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Outline

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Albania – A small (28.748 km²), mountainous (≈ 65%), rural (57.8% rural population; 2001) country in south-eastern Europe; was the last Balkan country entering democratization and transition to an open market economy.

After WW II and until 1989, Albania was characterized by high population growth (annual rate, above 2%).

The political system established after the war -and “survived” for nearly 4 decades- controlled and regulated population mobility within the Albanian territory and restricted any mobility abroad. Hence, population distribution was regulated through time and space. The “legacy” of the former political system could be summarized as:

i) low and controlled urbanization,

ii) a network of medium-size urban centers, which “absorbed” part of the growing population (located mainly in the western part of the country),

iii) “containment” of the largest part of population in rural and mountainous areas within a network of small settlements (villages).
The collapse of the “peculiar” socialist system of isolated Albania was followed by rapid socio-economic changes, unique in modern European history and in a very short period (12 years, 1989-2001), the country has changed radically.

What characterized this first period of transition and caused radical changes (even reversal of past trends) in demographic patterns were:

i) an exodus (external migration) of significant proportion of the population abroad (estimated 600,000 - 1,000,000 individuals, when 3,069,275 were enumerated in 2001 census),

ii) a rural exodus (internal migration) towards major urban centers (particularly towards the Tirana - Durres dipole) and from mountainous towards plain areas.

More specifically, two major groups of communes fueled the rural exodus: the municipalities of the north-east and those of the southern part of the country bordering with Greece; spatially separated by an intermediate zone of positive population change between 1989-2001.
Subsequently, changing the place of residence prior the fall of the regime (in 1989) due to either internal or external migration, radically changed the population map of Albania, while altered the population composition of communes.

While for decades their population was relatively homogenous because of the aforementioned mobility restrictions, after twelve years of intense mobility (within the country and abroad), the weight of “permanent residents” over the total population was reduced.

These changes in population composition had a significant impact not only on the political, social, economic and cultural life of the examined spatial units, but also on their demographic structure; depending on the intensity of population heterogeneity, as well as the geographic origin of immigrants and their differentiated demographic structure.

Given the above we aim to answer to the following questions:

i) How the intensity of heterogeneity varies geographically among 374 Albanian communes?

ii) How directional internal (inflow-outflow) and external migration relate with population heterogeneity?

iii) Are heterogeneous communes homogeneous in terms of geographic origin of the newly incoming residents?

iv) What are the demographic profiles of those residents?
Data Sources (1)

Population and Housing Census 2001 (INSTAT):
- Census available in individual records (i.e. 3,069,275 records)
- Building, Dwelling, Household and individual questionnaires
- Administrative structure of 12 Prefectures, 36 Districts, 65 Municipalities, 309 Communes (374 communes), 3051 villages
- No post-enumeration survey, quality “fairly good” due to questions raised regarding completeness, failure to capture external migration and Albanian household structure.
  Age declaration good (Lerch & Wanner (2008), author’s interviews with local experts in 2006)

Population and Housing Census 1989 (INSTAT):
- Census available in individual records in magnetic tape recordings (i.e. 3,182,417 records)
- Restored data: Village of residence in 1989, age and sex
- Administrative structure of 26 Districts, 2848 villages
- Completeness and declaration of age “very good”, an under-enumeration of women is probable (INSTAT & UNFPA (1999) & author’s interviews with local experts in 2006)

Vital statistics data from INSTAT were not available in the administrative levels of interest.
As the next step, the different spatial scales—*Modified Areal Unit Problem* (Openshaw, 1983)—regarding the censuses had to be addressed due to:

- successive administrative changes (6, between 1989-2001),
- establishment of commune level, not present in 1989,
- the absence of commune level in the 2001 questionnaire regarding the place of residence in 1989 (District & village).

Data transformation to 2001 administrative structure

2. Village (2001)
3. Commune (2001)

Sources: Printed maps obtained by Albanian Military Geographical Service & National Geospatial-Intelligence Agency, GEOnet Names Server (GNS) (http://earth-info.nga.mil/)
We considered a spatial demographic accounting exercise between two areas based on the examples of Wunsch & Termote (1978: 197) and Rees (1979), by introducing migration (internal and external); on the hypothesis of one migration per individual (change in the place of residence 1989-2001). Although migration usually is treated as a “noise” factor (closed populations); in this case we treat the effects of fertility, mortality and external migration on population change as “noise”. Subsequently, based on the place of residence in 1989 we derive the following population sub-groups in 2001

