	3756,
20	97603,	2126,	2045,	3254,	84873,	5305,
25	97095,	2851,	2911,	4527,	79184,	7623,
30	96667,	3463,	3977,	5441,	74797,	8989,
35	96073,	3762,	4388,	5847,	72406,	9670,
40	95302,	3886,	4567,	6041,	70811,	9997,
45	94004,	3965,	4612,	6152,	69098,	10176,
50	92093,	3967,	4591,	6155,	67210,	10169,
55	89136,	3882,	4465,	6059,	64752,	9977,
60	85012,	3724,	4263,	5840,	61582,	9604,
65	77833,	3433,	3875,	5402,	56272,	8852,
70	67172,	2966,	3296,	4673,	48539,	7697,
75	51844,	2281,	2495,	3608,	37527,	5934,

Table A6 continued.

AGE ***	INITIAL REGION OF COHORT			MIDDLE		
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	100000.	0.	0.	0.	0.	100000.
5	98164.	1238.	1716.	626.	2102.	92481.
10	97936.	1931.	2652.	987.	3264.	89101.
15	97741.	2401.	3202.	1265.	4079.	86795.
20	97331.	3879.	5593.	2306.	6756.	78797.
25	96826.	4486.	6787.	2974.	8442.	74136.
30	96365.	5319.	8466.	3576.	10072.	68932.
35	95708.	5720.	9159.	3854.	10944.	66032.
40	94859.	5904.	9473.	3989.	11358.	64135.
45	93504.	5991.	9571.	4067.	11547.	62328.
50	91576.	5962.	9543.	4071.	11552.	60447.
55	88507.	5829.	9340.	4020.	11357.	57962.
60	84189.	5583.	8900.	3875.	10978.	54852.
65	76753.	5114.	8102.	3594.	10184.	49760.
70	65952.	4416.	6930.	3110.	8934.	42562.
75	50301.	3395.	5253.	2409.	7015.	32229.

Table A7. Number of years lived in each region by a unit birth cohort.

AGE ***		INITIAL REGION OF COHORT		NORTH		
		TOTAL	NORTH	BERLIN	S.WEST	SOUTH
0	4.95092	4.77225	0.03053	0.02247	0.04840	0.07727
5	4.89623	4.46511	0.07372	0.05443	0.11709	0.18588
10	4.88740	4.33239	0.09255	0.07086	0.14966	0.24194
15	4.87363	4.19244	0.11621	0.08945	0.18652	0.28902
20	4.85052	3.85708	0.17624	0.13162	0.28022	0.40536
25	4.82606	3.46851	0.25267	0.17777	0.38523	0.54188
30	4.79779	3.24953	0.30031	0.20121	0.44074	0.60599
35	4.75997	3.12111	0.31924	0.21265	0.46841	0.63856
40	4.70394	3.02698	0.32542	0.21777	0.47957	0.65419
45	4.62079	2.93407	0.32555	0.21926	0.48250	0.65941
50	4.49454	2.82403	0.32048	0.21752	0.47809	0.65442
55	4.31038	2.68731	0.30825	0.21157	0.46572	0.63754
60	4.01854	2.48826	0.28723	0.19990	0.44105	0.60209
65	3.56270	2.18832	0.25466	0.17989	0.39825	0.54159
70	2.90174	1.76823	0.20655	0.14823	0.33187	0.44687
75	3.85365	2.29731	0.26448	0.20246	0.47657	0.61282

AGE ***		INITIAL REGION OF COHORT		BERLIN		
		TOTAL	NORTH	BERLIN	S.WEST	SOUTH
0	4.95623	0.02047	4.80899	0.01093	0.02640	0.08944
5	4.90774	0.05299	4.52998	0.02827	0.06846	0.22803
10	4.89897	0.07686	4.35680	0.04477	0.10436	0.31619
15	4.88590	0.10571	4.17577	0.06647	0.15411	0.38384
20	4.86512	0.14688	3.89642	0.09739	0.23476	0.48967
25	4.84210	0.18728	3.60993	0.12668	0.31367	0.60454
30	4.81553	0.21043	3.43030	0.14232	0.36019	0.67228
35	4.78022	0.22096	3.30073	0.15082	0.38800	0.71972
40	4.72721	0.22666	3.19597	0.15540	0.40183	0.74735
45	4.64310	0.22842	3.08812	0.15673	0.40706	0.76277
50	4.51165	0.22569	2.95928	0.15612	0.40558	0.76499
55	4.31335	0.21842	2.79443	0.15310	0.39823	0.74918
60	3.99868	0.20577	2.55955	0.14453	0.37849	0.71034
65	3.51727	0.18479	2.22174	0.12937	0.34137	0.64000
70	2.83679	0.15182	1.76759	0.10644	0.28428	0.52667
75	3.63144	0.20662	2.15550	0.14535	0.40700	0.71698

Table A7 continued.

AGE ***	INITIAL REGION OF COHORT		S.WEST			
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	4.95115	0.01312	0.01274	4.84368	0.05423	0.02738
5	4.89755	0.03427	0.03324	4.61880	0.13998	0.07126
10	4.88847	0.04753	0.04437	4.50815	0.19096	0.09746
15	4.87475	0.06590	0.06192	4.36429	0.25330	0.12934
20	4.85392	0.09901	0.09956	4.08077	0.37418	0.20040
25	4.83309	0.13193	0.14671	3.78299	0.49656	0.27490
30	4.80730	0.15176	0.17891	3.59918	0.56335	0.31409
35	4.77093	0.16163	0.19073	3.49083	0.59428	0.33345
40	4.71843	0.16587	0.19529	3.40709	0.60741	0.34276
45	4.64351	0.16686	0.19694	3.32044	0.61245	0.34681
50	4.53013	0.16494	0.19472	3.21907	0.60718	0.34423
55	4.35575	0.16002	0.18728	3.08347	0.59014	0.33484
60	4.07162	0.15073	0.17436	2.87251	0.55787	0.31614
65	3.61505	0.13492	0.15379	2.53823	0.50384	0.28427
70	2.94664	0.11066	0.12396	2.05767	0.41995	0.23440
75	3.93430	0.14935	0.15814	2.69822	0.60615	0.32245

AGE ***	INITIAL REGION OF COHORT		SOUTH			
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	4.95812	0.01798	0.01613	0.02780	4.84728	0.04893
5	4.91156	0.04663	0.04181	0.07164	4.62549	0.12599
10	4.90255	0.06389	0.05713	0.09847	4.51208	0.17097
15	4.88919	0.08841	0.08257	0.13598	4.35570	0.22653
20	4.86746	0.12444	0.12389	0.19452	4.10142	0.32319
25	4.84405	0.15785	0.17218	0.24919	3.84952	0.41531
30	4.81849	0.18062	0.20912	0.28219	3.68008	0.46649
35	4.78437	0.19120	0.22388	0.29719	3.58042	0.49167
40	4.73265	0.19630	0.22949	0.30482	3.49773	0.50432
45	4.65241	0.19831	0.23009	0.30767	3.40772	0.50862
50	4.53072	0.19623	0.22641	0.30535	3.29907	0.50365
55	4.35371	0.19015	0.21820	0.29746	3.15834	0.48954
60	4.07113	0.17891	0.20344	0.28103	2.94635	0.46141
65	3.62513	0.15995	0.17928	0.25187	2.62029	0.41373
70	2.97541	0.13115	0.14479	0.20704	2.15165	0.34078
75	4.09421	0.17702	0.18522	0.28405	2.98134	0.46658

Table A7 continued.

AGE ***	INITIAL REGION OF COHORT			MIDDLE		
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	4,95410	0,03096	0,04291	0,01564	0,05256	4,81203
5	4,90250	0,07924	0,10922	0,04032	0,13416	4,53956
10	4,89194	0,10830	0,14635	0,05631	0,18358	4,39740
15	4,87681	0,15699	0,21985	0,08928	0,27087	4,13981
20	4,85392	0,20913	0,30950	0,13200	0,37996	3,82334
25	4,82977	0,24514	0,38133	0,16376	0,46285	3,57669
30	4,80182	0,27598	0,44062	0,18575	0,52538	3,37410
35	4,76418	0,29060	0,46580	0,19606	0,55753	3,25419
40	4,70907	0,29739	0,47610	0,20139	0,57262	3,16157
45	4,62699	0,29885	0,47786	0,20344	0,57747	3,06937
50	4,50208	0,29478	0,47209	0,20226	0,57271	2,96023
55	4,31740	0,28531	0,45601	0,19736	0,55838	2,82034
60	4,02355	0,26744	0,42505	0,18671	0,52905	2,61529
65	3,56763	0,23825	0,37581	0,16760	0,47794	2,30803
70	2,90632	0,19528	0,30459	0,13797	0,39872	1,86976
75	3,85969	0,26377	0,38982	0,19024	0,57197	2,44388

Table A8. Expectations of life by place of birth.

AGE ***	INITIAL REGION OF COHORT		NORTH			
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	71.30880	51.67293	3.65409	2.55706	5.62989	7.79483
5	67.68677	47.83992	3.69613	2.58535	5.69326	7.87211
10	62.83629	43.38468	3.62924	2.53563	5.58661	7.70013
15	57.91573	39.00668	3.53927	2.46643	5.44076	7.46259
20	53.15636	34.86557	3.43516	2.38518	5.27261	7.19784
25	48.41908	31.06014	3.27083	2.26152	5.01036	6.81623
30	43.64654	27.61158	3.02461	2.08809	4.63507	6.28720
35	38.92782	24.49227	2.73125	1.89195	4.20587	5.69648
40	34.25799	21.33010	2.41915	1.68471	3.74973	5.07431
45	29.72812	18.40454	2.10649	1.47646	3.29171	4.44892
50	25.30674	15.58706	1.79524	1.26807	2.83402	3.82235
55	21.10885	12.93838	1.49559	1.06643	2.39248	3.21597
60	17.05165	10.39767	1.20474	0.86883	1.95978	2.62064
65	13.45887	8.15750	0.94658	0.69210	1.57399	2.08870
70	10.25968	6.17449	0.71537	0.53262	1.22780	1.60940
75	7.67269	4.57399	0.52659	0.40310	0.94886	1.22014

AGE ***	INITIAL REGION OF COHORT		BERLIN			
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	71.13130	2.66977	52.85109	1.81468	4.67377	9.12198
5	67.35435	2.69652	48.89824	1.83589	4.73020	9.19350
10	62.47925	2.64767	44.37282	1.81060	4.66949	8.97866
15	57.57834	2.57353	39.99581	1.76786	4.57061	8.67053
20	52.78219	2.47468	35.86265	1.70626	4.42953	8.30908
25	48.02590	2.33536	32.02231	1.61420	4.20914	7.84489
30	43.23811	2.15241	28.43524	1.49061	3.90411	7.25575
35	38.49801	1.94695	25.04358	1.35187	3.55383	6.60178
40	33.80034	1.73121	21.78693	1.20481	3.17614	5.90125
45	29.24069	1.51414	18.68926	1.05623	2.79281	5.18824
50	24.83579	1.29912	15.74269	0.90908	2.41174	4.47316
55	20.64580	1.09158	12.97453	0.76590	2.04157	3.77221
60	16.66606	0.89264	10.37370	0.62651	1.68175	3.09146
65	13.13207	0.71441	8.08115	0.50127	1.35804	2.47720
70	10.00472	0.55441	6.06803	0.38945	1.06923	1.92361
75	7.43845	0.42323	4.41522	0.29772	0.83367	1.46862

Table A8 continued.