**Group 1:** Total number of individuals that resided in the same Commune in 1989 and 2001 *(Stable population)*

**Group 2a:** Total number of individuals residing in a Commune in 2001 but not residing there in 1989 *(Total Inflow – Internal migrants)*

**Group 2b:** Total number of individuals residing in a District in 1989 but not residing there in 2001 *(Total Outflow-Internal migrants)*

**Group 3:** Total number of individuals recorded as being abroad in 1989 or 2001

**Group 4:** Total number of individuals aged < 12 years in 2001

**Group 5:** Total number of individuals with unknown or not available residence either in 1989, or in 2001
Therefore the total population of 1989 could be expressed by using 2001 population sub-groups:

\[ Pop.1989_i = \sum [(Group1)_i, (Group2b)_i, (P_R)_i] \]

where:

Group 1: Total number of individuals that resided in the same District/Commune in 1989 and 2001 (Stable population)

Group 2b: Total number of individuals residing in a District in 1989 but not residing there in 2001 (Total Outflow)

\( P_R \): the share of population which includes the individuals that died in the period 1989-2001 and the individuals who fuelled external migration

and \( i = 1st, 2nd, \ldots, 374th \) commune
Population Heterogeneity (Q1)

Based on the sub-groups we defined a measure of population heterogeneity as: *the share of population of each Commune in 2001 that was alive during 1989-2001, did not experience any form of external migration and resided in a different Commune in 1989*

\[
\frac{(\text{Group2a})}{\sum[(\text{Group1})_i, (\text{Group2a})_i]} 
\]

- A total of 441,845 individuals, corresponding to 14% of the 2001 population, resided in another commune in 1989 than in 2001

- 126 out of 374 communes (34%), exhibit heterogeneity > 15%

- Dispersed urban centers (district capitals) followed by their corresponding neighboring communes (peri-urban)

- Coastal/Centre zone especially, the Tirana-Durres crescent, which was characterized by high population growth, i.e. the capital, Tirana, increased from 238,057 inhabitants in 1989 to 341,453 in 2001, noting an increase of 44% approximately, and Durres, second largest city by 20%.
By means of statistical analyses (Two-step cluster analysis, SPSS®) and using the ratio of inflow over outflow, relevant index of external migration and the outflow over 1989 population; we derived the following typology:

Group 1: Heterogeneity (differentiated intensity) is due: a) to extremely high external migration, b) high inflow and c) limited outflow

Group 2: Heterogeneity (medium & high) is due: a) extremely high inflow, b) limited outflow and c) significant external migration

Group 3: Heterogeneity (differentiated intensity) is due: a) high external migration, b) limited inflow and c) limited outflow

Group 4: Heterogeneity (differentiated intensity) is due: a) solely to external migration, b) inflow counterbalances outflow

Group 5: Heterogeneity (low & very low) is due: a) significant external migration, b) limited inflow and c) high outflow

Group 6: Heterogeneity (low & very low) is due: a) limited external migration, b) limited inflow and c) high outflow

Group 7: Heterogeneity (low & very low) is due: a) significant external migration, b) low inflow and c) limited outflow
Population inflows are composed of distinct groups of different geographical origins. We divided Albania territory to 7 geographical administrative zones. By means of statistical analyses (Two-step cluster analysis, SPSS®) and using the (%) of the cumulative inflow originating from the communes of the same district and the corresponding (%) of each defined zone; we derived the following typology:

**Group 7:** Inflow solely from the same district

**Group 6:** a) very high inflow from the same district and b) low from South-east

**Group 5:** a) medium inflow from the same district and b) high from the centre

**Group 4:** a) medium inflow from the same district and b) low from North-east, medium from the centre and south-east

**Group 3:** a) low inflow from the same district and b) high from north and north-east

**Group 2:** a) low inflow from the same district and b) high from south/central

**Group 1:** a) extremely low inflow from the same district and b) extremely high from the coastal
Demographic profiles (Q4)
We examined the population heterogeneity of the 374 Albanian communes, as consequences of multidirectional internal migration streams and external migration.

The interplay of internal and external migration with the initial population (1989) allowed the majority of the Albanian communes (65%) to be relative homogeneous.

Those that presented heterogeneity (34%), at 30% of them at least 1 out of 4 was a newly resident. In the case of a neighboring to Tirana commune, 80% were new residents.

However, as we demonstrated, a large part of the inflow can originate from within the district of belonging (almost ¼ of 126 communes, inflow > 80%). So, even if the communes are population heterogenic according to our index, in fact due to common socio-economic characteristics, the impact of in-coming residents to the synthesis of the population could be low.

Closing, as the next step we would like to suggest decomposing population heterogeneity to its impact factors.