AGE	INITIAL REGION OF COHORT	S.WEST				
***	*****	*****	*****	*****	*****	*****
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	71,69262	1,90851	2,15267	56,48539	7,17186	3,97418
5	68,07144	1,93316	2,18258	52,67080	7,25946	4,02545
10	63,19901	1,90190	2,15285	48,05326	7,13053	3,96047
15	58,30634	1,85660	2,11124	43,52315	6,94765	3,86770
20	53,52199	1,79605	2,05577	39,20626	6,71418	3,74973
25	48,76288	1,70230	1,96267	35,17786	6,35953	3,56052
30	43,94323	1,57219	1,81825	31,39373	5,86961	3,28945
35	39,22681	1,42456	1,64397	27,85229	5,32184	2,98416
40	34,53560	1,26644	1,45706	24,41264	4,74115	2,65831
45	29,98035	1,10702	1,26891	21,11609	4,15885	2,32948
50	25,48676	0,94610	1,07828	17,89692	3,56993	1,99553
55	21,21856	0,79128	0,89427	14,85719	3,00276	1,67308
60	17,12891	0,64160	0,71755	11,95413	2,45489	1,36073
65	13,48791	0,50750	0,56014	9,37333	1,96605	1,08088
70	10,30328	0,38933	0,42240	7,12130	1,53644	0,83381
75	7,70199	0,29237	0,30958	5,28217	1,18662	0,63124

AGE	INITIAL REGION OF COHORT	SOUTH				
***	*****	*****	*****	*****	*****	*****
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	72,01115	2,29905	2,54362	3,59626	57,61449	5,95773
5	68,19555	2,31994	2,57056	3,62927	53,66631	6,00948
10	63,32071	2,27685	2,53285	3,56318	49,05529	5,89254
15	58,42838	2,21566	2,47901	3,46897	44,53629	5,72845
20	53,63515	2,13327	2,40358	3,34247	40,23829	5,51753
25	48,90294	2,01628	2,28858	3,15964	36,22488	5,21356
30	44,10836	1,86190	2,12059	2,91585	32,40300	4,80702
35	39,36573	1,68542	1,91604	2,64017	28,77290	4,35119
40	34,66391	1,49843	1,69662	2,34968	25,24870	3,87047
45	30,10798	1,31030	1,47592	2,05786	21,87647	3,38743
50	25,68103	1,12216	1,25671	1,76648	18,63023	2,90545
55	21,44987	0,93922	1,04439	1,48251	15,54697	2,43677
60	17,36913	0,76111	0,83838	1,20452	12,58600	1,97913
65	13,74061	0,60144	0,65433	0,95455	9,96142	1,56887
70	10,52464	0,45878	0,49129	0,73108	7,64156	1,20194
75	7,89713	0,34144	0,35727	0,54788	5,75056	0,89997

Table A8 continued.

AGE ***	INITIAL REGION OF COHORT			MIDDLE		
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	71.38778	3.53741	5.49291	2.36610	6.82577	53.16559
5	67.67630	3.57203	5.55194	2.39442	6.89990	49.25800
10	62.82782	3.49943	5.45332	2.35882	6.77895	44.73729
15	57.94800	3.39560	5.31446	2.30591	6.60463	40.32740
20	53.18199	3.24863	5.11100	2.22391	6.35420	36.24424
25	48.44619	3.04958	4.81800	2.09918	5.99491	32.48451
30	43.66609	2.80979	4.44535	1.93929	5.54329	28.92837
35	38.94855	2.54072	4.01548	1.75852	5.03238	25.60146
40	34.27483	2.25711	3.56038	1.56758	4.48968	22.40008
45	29.73530	1.97177	3.10280	1.37491	3.94235	19.34347
50	25.30872	1.68694	2.64631	1.18170	3.39475	16.39902
55	21.09947	1.41237	2.20465	0.99415	2.86537	13.62294
60	17.05359	1.14593	1.77610	0.81071	2.34911	10.97174
65	13.46348	0.90850	1.39436	0.64599	1.88740	8.62724
70	10.25898	0.69604	1.05289	0.49766	1.47182	6.54058
75	7.67321	0.52439	0.77497	0.37821	1.13711	4.85853

Table A9. Expectations of life by place of residence.

AGE ***	REGION OF RESIDENCE AT AGE X NORTH					
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	
0	71.30879	51.67293	3.65409	2.55706	5.62988	7.79483
5	67.67706	51.41149	3.06173	2.08911	4.63352	6.48120
10	62.82352	48.13290	2.78584	1.87215	4.17208	5.86056
15	57.89547	44.24594	2.63744	1.72508	3.90744	5.37956
20	53.13362	41.02422	2.35174	1.50925	3.43941	4.80900
25	48.37827	41.30771	1.43209	0.82172	1.91568	2.90107
30	43.60442	39.69043	0.72285	0.44697	1.04005	1.70411
35	38.88534	36.64328	0.38454	0.24698	0.56167	1.04887
40	34.22307	32.79650	0.23592	0.15262	0.35132	0.68671
45	29.70343	28.74975	0.15855	0.09847	0.23000	0.46665
50	25.28695	24.64968	0.10520	0.06442	0.15101	0.31664
55	21.10161	20.66042	0.07299	0.04481	0.10435	0.21903
60	17.03744	16.70848	0.06128	0.03831	0.07517	0.15420
65	13.44615	13.21142	0.04043	0.02550	0.05260	0.11620
70	10.24130	10.08818	0.02588	0.01511	0.03623	0.07590
75	7.65865	7.52857	0.02126	0.01249	0.02914	0.06719

AGE ***	REGION OF RESIDENCE AT AGE X BERLIN					
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	
0	71.13130	2.66977	52.85109	1.81468	4.67377	9.12198
5	67.32605	2.26636	51.76828	1.55981	4.09451	7.63709
10	62.43086	2.00759	48.61267	1.40243	3.72792	6.68025
15	57.50640	1.76430	45.36012	1.16627	3.27526	5.94046
20	52.67688	1.46987	42.40059	0.93753	2.70312	5.16578
25	47.84833	0.87216	41.34391	0.49266	1.57628	3.56331
30	43.01386	0.47263	38.82945	0.28279	0.96304	2.46594
35	38.23038	0.28888	35.61821	0.16042	0.55372	1.60915
40	33.50057	0.18633	31.77566	0.10059	0.34999	1.08800
45	28.91257	0.11609	27.79187	0.05746	0.21855	0.72860
50	24.50780	0.07790	23.76528	0.04729	0.15210	0.46522
55	20.31954	0.05471	19.86702	0.01974	0.09113	0.28693
60	16.37764	0.04820	16.06646	0.01318	0.04782	0.20198
65	12.87714	0.02855	12.68510	0.01022	0.03244	0.12082
70	9.79344	0.02010	9.65773	0.00805	0.02390	0.08368
75	7.23887	0.01801	7.12802	0.00471	0.01734	0.07080

Table A9 continued.

AGE ***	REGION OF RESIDENCE AT AGE X S.WEST					
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	71.69262	1.90851	2.15267	56.48540	7.17186	3.97418
5	68.07903	1.64169	1.87702	54.97083	6.18105	3.40845
10	63.21087	1.46364	1.69224	51.50185	5.51653	3.03640
15	58.32079	1.35625	1.60781	47.40491	5.12028	2.83155
20	53.54435	1.11491	1.33810	44.52671	4.25088	2.31374
25	48.79602	0.65208	0.83150	43.45370	2.54007	1.31868
30	43.97799	0.35504	0.38458	41.13054	1.39658	0.71125
35	39.27243	0.19195	0.20893	37.67688	0.79481	0.39986
40	34.58363	0.11580	0.13329	33.54132	0.53093	0.26228
45	30.02764	0.07354	0.08438	29.36679	0.33882	0.16410
50	25.50465	0.04945	0.04285	25.09595	0.21092	0.10548
55	21.21361	0.03187	0.02715	20.93572	0.14539	0.07348
60	17.10899	0.02330	0.02056	16.89532	0.11515	0.05466
65	13.45026	0.01399	0.01190	13.30213	0.08336	0.03888
70	10.27157	0.00961	0.00951	10.16512	0.05945	0.02788
75	7.67104	0.00739	0.00911	7.57925	0.05093	0.02436

AGE ***	REGION OF RESIDENCE AT AGE X SOUTH					
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	72.01115	2.29905	2.54362	3.59626	57.61449	5.95773
5	68.21788	1.93802	2.18992	3.08029	55.94118	5.06847
10	63.35617	1.70577	1.96327	2.74468	52.44969	4.49276
15	58.47311	1.57039	1.82485	2.52887	48.39011	4.15890
20	53.70369	1.23784	1.44318	2.00560	45.74434	3.27273
25	49.01258	0.79173	0.96826	1.26943	43.90930	2.07386
30	44.25459	0.43054	0.45823	0.69199	41.50629	1.16755
35	39.52396	0.24393	0.24077	0.40628	37.93929	0.69369
40	34.82455	0.15861	0.13644	0.26397	33.81877	0.44675
45	30.27141	0.09568	0.08455	0.16104	29.65314	0.27699
50	25.85526	0.05805	0.05306	0.10517	25.45461	0.18436
55	21.62247	0.03813	0.03788	0.07088	21.35124	0.12434
60	17.52982	0.02805	0.02286	0.05213	17.33855	0.08823
65	13.88770	0.01731	0.01590	0.03736	13.75209	0.06504
70	10.65926	0.01223	0.01312	0.02850	10.55698	0.04843
75	8.01275	0.00915	0.01079	0.02449	7.93060	0.03772

Table A9 continued.

AGE ***	REGION OF RESIDENCE AT AGE X				MIDDLE	
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	71.38778	3.53741	5.49291	2.36610	6.82577	53.16559
5	67.66775	3.00582	4.82886	2.04274	5.87232	51.91801
10	62.81614	2.66472	4.39587	1.83923	5.26715	48.64917
15	57.93563	2.44138	4.12939	1.69612	4.85991	44.80883
20	53.16489	1.75007	3.02513	1.13119	3.44118	43.81733
25	48.42649	1.28718	2.27716	0.75911	2.46727	41.63577
30	43.64878	0.72573	1.30302	0.40674	1.41390	39.79939
35	38.93938	0.41689	0.79432	0.23906	0.83437	36.65474
40	34.27740	0.25628	0.51840	0.15686	0.53451	32.81136
45	29.74630	0.15406	0.35072	0.09832	0.34283	28.80036
50	25.31968	0.09752	0.23358	0.06625	0.22533	24.69700
55	21.11456	0.06048	0.14836	0.04459	0.15672	20.70440
60	17.06569	0.04297	0.10687	0.03431	0.11169	16.76985
65	13.47487	0.03428	0.07706	0.02380	0.08013	13.25960
70	10.25168	0.02536	0.05280	0.01944	0.05270	10.10137
75	7.67179	0.01982	0.04244	0.01644	0.03886	7.55422

Table A10. Survivorship proportions.

	REGION	NORTH				

	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.98892	0.93535	0.00912	0.00672	0.01444	0.02329
5	0.99821	0.96978	0.00437	0.00362	0.00722	0.01322
10	0.99719	0.96668	0.00514	0.00402	0.00814	0.01321
15	0.99522	0.91818	0.01402	0.00994	0.02203	0.03105
20	0.99489	0.89637	0.01983	0.01222	0.02748	0.03899
25	0.99402	0.93555	0.01323	0.00693	0.01625	0.02406
30	0.99193	0.95822	0.00669	0.00387	0.00897	0.01418
35	0.98792	0.96829	0.00350	0.00220	0.00488	0.00905
40	0.98204	0.96814	0.00236	0.00151	0.00341	0.00662
45	0.97231	0.96167	0.00182	0.00109	0.00252	0.00521
50	0.95889	0.95102	0.00117	0.00067	0.00188	0.00418
55	0.93237	0.92545	0.00118	0.00068	0.00165	0.00341
60	0.88659	0.87896	0.00153	0.00096	0.00164	0.00352
65	0.81425	0.80757	0.00123	0.00076	0.00146	0.00323
70	1.32487	1.29713	0.00461	0.00270	0.00641	0.01402

	REGION	BERLIN				

	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.99023	0.00680	0.94164	0.00354	0.00858	0.02967
5	0.99824	0.00521	0.96120	0.00349	0.00758	0.02075
10	0.99737	0.00621	0.95690	0.00451	0.01049	0.01926
15	0.99581	0.01016	0.93007	0.00674	0.01799	0.03085
20	0.99531	0.01186	0.92195	0.00697	0.01935	0.03518
25	0.99458	0.00719	0.94517	0.00378	0.01211	0.02632
30	0.99282	0.00384	0.95899	0.00230	0.00794	0.01975
35	0.98907	0.00262	0.96610	0.00149	0.00490	0.01396
40	0.98192	0.00188	0.96459	0.00088	0.00333	0.01125
45	0.97077	0.00128	0.95687	0.00078	0.00257	0.00927
50	0.95395	0.00079	0.94321	0.00078	0.00249	0.00668
55	0.92346	0.00094	0.91507	0.00030	0.00171	0.00544
60	0.87450	0.00117	0.86712	0.00025	0.00102	0.00495
65	0.80028	0.00078	0.79473	0.00034	0.00096	0.00347
70	1.23995	0.00373	1.21580	0.00125	0.00404	0.01512

Table A10 continued.

	REGION	S.WEST				
	*****	*****				
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.98915	0.00440	0.00422	0.95341	0.01806	0.00906
5	0.99815	0.00284	0.00242	0.97576	0.01152	0.00562
10	0.99719	0.00389	0.00365	0.96748	0.01472	0.00745
15	0.99576	0.00774	0.00817	0.93364	0.02985	0.01635
20	0.99582	0.00879	0.01084	0.92472	0.03375	0.01772
25	0.99471	0.00558	0.00756	0.94916	0.02154	0.01087
30	0.99237	0.00317	0.00337	0.96843	0.01154	0.00586
35	0.98905	0.00177	0.00191	0.97500	0.00686	0.00351
40	0.98469	0.00114	0.00161	0.97380	0.00547	0.00267
45	0.97659	0.00085	0.00116	0.96891	0.00385	0.00182
50	0.96233	0.00065	0.00056	0.95746	0.00238	0.00128
55	0.93554	0.00058	0.00051	0.93124	0.00208	0.00114
60	0.88789	0.00056	0.00046	0.88328	0.00241	0.00118
65	0.81427	0.00041	0.00028	0.81036	0.00219	0.00103
70	1.32905	0.00166	0.00182	1.30962	0.01082	0.00512

	REGION	SOUTH				
	*****	*****				
	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.99064	0.00600	0.00529	0.00922	0.95388	0.01624
5	0.99817	0.00376	0.00334	0.00602	0.97486	0.01020
10	0.99729	0.00531	0.00536	0.00863	0.96399	0.01400
15	0.99557	0.00875	0.00902	0.01466	0.93845	0.02469
20	0.99518	0.00950	0.01124	0.01568	0.93367	0.02509
25	0.99483	0.00674	0.00886	0.01074	0.95118	0.01732
30	0.99314	0.00364	0.00431	0.00576	0.96964	0.00979
35	0.98942	0.00225	0.00235	0.00371	0.97475	0.00636
40	0.98311	0.00174	0.00146	0.00273	0.97261	0.00457
45	0.97402	0.00117	0.00097	0.00184	0.96688	0.00316
50	0.96169	0.00075	0.00078	0.00133	0.95641	0.00242
55	0.93648	0.00067	0.00069	0.00110	0.93208	0.00193
60	0.89250	0.00065	0.00045	0.00106	0.88855	0.00180
65	0.82410	0.00051	0.00041	0.00095	0.82040	0.00182
70	1.40054	0.00209	0.00234	0.00519	1.38248	0.00844

Table A10 continued.

	REGION	MIDDLE				

	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	0.98957	0.01031	0.01417	0.00510	0.01723	0.94276
5	0.99782	0.00667	0.00892	0.00341	0.01122	0.96760
10	0.99686	0.01142	0.01775	0.00730	0.02062	0.93977
15	0.99526	0.01442	0.02407	0.01006	0.02794	0.91877
20	0.99497	0.01288	0.02253	0.00812	0.02404	0.92740
25	0.99409	0.01128	0.02002	0.00621	0.02041	0.93616
30	0.99193	0.00651	0.01142	0.00328	0.01185	0.95888
35	0.98818	0.00405	0.00719	0.00210	0.00741	0.96743
40	0.98248	0.00278	0.00530	0.00155	0.00533	0.96752
45	0.97299	0.00193	0.00440	0.00110	0.00378	0.96178
50	0.95904	0.00136	0.00332	0.00080	0.00285	0.95071
55	0.93211	0.00088	0.00247	0.00070	0.00246	0.92561
60	0.88742	0.00086	0.00249	0.00067	0.00250	0.88090
65	0.81508	0.00098	0.00233	0.00060	0.00240	0.80876
70	1.32717	0.00442	0.00931	0.00351	0.00897	1.30095

Table A11. Multiregional population projection.

YEAR 1975

POPULATION

AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	958065.	130449.	62653.	147410.	384605.	232948.
5	1208179.	164503.	79009.	185894.	485010.	293763.
10	1424851.	204645.	92259.	212098.	554272.	361577.
15	1329414.	189898.	73156.	203787.	535508.	327065.
20	1320248.	188590.	72651.	202382.	531815.	324810.
25	964292.	116643.	66688.	153362.	407753.	219846.
30	1095315.	124046.	90215.	158742.	466059.	256253.
35	1328627.	168270.	100196.	197410.	537937.	324814.
40	1067476.	140364.	76735.	153749.	436268.	260360.
45	990012.	117915.	62934.	149926.	429621.	229616.
50	875372.	96209.	48528.	139022.	396536.	195077.
55	621547.	66299.	38995.	95091.	282475.	138687.
60	896141.	95490.	56860.	137037.	406848.	199906.
65	968333.	100051.	64747.	141890.	445774.	215871.
70	818135.	84113.	52249.	118205.	383328.	180240.
75	954242.	97898.	60299.	133800.	451037.	211208.
TOTAL	16820250.	2085383.	1098174.	2529805.	7134846.	3972041.

PERCENTAGE DISTRIBUTION

AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	5.6959	6.2554	5.7052	5.8269	5.3905	5.8647
5	7.1829	7.8884	7.1946	7.3482	6.7978	7.3958
10	8.4710	9.8133	8.4011	8.3840	7.7685	9.1031
15	7.9037	9.1061	6.6616	8.0554	7.5055	8.2342
20	7.8492	9.0434	6.6156	7.9999	7.4538	8.1774
25	5.7329	5.5934	6.0726	6.0622	5.7150	5.5348
30	6.5119	5.9484	8.2150	6.2749	6.5322	6.4514
35	7.8990	8.0690	9.1239	7.8034	7.5396	8.1775
40	6.3464	6.7308	6.9875	6.0775	6.1146	6.5548
45	5.8858	5.6544	5.7308	5.9264	6.0214	5.7808
50	5.2043	4.6135	4.4190	5.4954	5.5577	4.9113
55	3.6952	3.1792	3.5509	3.7588	3.9591	3.4916
60	5.3278	4.5790	5.1777	5.4169	5.7023	5.0328
65	5.7569	4.7977	5.8959	5.6087	6.2478	5.4348
70	4.8640	4.0335	4.7578	4.6725	5.3726	4.5377
75	5.6732	4.6945	5.4908	5.2889	6.3216	5.3174
TOTAL	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000
H.AG	37.0331	34.5597	37.1221	36.6895	38.3569	36.1480
SHA	100.0000	12.3981	6.5289	15.0402	42.4182	23.6146

Table A11 continued.

YEAR 1980

POPULATION						
AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	946381.	133580.	64206.	147152.	376461.	224981.
5	948378.	127798.	66145.	146377.	375967.	232091.
10	1205875.	164256.	81350.	186179.	480039.	294052.
15	1420804.	206295.	99499.	213865.	547523.	353623.
20	1323409.	186082.	85071.	203784.	523268.	325204.
25	1313902.	180923.	86209.	200933.	517767.	328070.
30	959013.	115454.	73747.	152370.	398341.	219101.
35	1087190.	123078.	92814.	157943.	458607.	254747.
40	1313805.	166072.	101365.	195671.	529427.	321269.
45	1049287.	137697.	76612.	151596.	427281.	256101.
50	964033.	114549.	62034.	146488.	417297.	223665.
55	840763.	92187.	46920.	133895.	380437.	187326.
60	580592.	61760.	36346.	89018.	264005.	129462.
65	796571.	84509.	50194.	121712.	362547.	177610.
70	792132.	81346.	52305.	115634.	366753.	176094.
75	1109402.	111097.	66704.	157720.	533589.	240292.
TOTAL	16651537.	2086684.	1141521.	2520338.	6959307.	3943688.

PERCENTAGE DISTRIBUTION

AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	5.6834	6.4016	5.6246	5.8386	5.4095	5.7048
5	5.6954	6.1245	5.7945	5.8078	5.4024	5.8851
10	7.2418	7.8716	7.1265	7.3871	6.8978	7.4563
15	8.5326	9.8863	8.7163	8.4856	7.8675	8.9668
20	7.9477	8.9176	7.4524	8.0856	7.5190	8.2462
25	7.8906	8.6703	7.5521	7.9725	7.4399	8.3189
30	5.7593	5.5329	6.4604	6.0456	5.7239	5.5557
35	6.5291	5.8983	8.1307	6.2668	6.5898	6.4596
40	7.8900	7.9587	8.8798	7.7637	7.6075	8.1464
45	6.3014	6.5988	6.7114	6.0149	6.1397	6.4939
50	5.7895	5.4895	5.4343	5.8122	5.9962	5.6715
55	5.0492	4.4179	4.1103	5.3126	5.4666	4.7500
60	3.4867	2.9597	3.1840	3.5320	3.7935	3.2828
65	4.7838	4.0499	4.3971	4.8292	5.2095	4.5036
70	4.7571	3.8983	4.5821	4.5881	5.2700	4.4652
75	6.6625	5.3241	5.8434	6.2579	7.6673	6.0931
TOTAL	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000
M.AG	37.5557	35.2094	36.8806	37.2227	38.9397	36.7630
SHA	102.0000	12.5315	6.8553	15.1358	41.7938	23.6836
LAM	0.969970	1.000624	1.039472	0.996258	0.975397	0.992862

Table A11 continued.

YEAR 1985						
POPULATION						
AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	1011323.	141448.	72384.	160861.	398486.	238144.
5	936806.	130606.	67479.	146042.	368115.	224565.
10	946570.	127659.	67816.	146575.	372228.	232291.
15	1202456.	165918.	87162.	187443.	473746.	288188.
20	1414369.	201972.	110632.	213976.	536421.	351388.
25	1317051.	178758.	97538.	202155.	510015.	328585.
30	1306671.	177831.	96549.	199895.	507498.	324898.
35	951888.	114274.	76226.	151189.	392223.	217975.
40	1075094.	121762.	93309.	156639.	451054.	252330.
45	1291427.	163012.	100956.	192829.	518612.	316017.
50	1021667.	133640.	75274.	148164.	415226.	249363.
55	925801.	109698.	59795.	141117.	400460.	214731.
60	785425.	85857.	43836.	125316.	355569.	174847.
65	516091.	54658.	32093.	79062.	235256.	115022.
70	651627.	68694.	40591.	99164.	298301.	144876.
75	1073672.	107450.	66677.	154246.	510592.	234707.
TOTAL	16427958.	2083237.	1188318.	2504673.	6743803.	3907928.
PERCENTAGE DISTRIBUTION						
AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	6.1561	6.7898	6.0913	6.4224	5.9089	6.0939
5	5.7025	6.2694	5.6785	5.8308	5.4586	5.7464
10	5.7619	6.1279	5.7069	5.8521	5.5196	5.9441
15	7.3196	7.9644	7.3349	7.4837	7.0249	7.3744
20	8.6096	9.6951	9.3099	8.5431	7.9543	8.9917
25	8.0171	8.5808	8.2081	8.0711	7.5627	8.4082
30	7.9539	8.5363	8.1249	7.9809	7.5254	8.3138
35	5.7943	5.4854	6.4146	6.0363	5.8161	5.5778
40	6.5443	5.8448	7.8522	6.2539	6.6884	6.4569
45	7.8612	7.8249	8.4957	7.6988	7.6902	8.0866
50	6.2191	6.4150	6.3345	5.9155	6.1572	6.3810
55	5.6355	5.2657	5.0319	5.6341	5.9382	5.4948
60	4.7810	4.1213	3.6889	5.0033	5.2725	4.4742
65	3.1415	2.6237	2.7007	3.1566	3.4885	2.9433
70	3.9666	3.2975	3.4159	3.9592	4.4233	3.7072
75	6.5356	5.1579	5.6111	6.1583	7.5713	6.0059
TOTAL	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000
M.AG	37.5529	35.5036	36.5184	37.1991	38.8398	36.9661
SHA	100.0000	12.6810	7.2335	15.2464	41.0508	23.7483
LAM	0.986573	0.998348	1.040995	0.993785	0.969834	0.990932

Table A11 continued.

YEAR 1990

POPULATION

AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	1020728	136429	82384	166922	403800	231193
5	1001089	138349	75613	159464	389783	237882
10	935021	130308	69016	146190	364515	224992
15	943885	129026	72203	147537	367521	227598
20	1197035	162979	96134	187084	463457	287381
25	1407591	193856	122267	212371	524200	354897
30	1309802	175852	107179	201002	500264	325506
35	1296914	175368	100349	198484	500609	322104
40	941291	112883	76820	149686	385903	215999
45	1056786	119725	92539	154425	441627	248470
50	1257438	158274	99014	188396	504044	307710
55	981004	127898	72390	142762	398625	239328
60	864696	102116	55723	132099	374366	200391
65	698230	75965	38795	111276	316864	155331
70	422193	44430	25959	64415	193566	93823
75	883195	90688	51896	132161	415371	193079
TOTAL	16216899	2074146	1238282	2494274	6544515	3865682

PERCENTAGE DISTRIBUTION

AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	6.2942	6.5776	6.6531	6.6922	6.1701	5.9807
5	6.1731	6.6702	6.1063	6.3932	5.9559	6.1537
10	5.7657	6.2825	5.5735	5.8610	5.5698	5.8202
15	5.8204	6.2207	5.8309	5.9150	5.6157	5.8877
20	7.3814	7.8577	7.7635	7.5005	7.0816	7.4342
25	8.6798	9.3463	9.8739	8.5144	8.0098	9.1807
30	8.0768	8.4783	8.6555	8.0585	7.6440	8.4204
35	7.9973	8.4550	8.1039	7.9576	7.6493	8.3324
40	5.8044	5.4624	6.2037	6.0012	5.8956	5.5876
45	6.5166	5.7723	7.4732	6.1912	6.7480	6.4276
50	7.7539	7.6308	7.9961	7.5531	7.7018	7.9600
55	6.0493	6.1663	5.8460	5.7236	6.0910	6.1911
60	5.3321	4.9233	4.5001	5.2961	5.7203	5.1838
65	4.3056	3.6625	3.1330	4.4612	4.8417	4.0182
70	2.6034	2.1421	2.0964	2.5825	2.9577	2.4271
75	5.4461	4.3723	4.1910	5.2986	6.3469	4.9947
TOTAL	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000
M.AG	37.4897	35.9003	36.0964	37.0946	38.5923	37.1770
SHA	100.0000	12.7900	7.6358	15.3807	40.3561	23.8374
LAM	0.987152	0.995636	1.042047	0.995848	0.970449	0.989191

Table A11 continued.

YEAR 1995						
POPULATION						
AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	959331	120508	85929	162106	385380	205407
5	1010409	133708	84958	165258	394855	231650
10	999183	138068	77091	159519	386060	238445
15	932371	131468	73193	147061	359964	220686
20	939631	126841	78962	147192	359804	226831
25	1191291	156979	105574	185262	452277	291199
30	1399835	190574	131481	211213	515058	351509
35	1300021	173494	110509	199533	493681	322804
40	1282420	172053	101432	196590	493065	318480
45	925284	110876	76314	147392	377944	212759
50	1028966	116382	90465	150915	429075	242129
55	1207361	151516	95097	181483	483938	295327
60	916044	118993	67331	133662	372771	223287
65	768508	90308	49203	117322	333684	177990
70	571243	61737	31448	90639	260722	126697
75	572279	58656	33211	85846	269529	125037
TOTAL	16004176	2052961	1292179	2480994	6367808	3810235
PERCENTAGE DISTRIBUTION						
AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	5.9943	5.8700	6.6500	6.5339	6.0520	5.3909
5	6.3134	6.5130	6.5733	6.6610	6.2008	6.0797
10	6.2433	6.7253	5.9660	6.4296	6.0627	6.2580
15	5.8258	6.4038	5.6643	5.9275	5.6529	5.7919
20	5.8712	6.1785	6.1108	5.9328	5.6504	5.9532
25	7.4436	7.6465	8.1703	7.4672	7.1026	7.6425
30	8.7467	9.2829	10.1752	8.5133	8.0885	9.2254
35	8.1230	8.4509	8.5522	8.0425	7.7528	8.4720
40	8.0130	8.4197	7.8497	7.9238	7.7431	8.3585
45	5.7815	5.4008	5.9058	5.9409	5.9352	5.5839
50	6.4294	5.6690	7.0010	6.0829	6.7382	6.3547
55	7.5440	7.3804	7.3594	7.3149	7.5998	7.7509
60	5.7238	5.7962	5.2106	5.3874	5.8540	5.8602
65	4.8019	4.3989	3.8077	4.7288	5.2402	4.6714
70	3.5693	3.0072	2.4337	3.6534	4.0944	3.3252
75	3.5758	2.8572	2.5701	3.4602	4.2327	3.2816
TOTAL	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000
M.AG	37.7228	36.6256	36.1637	37.1536	38.5861	37.7705
SHA	100.0000	12.8277	8.0740	15.5022	39.7884	23.8078
LAM	0.986883	0.989786	1.043525	0.994676	0.972999	0.985656

Table A11 continued.

YEAR 2000						
POPULATION						
AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	853854.	108011.	79748.	144766.	338923.	182407.
5	949647.	118444.	87648.	160270.	376553.	206732.
10	1008488.	133611.	86010.	165198.	391038.	232631.
15	996352.	139339.	81363.	160308.	381354.	233987.
20	928169.	128924.	79678.	146598.	352577.	220391.
25	935123.	122267.	86064.	145695.	351373.	229724.
30	1184738.	154672.	113099.	183996.	443961.	289010.
35	1389372.	187949.	134308.	209705.	508778.	348631.
40	1285492.	171054.	111232.	197600.	486365.	319242.
45	1260568.	169507.	108971.	193631.	483259.	313201.
50	900966.	107701.	74697.	143922.	367274.	207372.
55	987974.	111500.	86687.	145409.	411861.	232516.
60	1127349.	141021.	88353.	169877.	452586.	275533.
65	813904.	105175.	59350.	118736.	332368.	198275.
70	628506.	73361.	39799.	95583.	274620.	145142.
75	774553.	81455.	40475.	120708.	363083.	168832.
TOTAL	16025057.	2053972.	1349484.	2502002.	6315973.	3803626.

PERCENTAGE DISTRIBUTION						
AGE	TOTAL	NORTH	BERLIN	S.WEST	SOUTH	MIDDLE
0	5.3282	5.2586	5.9095	5.7860	5.3661	4.7956
5	5.9260	5.7666	6.4950	6.4057	5.9619	5.4351
10	6.2932	6.5050	6.3736	6.6026	6.1913	6.1160
15	6.2175	6.7839	6.0292	6.4072	6.0379	6.1517
20	5.7920	6.2768	5.9044	5.8592	5.5823	5.7942
25	5.8354	5.9527	6.3776	5.8232	5.5632	6.0396
30	7.3930	7.5304	8.3809	7.3539	7.0292	7.5983
35	8.6700	9.1505	9.9526	8.3815	8.0554	9.1658
40	8.0218	8.3280	8.2426	7.8977	7.7005	8.3931
45	7.8662	8.2526	7.4822	7.7390	7.6514	8.2343
50	5.6222	5.2436	5.5352	5.7523	5.8150	5.4519
55	6.1652	5.4285	6.4237	5.8117	6.5209	6.1130
60	7.0349	6.8648	6.5472	6.7896	7.1657	7.2440
65	5.0789	5.1206	4.3980	4.7456	5.2623	5.2128
70	3.9220	3.5717	2.9492	3.8203	4.3480	3.8159
75	4.8334	3.9657	2.9993	4.8245	5.7486	4.4387
TOTAL	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000
M.AG	39.0711	38.2358	37.2050	38.3742	39.8508	39.3480
SHA	100.0000	12.8173	8.4211	15.6131	39.4131	23.7355
LAM	1.001305	1.000493	1.044347	1.008468	0.991860	0.998265



GUIDE FOR APPENDIX III.A

<u>Region No.</u>	<u>Name</u>
1	Rostock
2	Schwerin
3	Neubrandenburg
4	Potsdam
5	Frankfurt
6	Cottbus
7	Magdeburg
8	Halle
9	Erfurt
10	Gera
11	Suhl
12	Dresden
13	Leipzig
14	Karl-Marx-Stadt
15	Berlin

APPENDIX III.A Demographic Data for the GDR, 15 Regions (1975)

region 1		migration from region 1 to:																
age	population	births	deaths	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	55635.	0.	233.	0.	158.	156.	74.	79.	52.	67.	68.	43.	28.	16.	58.	40.	53.	139.
5	70159.	0.	34.	0.	85.	84.	40.	42.	28.	36.	36.	23.	15.	5.	31.	22.	28.	74.
10	85463.	1.	24.	0.	101.	58.	46.	58.	27.	42.	39.	31.	7.	3.	11.	21.	19.	67.
15	77520.	1804.	59.	0.	91.	85.	56.	50.	35.	49.	49.	27.	15.	11.	35.	34.	44.	91.
20	76986.	5686.	79.	0.	323.	301.	199.	175.	122.	171.	94.	54.	40.	123.	118.	155.	323.	
25	50030.	2100.	46.	0.	134.	138.	60.	66.	63.	68.	73.	42.	30.	18.	55.	42.	45.	166.
30	56073.	867.	76.	0.	90.	68.	36.	54.	29.	38.	47.	30.	11.	8.	29.	37.	43.	128.
35	73532.	368.	129.	0.	57.	34.	34.	22.	30.	33.	23.	23.	6.	4.	29.	16.	8.	74.
40	59688.	72.	176.	0.	33.	39.	26.	20.	15.	13.	28.	12.	9.	3.	1.	12.	9.	17.
45	48859.	0.	210.	0.	18.	15.	13.	13.	9.	6.	8.	4.	1.	1.	0.	6.	4.	2.
50	38996.	0.	311.	0.	24.	24.	8.	4.	4.	8.	10.	3.	0.	1.	1.	1.	1.	4.
55	27184.	0.	273.	0.	6.	4.	1.	8.	4.	6.	2.	1.	1.	1.	1.	2.	1.	5.
60	38723.	0.	720.	0.	16.	7.	4.	8.	5.	2.	2.	1.	5.	1.	4.	3.	5.	9.
65	39921.	0.	1216.	0.	7.	17.	8.	8.	4.	2.	6.	2.	3.	0.	5.	4.	5.	8.
70	32738.	0.	1689.	0.	15.	17.	4.	3.	2.	1.	3.	1.	1.	0.	3.	0.	2.	8.
75	37257.	0.	4915.	0.	18.	26.	9.	6.	3.	6.	3.	3.	0.	2.	5.	0.	0.	15.
tot	8686674.	10898.	10190.	0.	1170.	1053.	612.	624.	430.	565.	536.	336.	181.	112.	412.	358.	445.	1170.
region 2		migration from region 2 to:																
age	population	births	deaths	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
region 2		migration from region 2 to:																
age	population	births	deaths	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	35955.	0.	142.	226.	0.	93.	90.	37.	32.	72.	37.	31.	23.	11.	36.	20.	42.	81.
5	45341.	0.	20.	131.	0.	54.	52.	22.	19.	42.	22.	18.	13.	7.	21.	11.	24.	46.
10	56802.	0.	14.	93.	0.	41.	39.	15.	16.	24.	28.	17.	7.	6.	9.	22.	14.	19.
15	52902.	1191.	42.	136.	0.	65.	58.	32.	25.	46.	29.	24.	30.	11.	29.	26.	28.	75.
20	52537.	3824.	60.	423.	0.	200.	178.	99.	99.	144.	88.	76.	92.	36.	88.	81.	88.	232.
25	32623.	1302.	37.	226.	0.	58.	50.	31.	34.	66.	45.	22.	16.	16.	39.	24.	28.	103.
30	33767.	487.	49.	126.	0.	40.	48.	26.	23.	30.	19.	23.	7.	4.	17.	19.	14.	40.
35	45785.	239.	88.	79.	0.	49.	30.	9.	11.	28.	14.	9.	5.	6.	11.	24.	7.	24.
40	37822.	63.	106.	42.	0.	28.	18.	6.	3.	14.	9.	5.	4.	6.	5.	4.	6.	17.
45	33417.	3.	148.	25.	0.	14.	14.	5.	4.	11.	5.	4.	1.	1.	10.	6.	3.	15.
50	28650.	0.	181.	19.	0.	12.	6.	1.	6.	4.	3.	2.	1.	1.	4.	2.	2.	6.
55	20147.	0.	199.	7.	0.	5.	4.	0.	2.	4.	2.	0.	0.	1.	4.	0.	1.	2.
60	28402.	0.	515.	11.	0.	4.	10.	1.	3.	7.	4.	3.	2.	2.	4.	2.	9.	14.
65	29815.	0.	881.	8.	0.	4.	13.	4.	3.	8.	4.	3.	1.	2.	3.	0.	1.	15.
70	25270.	0.	1405.	18.	0.	11.	8.	1.	6.	4.	3.	1.	2.	0.	3.	0.	5.	7.
75	31112.	0.	3950.	27.	0.	17.	18.	8.	4.	10.	6.	1.	6.	1.	6.	4.	1.	5.
tot	590347.	7109.	7837.	1597.	0.	686.	654.	297.	270.	514.	311.	244.	215.	103.	290.	246.	262.	701.

GUIDE FOR APPENDIX III.A

<u>Region No.</u>	<u>Name</u>
1	Rostock
2	Schwerin
3	Neubrandenburg
4	Potsdam
5	Frankfurt
6	Cottbus
7	Magdeburg
8	Halle
9	Erfurt
10	Gera
11	Suhl
12	Dresden
13	Leipzig
14	Karl-Marx-Stadt
15	Berlin

APPENDIX III.A continued.

region 3	age population	births	deaths	migration from region										15				
				2	3	4	5	6	7	8	9	10	11	12				
0	38859.	0.	144.	194.	82.	0.	137.	136.	41.	47.	51.	31.	62.	8.	29.			
5	49003.	0.	22.	112.	48.	0.	79.	79.	23.	27.	29.	18.	36.	4.	32.			
10	62380.	0.	13.	82.	68.	0.	103.	97.	8.	24.	30.	17.	36.	2.	24.			
15	59477.	2105.	66.	133.	58.	0.	80.	99.	35.	33.	38.	25.	40.	7.	37.			
20	59066.	4040.	57.	411.	179.	0.	248.	307.	109.	102.	118.	79.	122.	23.	14.			
25	33990.	1050.	36.	199.	61.	0.	111.	87.	27.	51.	47.	27.	38.	10.	35.			
30	34206.	542.	47.	108.	41.	0.	61.	57.	30.	18.	23.	18.	24.	3.	26.			
35	48953.	280.	96.	64.	34.	0.	76.	65.	11.	20.	22.	15.	23.	0.	22.			
40	42854.	61.	141.	51.	18.	0.	44.	33.	9.	10.	5.	12.	1.	12.	1.	23.		
45	35639.	0.	143.	23.	13.	0.	23.	26.	5.	10.	3.	2.	5.	3.	6.	9.		
50	28653.	0.	184.	15.	15.	0.	19.	21.	4.	5.	4.	3.	5.	3.	5.	10.		
55	18968.	0.	179.	10.	4.	0.	10.	9.	3.	2.	0.	1.	1.	2.	4.	1.		
60	28365.	0.	530.	9.	2.	0.	11.	7.	4.	3.	7.	2.	2.	3.	0.	1.		
65	30315.	0.	936.	13.	2.	0.	11.	22.	6.	6.	6.	3.	3.	3.	2.	12.		
70	26105.	0.	1450.	30.	12.	0.	8.	11.	3.	3.	4.	2.	1.	1.	2.	7.		
75	29529.	0.	3918.	30.	25.	0.	16.	27.	4.	4.	3.	3.	2.	1.	5.	2.		
tot	626362.	8078.	7962.	1484.	662.	0.	1037.	1083.	322.	365.	384.	254.	412.	72.	387.	284.		
region 4	age population	births	deaths	migration from region										15				
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	63534.	0.	205.	53.	59.	102.	0.	109.	71.	106.	84.	31.	21.	14.	14.	47.	50.	298.
5	89120.	0.	51.	49.	45.	77.	0.	81.	54.	80.	63.	24.	15.	10.	10.	36.	37.	224.
10	103844.	1.	43.	42.	53.	58.	0.	104.	43.	76.	60.	27.	12.	9.	9.	37.	37.	229.
15	92014.	1999.	87.	140.	113.	159.	0.	227.	140.	232.	155.	93.	59.	112.	112.	101.	92.	828.
20	91379.	6030.	94.	89.	73.	102.	0.	145.	90.	149.	100.	59.	40.	37.	37.	71.	71.	539.
25	58592.	2131.	60.	67.	64.	90.	0.	112.	52.	82.	97.	36.	16.	17.	17.	64.	64.	431.
30	73605.	983.	111.	44.	37.	51.	0.	63.	51.	63.	51.	24.	15.	4.	15.	52.	52.	312.
35	93668.	430.	168.	35.	27.	51.	0.	80.	33.	45.	39.	18.	11.	8.	8.	36.	32.	212.
40	76161.	77.	220.	24.	22.	57.	0.	57.	28.	32.	25.	6.	7.	5.	22.	18.	18.	110.
45	64880.	4.	274.	14.	16.	0.	36.	19.	20.	19.	7.	2.	2.	2.	2.	10.	11.	95.
50	51934.	0.	37.	8.	10.	7.	0.	15.	5.	11.	10.	3.	2.	2.	2.	11.	6.	63.
55	38427.	0.	401.	3.	2.	0.	4.	3.	4.	3.	4.	1.	0.	3.	3.	4.	1.	3.
60	57434.	0.	1085.	7.	4.	2.	0.	19.	4.	11.	4.	1.	6.	4.	1.	6.	4.	42.
65	62739.	0.	1823.	1.	7.	12.	0.	11.	8.	6.	13.	4.	2.	3.	3.	5.	5.	55.
70	51690.	0.	2745.	1.	5.	11.	0.	17.	4.	7.	6.	6.	0.	2.	2.	3.	6.	3.
75	60536.	0.	7882.	10.	7.	10.	0.	31.	12.	26.	10.	7.	7.	0.	3.	3.	5.	61.
tot	1120557.	11655.	15626.	578.	545.	775.	0.	1102.	617.	950.	751.	350.	214.	181.	517.	458.	350.	3544.

GUIDE FOR APPENDIX III.A

<u>Region No.</u>	<u>Name</u>
1	Rostock
2	Schwerin
3	Neubrandenburg
4	Potsdam
5	Frankfurt
6	Cottbus
7	Magdeburg
8	Halle
9	Erfurt
10	Gera
11	Suhl
12	Dresden
13	Leipzig
14	Karl-Marx-Stadt
15	Berlin

APPENDIX III.A continued.

region 5		age population		births deaths		migration from region		5 to:					
		1	2	3	4	5	6	7	8	9	10	11	12
0	41661.	0.	172.	50.	23.	48.	96.	0.	63.	28.	50.	31.	17.
5	52538.	0.	19.	38.	17.	37.	73.	0.	47.	21.	38.	23.	13.
10	66521.	0.	27.	30.	21.	36.	138.	0.	57.	15.	46.	29.	14.
15	58676.	1504.	47.	78.	40.	94.	203.	0.	126.	71.	85.	59.	54.
20	58272.	4159.	48.	55.	28.	66.	142.	0.	89.	49.	59.	41.	37.
25	38441.	1442.	35.	60.	22.	34.	71.	0.	49.	36.	57.	35.	17.
30	44835.	624.	64.	37.	21.	22.	59.	0.	40.	17.	22.	21.	9.
35	58719.	288.	107.	24.	14.	22.	66.	0.	32.	9.	22.	12.	11.
40	47773.	136.	14.	9.	13.	48.	20.	0.	20.	6.	12.	8.	2.
45	39342.	4.	153.	6.	3.	14.	30.	0.	11.	5.	12.	5.	4.
50	30926.	0.	197.	3.	3.	3.	9.	0.	12.	4.	6.	2.	1.
55	21375.	0.	206.	1.	0.	3.	9.	0.	6.	4.	7.	1.	1.
60	31170.	0.	563.	0.	0.	2.	12.	0.	1.	2.	0.	2.	1.
65	34522.	0.	1092.	5.	2.	6.	14.	0.	3.	3.	0.	1.	2.
70	29368.	0.	1565.	2.	2.	6.	15.	0.	6.	1.	2.	1.	3.
75	34744.	0.	4612.	7.	4.	10.	21.	0.	16.	9.	8.	1.	6.
tot	688883.	80880.	90443.	418.	209.	416.	1006.	0.	586.	279.	460.	268.	199.
region 6		age population		births deaths		migration from region		5 to:					
		1	2	3	4	5	6	7	8	9	10	11	12
0	53807.	0.	220.	43.	17.	26.	79.	55.	0.	47.	60.	31.	29.
5	67855.	0.	29.	33.	13.	20.	60.	42.	0.	36.	45.	23.	22.
10	79544.	1.	38.	23.	20.	15.	63.	44.	0.	30.	28.	17.	17.
15	72524.	1845.	57.	84.	32.	37.	121.	93.	0.	63.	43.	116.	63.
20	72023.	5248.	88.	67.	25.	30.	97.	75.	0.	50.	51.	92.	51.
25	48680.	1843.	51.	53.	21.	10.	68.	60.	0.	48.	80.	43.	33.
30	57930.	854.	82.	43.	26.	21.	58.	53.	0.	45.	44.	18.	15.
35	72684.	365.	146.	22.	16.	17.	40.	36.	0.	19.	31.	15.	16.
40	56190.	58.	166.	12.	9.	4.	24.	20.	0.	9.	11.	14.	8.
45	49638.	0.	217.	7.	5.	1.	16.	11.	0.	7.	11.	7.	4.
50	43234.	0.	293.	10.	2.	3.	7.	7.	0.	4.	8.	3.	8.
55	29046.	0.	275.	2.	1.	2.	3.	4.	0.	5.	1.	0.	1.
60	41888.	0.	692.	3.	1.	0.	11.	9.	0.	3.	8.	1.	2.
65	44975.	0.	1286.	6.	2.	0.	9.	10.	0.	6.	14.	3.	1.
70	38560.	0.	1950.	0.	5.	3.	6.	8.	0.	3.	6.	2.	2.
75	44408.	0.	5587.	4.	3.	5.	20.	10.	0.	6.	12.	7.	8.
tot	872986.	10214.	11177.	412.	198.	194.	682.	537.	0.	382.	571.	299.	260.

GUIDE FOR APPENDIX III.A

Region No. Name

1	Rostock
2	Schwerin
3	Neubrandenburg
4	Potsdam
5	Frankfurt
6	Cottbus
7	Magdeburg
8	Halle
9	Erfurt
10	Gera
11	Suhl
12	Dresden
13	Leipzig
14	Karl-Marx-Stadt
15	Berlin

APPENDIX III.A continued

region 7		migration from region 7 to:																	
	age population	births	deaths	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
0	73946.	0.	267.	81.	78.	39.	132.	58.	66.	0.	176.	40.	38.	25.	50.	58.	36.	109.	
5	93250.	0.	39.	61.	59.	29.	99.	43.	50.	0.	133.	30.	29.	18.	38.	43.	27.	82.	
10	1116668.	1.	39.	33.	48.	28.	85.	41.	37.	0.	104.	35.	30.	11.	27.	44.	28.	41.	
15	103852.	2367.	89.	176.	143.	114.	289.	131.	134.	0.	444.	132.	90.	96.	142.	147.	100.	260.	
20	103135.	6849.	111.	112.	91.	73.	186.	84.	86.	0.	284.	84.	58.	61.	91.	94.	64.	167.	
25	74133.	2511.	68.	132.	69.	35.	127.	43.	43.	0.	201.	58.	41.	32.	61.	71.	51.	192.	
30	79883.	990.	104.	61.	42.	32.	93.	51.	48.	0.	116.	37.	27.	14.	45.	40.	25.	73.	
35	99743.	466.	177.	32.	36.	18.	78.	31.	26.	0.	66.	25.	14.	7.	22.	38.	17.	64.	
40	80236.	107.	239.	19.	16.	14.	39.	21.	13.	0.	50.	11.	14.	10.	14.	14.	17.	29.	
45	75756.	2.	310.	14.	14.	4.	24.	13.	10.	0.	29.	6.	5.	3.	12.	10.	17.	17.	
50	68983.	0.	466.	10.	7.	3.	13.	9.	12.	0.	14.	8.	6.	4.	5.	6.	4.	15.	
55	49639.	0.	499.	3.	4.	4.	10.	8.	3.	0.	17.	5.	4.	1.	2.	8.	3.	4.	
60	69414.	0.	1348.	9.	3.	2.	10.	8.	8.	0.	18.	10.	2.	1.	1.	8.	6.	6.	
65	73635.	0.	2264.	6.	1.	2.	9.	6.	6.	0.	29.	7.	4.	0.	4.	8.	6.	14.	
70	60622.	0.	3474.	9.	4.	0.	17.	5.	5.	0.	21.	9.	2.	2.	6.	8.	4.	19.	
75	71520.	0.	9446.	10.	3.	0.	20.	12.	5.	0.	38.	12.	5.	4.	3.	7.	7.	26.	
tot	1289615.	13293.	18940.	768.	609.	397.	1231.	564.	586.	0.	1740.	509.	369.	291.	514.	602.	405.	1118.	
region 8		migration from region 8 to:																	
	age population	births	deaths	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
0	106205.	0.	378.	88.	53.	50.	117.	83.	116.	215.	0.	140.	134.	55.	80.	268.	101.	145.	
5	133932.	0.	54.	70.	42.	39.	93.	65.	91.	169.	0.	111.	105.	44.	64.	211.	80.	114.	
10	154954.	0.	57.	47.	41.	28.	77.	53.	47.	132.	0.	102.	74.	34.	45.	151.	55.	89.	
15	148359.	4.	114.	66.	66.	59.	143.	98.	147.	271.	0.	201.	146.	65.	110.	323.	122.	188.	
20	147335.	3427.	159.	222.	127.	113.	276.	189.	283.	522.	0.	388.	282.	126.	126.	235.	363.	363.	
25	116404.	9714.	101.	132.	74.	52.	139.	121.	139.	258.	0.	180.	163.	71.	133.	121.	287.	147.	
30	123460.	3612.	141.	64.	41.	38.	116.	62.	72.	166.	0.	93.	97.	46.	63.	251.	77.	147.	
35	144588.	1598.	232.	46.	33.	31.	74.	56.	40.	108.	0.	87.	56.	32.	37.	136.	55.	74.	
40	117660.	632.	349.	32.	17.	9.	35.	25.	27.	48.	0.	52.	37.	30.	26.	35.	35.	45.	
45	114646.	131.	507.	19.	10.	8.	16.	27.	29.	54.	0.	25.	25.	18.	22.	60.	32.	32.	
50	103942.	0.	713.	13.	11.	4.	19.	9.	22.	41.	0.	19.	22.	9.	22.	13.	45.	21.	
55	72514.	0.	688.	9.	3.	5.	13.	7.	7.	22.	0.	11.	6.	5.	4.	22.	7.	7.	
60	101858.	0.	1845.	14.	8.	9.	17.	6.	11.	29.	0.	27.	9.	8.	17.	35.	15.	10.	
65	107752.	0.	3431.	9.	6.	10.	18.	14.	10.	38.	0.	22.	12.	7.	19.	39.	11.	9.	
70	89047.	0.	4782.	8.	6.	3.	12.	15.	11.	46.	0.	18.	14.	7.	6.	30.	13.	16.	
75	99860.	0.	12900.	12.	3.	9.	24.	13.	16.	67.	0.	43.	29.	12.	21.	49.	24.	28.	
tot	1876516.	19118.	26451.	901.	467.	1200.	832.	1068.	2186.	0.	1519.	1211.	569.	872.	2695.	992.	1567.		

GUIDE FOR APPENDIX III.A

<u>Region No.</u>	<u>Name</u>
1	Rostock
2	Schwerin
3	Neubrandenburg
4	Potsdam
5	Frankfurt
6	Cottbus
7	Magdeburg
8	Halle
9	Erfurt
10	Gera
11	Suhl
12	Dresden
13	Leipzig
14	Karl-Marx-Stadt
15	Berlin

APPENDIX III.A continued

region 9			age population			births			deaths			migration from region 9 to 10			age population			births			deaths			migration from region 10 to 11					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	74040.	0.	296.	37.	28.	21.	51.	41.	32.	60.	115.	0.	115.	61.	58.	46.	46.	73.	90.	91.	131.	48.	46.	37.	58.	37.			
5	93369.	0.	39.	29.	22.	16.	41.	33.	26.	48.	90.	0.	91.	92.	102.	37.	41.	29.	92.	102.	119.	153.	78.	94.	77.	113.			
10	105846.	0.	36.	21.	17.	14.	25.	24.	16.	37.	68.	0.	0.	0.	127.	0.	0.	0.	127.	104.	157.	251.	233.	154.	186.	151.	221.		
15	101821.	2.	82.	64.	29.	30.	64.	51.	53.	80.	101.	0.	0.	0.	147.	0.	0.	0.	147.	95.	147.	222.	222.	159.	159.	156.	156.		
20	101118.	2457.	99.	127.	57.	60.	126.	101.	104.	157.	101.	0.	0.	0.	111.	0.	0.	0.	111.	42.	72.	64.	64.	72.	72.	47.	72.		
25	76470.	6780.	62.	57.	37.	30.	54.	55.	46.	95.	54.	0.	0.	0.	111.	0.	0.	0.	111.	42.	64.	64.	64.	64.	64.	47.	64.		
30	77940.	2812.	99.	36.	18.	14.	39.	18.	23.	50.	59.	0.	0.	0.	111.	0.	0.	0.	111.	23.	59.	59.	59.	59.	59.	23.	59.		
35	95432.	1175.	165.	30.	14.	14.	24.	15.	19.	59.	62.	0.	0.	0.	111.	0.	0.	0.	111.	23.	59.	59.	59.	59.	59.	23.	59.		
40	73997.	572.	201.	8.	5.	1.	9.	7.	4.	23.	44.	0.	0.	0.	111.	0.	0.	0.	111.	23.	34.	34.	34.	34.	34.	23.	34.		
45	72395.	114.	231.	0.	10.	4.	8.	4.	7.	11.	23.	0.	0.	0.	111.	0.	0.	0.	111.	23.	34.	34.	34.	34.	34.	23.	34.		
50	67194.	0.	428.	5.	3.	0.	6.	0.	6.	7.	14.	0.	0.	0.	111.	0.	0.	0.	111.	6.	14.	14.	14.	14.	14.	10.	14.		
55	47211.	0.	439.	2.	1.	0.	3.	2.	2.	3.	6.	0.	0.	0.	111.	0.	0.	0.	111.	6.	15.	15.	15.	15.	15.	1.	15.		
60	67121.	0.	1205.	5.	0.	5.	7.	1.	1.	6.	12.	0.	0.	0.	111.	0.	0.	0.	111.	6.	12.	12.	12.	12.	12.	2.	9.		
65	68252.	0.	2118.	2.	3.	2.	4.	3.	4.	3.	12.	0.	0.	0.	111.	0.	0.	0.	111.	6.	15.	15.	15.	15.	15.	5.	5.		
70	56113.	0.	3054.	6.	3.	0.	6.	4.	2.	2.	10.	0.	0.	0.	111.	0.	0.	0.	111.	6.	12.	12.	12.	12.	12.	7.	12.		
75	64135.	0.	8494.	4.	3.	1.	11.	1.	6.	14.	14.	0.	0.	0.	111.	0.	0.	0.	111.	6.	14.	14.	14.	14.	14.	6.	14.		
tot	1242454.	13912.	17048.	433.	250.	212.	478.	361.	351.	623.	1071.	0.	0.	0.	1078.	1435.	574.	673.	673.	526.	526.	526.	526.	526.	526.	869.	869.		
region 10			age population			births			deaths			migration from region 10 to 11			age population			births			deaths			migration from region 11 to 12					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	42129.	0.	177.	21.	8.	14.	26.	17.	16.	18.	67.	0.	0.	0.	103.	0.	0.	0.	103.	81.	52.	81.	81.	81.	43.	75.	92.	41.	
5	53128.	0.	22.	17.	6.	11.	20.	14.	13.	14.	52.	0.	0.	0.	47.	0.	0.	0.	47.	32.	32.	32.	32.	32.	32.	32.	32.	32.	
10	61111.	0.	21.	17.	7.	7.	15.	9.	10.	8.	32.	0.	0.	0.	70.	0.	0.	0.	70.	35.	26.	26.	26.	26.	26.	26.	26.	26.	
15	57995.	1.	42.	27.	18.	15.	31.	27.	28.	36.	81.	0.	0.	0.	118.	0.	0.	0.	118.	61.	67.	67.	67.	67.	67.	67.	67.	67.	
20	57595.	1327.	51.	54.	36.	30.	60.	52.	56.	71.	159.	0.	0.	0.	231.	0.	0.	0.	231.	131.	90.	90.	90.	90.	90.	213.	221.	221.	
25	43974.	3971.	31.	33.	9.	15.	35.	20.	24.	21.	83.	0.	0.	0.	130.	0.	0.	0.	130.	64.	62.	62.	62.	62.	62.	85.	111.	119.	
30	47768.	1533.	70.	24.	8.	19.	18.	10.	13.	22.	39.	0.	0.	0.	67.	0.	0.	0.	67.	44.	28.	28.	28.	28.	28.	67.	45.	45.	
35	57723.	75.	85.	10.	6.	11.	7.	11.	7.	9.	16.	0.	0.	0.	64.	0.	0.	0.	64.	27.	16.	16.	16.	16.	16.	43.	45.	45.	
40	45973.	280.	118.	13.	6.	3.	5.	9.	6.	7.	12.	0.	0.	0.	23.	0.	0.	0.	23.	17.	8.	8.	8.	8.	8.	22.	25.	25.	
45	43908.	46.	144.	3.	2.	1.	2.	5.	1.	7.	16.	0.	0.	0.	14.	0.	0.	0.	14.	16.	5.	5.	5.	16.	16.	15.	9.	9.	
50	39811.	0.	223.	6.	5.	3.	5.	1.	4.	2.	5.	0.	0.	0.	20.	0.	0.	0.	20.	5.	4.	4.	4.	4.	4.	18.	6.	6.	
55	27216.	0.	249.	3.	2.	1.	0.	1.	1.	1.	2.	0.	0.	0.	2.	0.	0.	0.	2.	5.	2.	2.	2.	2.	2.	5.	9.	9.	
60	40247.	0.	661.	3.	2.	1.	2.	1.	2.	1.	2.	0.	0.	0.	5.	0.	0.	0.	5.	3.	8.	8.	8.	8.	8.	15.	10.	10.	
65	42565.	0.	1280.	1.	2.	1.	2.	1.	2.	1.	2.	0.	0.	0.	5.	0.	0.	0.	5.	8.	5.	5.	5.	5.	5.	11.	15.	15.	
70	35680.	0.	1837.	1.	0.	1.	3.	2.	1.	2.	1.	0.	0.	0.	3.	0.	0.	0.	3.	13.	0.	0.	0.	0.	0.	12.	3.	3.	
75	41093.	0.	5188.	4.	2.	1.	2.	1.	2.	1.	3.	0.	0.	0.	8.	0.	0.	0.	8.	28.	0.	0.	0.	0.	0.	19.	7.	7.	
tot	737916.	7908.	10199.	237.	120.	118.	241.	190.	231.	585.	982.	0.	0.	0.	538.	383.	798.	0.	0.	538.	383.	383.	383.	383.	383.	884.	884.	884.	

GUIDE FOR APPENDIX III.A

<u>Region No.</u>	<u>Name</u>
1	Rostock
2	Schwerin
3	Neubrandenburg
4	Potsdam
5	Frankfurt
6	Cottbus
7	Magdeburg
8	Halle
9	Erfurt
10	Gera
11	Suhl
12	Dresden
13	Leipzig
14	Karl-Marx-Stadt
15	Berlin

APPENDIX III.A continued

region 11			region 12			region 13			region 14			region 15						
age	population	births	deaths	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	31241.	0.	110.	18.	8.	27.	12.	18.	14.	31.	105.	62.	29.	26.	32.	41.		
5	39397.	0.	111.	14.	6.	22.	9.	14.	11.	24.	82.	49.	0.	22.	26.	33.		
10	45141.	0.	18.	4.	6.	9.	4.	10.	13.	17.	80.	33.	0.	20.	17.	17.	9.	
15	43972.	1.	33.	17.	9.	17.	27.	12.	33.	20.	35.	125.	61.	0.	36.	44.	35.	
20	43668.	993.	37.	32.	19.	32.	52.	24.	64.	38.	68.	247.	119.	0.	72.	85.	91.	
25	32918.	2980.	20.	23.	4.	12.	35.	19.	16.	15.	42.	117.	79.	0.	34.	43.	49.	
30	33034.	1145.	52.	13.	10.	2.	19.	10.	13.	17.	24.	61.	46.	0.	17.	21.	22.	
35	44255.	520.	80.	4.	8.	3.	12.	9.	12.	9.	22.	49.	11.	0.	12.	9.	14.	
40	33779.	205.	102.	1.	3.	4.	7.	10.	8.	10.	37.	17.	0.	5.	6.	8.	9.	
45	33623.	40.	139.	0.	3.	5.	3.	11.	3.	8.	22.	9.	0.	5.	6.	7.	14.	
50	32017.	0.	193.	1.	0.	0.	3.	2.	4.	2.	8.	20.	3.	0.	3.	5.	8.	
55	20664.	0.	201.	1.	0.	0.	3.	2.	3.	1.	0.	12.	3.	0.	5.	1.	4.	
60	29669.	0.	541.	2.	0.	2.	3.	4.	2.	0.	15.	9.	0.	7.	3.	1.	5.	
65	31073.	0.	962.	1.	2.	0.	3.	0.	2.	4.	17.	7.	0.	7.	1.	3.	2.	
70	26412.	0.	1434.	0.	0.	1.	1.	3.	1.	1.	3.	14.	5.	0.	1.	2.	3.	
75	28572.	0.	3764.	1.	1.	0.	1.	2.	2.	7.	4.	30.	10.	0.	1.	5.	0.	
tot	549435.	5884.	7697.	132.	72.	96.	221.	115.	217.	165.	300.	1033.	523.	0.	276.	294.	365.	
migration from region 11 to :																		
0	101160.	0.	352.	66.	31.	58.	79.	65.	285.	41.	74.	65.	52.	20.	0.	114.	149.	156.
5	127569.	0.	41.	50.	23.	44.	60.	49.	218.	31.	57.	50.	40.	15.	0.	87.	114.	120.
10	145298.	0.	42.	22.	19.	32.	69.	45.	114.	24.	51.	34.	44.	15.	0.	84.	110.	65.
15	134605.	2.	99.	120.	48.	83.	139.	119.	524.	78.	155.	123.	90.	50.	0.	223.	316.	295.
20	133677.	2979.	137.	109.	43.	76.	127.	108.	476.	71.	141.	112.	82.	46.	0.	202.	288.	268.
25	100520.	9886.	85.	86.	33.	47.	73.	74.	341.	64.	98.	87.	63.	34.	0.	149.	210.	261.
30	122132.	4310.	135.	42.	17.	27.	71.	51.	165.	44.	76.	47.	52.	14.	0.	106.	124.	159.
35	139560.	2135.	283.	20.	10.	31.	40.	42.	115.	24.	45.	34.	23.	13.	0.	67.	78.	84.
40	109898.	842.	277.	12.	20.	29.	22.	20.	73.	17.	22.	8.	9.	0.	45.	57.	42.	
45	105725.	139.	384.	13.	5.	9.	14.	10.	34.	8.	15.	4.	9.	5.	0.	27.	25.	28.
50	97962.	0.	566.	2.	2.	12.	5.	40.	7.	15.	7.	4.	3.	0.	16.	23.	19.	
55	71529.	0.	636.	2.	1.	2.	4.	1.	18.	1.	5.	3.	2.	0.	8.	18.	21.	
60	103012.	0.	1658.	6.	1.	4.	6.	6.	23.	1.	6.	5.	2.	4.	0.	9.	27.	11.
65	114830.	0.	2995.	1.	1.	3.	8.	8.	20.	4.	5.	3.	1.	0.	18.	20.	9.	
70	102322.	0.	4854.	4.	1.	2.	1.	2.	8.	20.	3.	9.	2.	0.	15.	23.	9.	
75	125822.	0.	15210.	7.	1.	4.	21.	11.	28.	10.	14.	12.	4.	3.	0.	22.	43.	
tot	1835621.	20293.	27674.	562.	254.	442.	752.	627.	2494.	428.	785.	617.	480.	236.	0.	1192.	1625.	1571.

GUIDE FOR APPENDIX III.A

<u>Region No.</u>	<u>Name</u>
1	Rostock
2	Schwerin
3	Neubrandenburg
4	Potsdam
5	Frankfurt
6	Cottbus
7	Magdeburg
8	Halle
9	Erfurt
10	Gera
11	Suhl
12	Dresden
13	Leipzig
14	Karl-Marx-Stadt
15	Berlin

APPENDIX III.A continued

region 13		age population births deaths										migration from region 13 to:									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
0	77702.	0.	287.	50.	45.	70.	68.	116.	53.	232.	63.	113.	37.	153.	0.	170.	100.				
5	97988.	0.	39.	40.	36.	55.	53.	92.	41.	184.	50.	89.	29.	121.	0.	135.	79.				
10	114467.	0.	50.	32.	29.	47.	50.	33.	128.	38.	73.	24.	85.	0.	111.	68.					
15	108031.	2.	74.	60.	34.	40.	92.	59.	115.	74.	269.	90.	106.	48.	159.	0.	222.	138.			
20	107286.	2329.	100.	115.	65.	78.	176.	113.	222.	143.	517.	173.	203.	91.	307.	0.	426.	266.			
25	81305.	7073.	66.	76.	37.	49.	80.	68.	131.	61.	295.	107.	169.	50.	169.	0.	235.	229.			
30	96414.	2866.	135.	79.	34.	26.	59.	57.	83.	30.	212.	50.	86.	41.	107.	0.	124.	126.			
35	110985.	1338.	191.	22.	16.	19.	49.	35.	48.	33.	128.	27.	40.	24.	76.	0.	105.	114.			
40	89307.	536.	217.	23.	11.	10.	31.	32.	39.	27.	55.	28.	23.	16.	46.	0.	68.	33.			
45	85239.	90.	367.	17.	12.	6.	19.	8.	23.	17.	49.	13.	18.	11.	34.	0.	39.	26.			
50	78161.	0.	526.	13.	7.	5.	13.	6.	15.	10.	43.	11.	13.	12.	23.	0.	29.	14.			
55	57272.	0.	503.	4.	1.	1.	8.	4.	9.	6.	20.	8.	7.	3.	13.	0.	28.	11.			
60	83024.	0.	1502.	10.	1.	4.	6.	5.	13.	9.	35.	9.	8.	6.	22.	0.	20.	12.			
65	91184.	0.	2621.	5.	1.	5.	11.	6.	8.	10.	29.	11.	14.	3.	20.	0.	31.	11.			
70	77516.	0.	3996.	4.	3.	2.	13.	7.	11.	7.	33.	8.	14.	1.	31.	0.	24.	13.			
75	89960.	0.	11462.	6.	6.	10.	12.	16.	13.	47.	10.	15.	6.	32.	0.	47.	16.				
tot	1445841.	14234.	22136.	556.	322.	356.	731.	580.	991.	567.	2276.	696.	958.	402.	1398.	0.	1814.	1256.			
region 14		age population births deaths										migration from region 14 to:									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
0	99537.	0.	279.	48.	31.	27.	54.	131.	47.	67.	63.	136.	24.	186.	240.						
5	125522.	0.	49.	36.	23.	20.	40.	41.	99.	35.	51.	47.	103.	18.	140.	181.					
10	139553.	0.	47.	24.	10.	19.	31.	22.	80.	24.	61.	29.	74.	12.	161.	111.					
15	144514.	2.	103.	46.	65.	116.	80.	185.	104.	148.	149.	255.	63.	375.	428.						
20	143517.	2901.	164.	100.	45.	64.	114.	79.	182.	101.	144.	145.	145.	145.	249.	62.	368.	419.			
25	115524.	9810.	105.	78.	32.	31.	70.	72.	137.	47.	104.	83.	170.	43.	274.	43.	299.	231.			
30	124053.	4110.	144.	46.	24.	20.	28.	28.	99.	39.	78.	53.	105.	23.	164.	147.	0.	231.			
35	142804.	1740.	213.	13.	16.	21.	20.	65.	20.	55.	34.	19.	69.	24.	104.	94.	0.	56.			
40	119403.	648.	335.	13.	9.	12.	15.	15.	48.	15.	16.	8.	53.	12.	72.	65.	0.	31.			
45	124011.	121.	514.	12.	8.	7.	9.	10.	28.	8.	14.	12.	36.	11.	47.	35.	0.	21.			
50	116471.	0.	746.	6.	4.	7.	8.	7.	8.	7.	11.	10.	9.	10.	36.	34.	0.	13.			
55	81160.	0.	783.	6.	1.	6.	1.	6.	10.	5.	12.	7.	7.	4.	23.	19.	0.	12.			
60	118954.	0.	2016.	7.	1.	8.	6.	8.	5.	16.	6.	13.	4.	38.	39.	0.	15.				
65	132008.	0.	3807.	4.	6.	4.	7.	5.	15.	8.	13.	13.	2.	46.	30.	0.	9.				
70	114443.	0.	5677.	7.	4.	4.	6.	9.	11.	7.	6.	11.	1.	34.	32.	0.	10.				
75	135395.	0.	16687.	10.	0.	4.	13.	7.	9.	12.	21.	14.	32.	3.	73.	49.	0.	16.			
tot	1976869.	19332.	31669.	513.	265.	294.	559.	459.	1116.	479.	792.	664.	1335.	316.	2141.	2212.	0.	1261.			

GUIDE FOR APPENDIX III.A

<u>Region No.</u>	<u>Name</u>
1	Rostock
2	Schwerin
3	Neubrandenburg
4	Potsdam
5	Frankfurt
6	Cottbus
7	Magdeburg
8	Halle
9	Erfurt
10	Gera
11	Suhl
12	Dresden
13	Leipzig
14	Karl-Marx-Stadt
15	Berlin

APPENDIX III.A continued

region	15	age population	births	deaths	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	62653.	0.	221.	50.	27.	32.	177.	256.	31.	17.	39.	20.	19.	17.	37.	26.	33.	9.	
5	79309.	0.	30.	38.	20.	24.	135.	195.	24.	13.	30.	15.	14.	13.	29.	19.	25.	6.	
10	92259.	0.	30.	67.	16.	16.	145.	174.	13.	27.	48.	24.	50.	8.	39.	28.	49.	9.	
15	73156.	2.	53.	37.	21.	47.	128.	119.	38.	30.	41.	33.	23.	11.	54.	37.	49.	8.	
20	72651.	1428.	69.	77.	43.	43.	96.	261.	242.	79.	61.	83.	68.	46.	23.	110.	75.	100.	9.
25	66688.	5451.	62.	66.	26.	40.	163.	178.	32.	33.	45.	33.	15.	14.	50.	52.	44.	9.	
30	90215.	2840.	112.	49.	25.	22.	200.	182.	35.	26.	50.	19.	13.	22.	49.	44.	44.	9.	
35	100196.	1426.	164.	28.	13.	19.	137.	158.	13.	16.	29.	14.	10.	9.	31.	26.	29.	8.	
40	76735.	505.	212.	14.	6.	16.	96.	75.	17.	5.	20.	7.	9.	5.	12.	16.	17.	9.	
45	62934.	89.	287.	12.	4.	3.	60.	58.	6.	10.	8.	1.	3.	1.	6.	9.	7.	7.	
50	48528.	0.	357.	6.	2.	3.	47.	29.	11.	7.	4.	3.	4.	5.	10.	7.	6.	9.	
55	38995.	0.	453.	3.	0.	1.	19.	17.	2.	4.	3.	2.	1.	0.	6.	4.	6.	9.	
60	56860.	0.	1171.	8.	8.	2.	34.	37.	2.	2.	2.	1.	0.	1.	5.	2.	6.	6.	
65	64747.	0.	2194.	4.	3.	7.	26.	22.	8.	5.	2.	2.	2.	0.	3.	2.	7.	7.	
70	52249.	0.	3005.	4.	3.	2.	19.	21.	1.	1.	4.	4.	2.	0.	2.	4.	4.	4.	
75	60299.	0.	8338.	6.	2.	12.	26.	36.	5.	12.	5.	5.	0.	0.	6.	3.	4.	6.	
tot	1098174.	11741.	16758.	460.	219.	342.	1673.	1799.	307.	269.	412.	252.	211.	129.	451.	354.	430.	9.	

APPENDIX III.B Demographic Data for the GDR, 5 Regions (1975)

North	Berlin	S.West	South	Middle	GDR
100000.	100000.	100000.	100000.	100000.	
130449.	164503.	204645.	189898.	188590.	116643.
168270.	140364.	117915.	96209.	66299.	95490.
86113.	97598.				100051.
0.	0.	1.	5100.	13550.	4452.
3.	0.	0.	0.	0.	0.
519.	76.	51.	167.	196.	119.
501.	676.	651.	1765.	3033.	4544.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
337.	188.	130.	270.	876.	421.
51.	31.	11.	34.	35.	22.
247.	139.	126.	191.	615.	211.
31.	18.	6.	20.	23.	12.
532.	298.	225.	417.	1364.	491.
71.	42.	23.	35.	38.	29.
865.	488.	499.	598.	1933.	742.
142.	92.	53.	65.	95.	450.
				54.	369.
				115.	213.

North	Berlin	S.West	South	Middle	GDR
62653.	79029.	92259.	73156.	72651.	66688.
100196.	76735.	62934.	48528.	38995.	56860.
52249.	60299.				90215.
0.	0.	0.	2.	1428.	1426.
89.	0.	0.	0.	0.	505.
221.	30.	30.	53.	69.	62.
287.	357.	453.	1171.	2194.	3005.
106.	83.	99.	105.	216.	8338.
19.	11.	4.	18.	14.	132.
0.	0.	0.	0.	0.	87.
0.	0.	0.	0.	0.	60.
56.	42.	82.	67.	137.	54.
5.	12.	3.	3.	4.	33.
135.	103.	164.	181.	368.	187.
32.	27.	19.	14.	14.	115.
481.	367.	359.	315.	643.	18.
134.	84.	42.	75.	61.	443.
				42.	324.
				79.	193.

North	Berlin	S.West	South	Middle	GDR
147410.	185894.	212098.	203787.	202382.	153362.
197410.	153749.	149926.	139022.	95091.	137037.
118205.	133800.				141890.
0.	0.	0.	4.	4777.	5490.
200.	0.	0.	0.	0.	2445.
583.	72.	75.	157.	187.	0.
514.	844.	889.	2407.	4360.	113.
162.	120.	97.	227.	446.	221.
28.	23.	10.	20.	15.	17446.
155.	123.	67.	233.	459.	220.
49.	21.	8.	19.	10.	135.
0.	0.	0.	0.	8.	87.
0.	0.	0.	0.	0.	43.
675.	530.	386.	874.	1718.	146.
146.	85.	36.	72.	82.	88.
334.	263.	160.	461.	906.	22.
67.	42.	22.	36.	39.	0.
				28.	0.
				56.	0.
					195.
					113.
					155.
					99.

APPENDIX III.B continued.

North	Berlin	S.West	South	Middle	GDR	
384605.	485010.	554272.	535508.	531815.	407753.	466059.
537937.	436268.	429621.	396536.	282475.	406848.	445774.
383328.	451037.					
0.	0.	0.	10.	11636.	36483.	14898.
481.	0.	0.	0.	0.	0.	0.
1296.	183.	196.	390.	560.	357.	555.
1772.	2551.	2610.	7021.	12854.	19309.	56259.
583.	452.	327.	839.	1158.	727.	458.
126.	75.	35.	69.	55.	50.	68.
512.	396.	299.	863.	1132.	1028.	531.
107.	59.	51.	48.	38.	48.	84.
902.	701.	553.	1385.	1960.	1187.	707.
187.	129.	65.	101.	104.	93.	183.
0.	0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.
1590.	1236.	887.	2345.	3181.	1875.	1184.
314.	228.	124.	162.	190.	188.	282.

North	Berlin	S.West	South	Middle	GDR	
232948.	293763.	361577.	327065.	324810.	219846.	256253.
324814.	200360.	229616.	195077.	138687.	199906.	215871.
180240.	211208.					
0.	0.	3.	7715.	22286.	7927.	3451.
10.	0.	0.	0.	0.	0.	0.
864.	138.	147.	280.	341.	214.	361.
954.	1333.	1381.	3688.	6465.	9734.	27527.
620.	468.	407.	1209.	812.	657.	437.
103.	69.	30.	33.	50.	48.	73.
856.	647.	532.	2000.	1357.	1185.	757.
225.	167.	75.	108.	133.	101.	166.
302.	229.	215.	806.	547.	368.	220.
57.	40.	18.	35.	28.	32.	60.
1036.	779.	692.	2247.	1561.	1173.	791.
209.	127.	75.	105.	134.	103.	136.
0.	0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.
0,000000						

APPENDIX III.C Aggregations from 15 Regions to 10 and 5 Regions

<u>DISTRICTS</u>	<u>TEN REGIONS</u>	<u>FIVE REGIONS</u>
Rostock	Rostock	<u>North Region</u>
Neubrandenburg	Neubrandenburg	Rostock
Schwerin	Schwerin	Neubrandenburg
Berlin	Berlin	Schwerin
Erfurt	Erfurt	<u>Berlin Region</u>
Gera	Gera	Berlin
Suhl	Suhl	<u>South West</u>
Leipzig	Leipzig	Erfurt
Halle	Halle	Gera
Karl-Marx-Stadt	Karl-Marx-Stadt	Suhl
Dresden	Dresden	<u>South Region</u>
Cottbus	Cottbus	Leipzig
Frankfurt	Frankfurt	Halle
Potsdam	Potsdam	Karl-Marx-Stadt
Magdeburg	Magdeburg	Dresden
		<u>Middle Region</u>
		Cottbus
		Frankfurt
		Potsdam
		Magdeburg