A Window on Temporary Migration: Looking through Data from South Africa

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Introduction

Temporary and Circular migration are often seen as distinct features of population distribution. Such non-permanent relocation is often considered even more prevalent and consequential in low- and middle-income countries, especially within the African setting. Nevertheless, despite the commentary, the phenomenon of temporary migration often escapes conventional data-collection platforms, and hence, appears as a more nebulous concept in discussion. Empirical measurement and analysis thereby falls short of enlightening policymakers about short-term migration's purported social and economic importance. Our work recognizes the challenge of capturing varieties of migratory behavior in a population-representative way. The need to better understand the fluidity of residence time and space, especially amidst the notion of "temporary and circular migration," calls us to investigate the phenomena with more refinement. Our investigation may simply confirm—or it may indeed refute— some widely held presumptions in the migration and development literature.

In this analysis we take advantage of unique longitudinal data from a cohort of young (18-40) rural-resident men and women in South Africa, for whom we have multiple waves of direct individual survey data on residential location and migration. This survey, the Migrant Health Follow-Up Study (MHFUS), collected information not only on current, established ("usual") residence, but also on temporary moves from that residence. The data also incorporate historical (pre-survey) information from the individual's rural origin household. The first wave of the study included a sample of approximately 3000 individuals, about half of whom had already moved away from the rural-origin community, while the other half remained. Through four years of the ongoing survey, we have been able to maintain over 90 percent retention of the original sample, an invaluable analytical feature in a highly mobile population.

Our analysis is designed to provide a better understanding of the patterns of temporary and more permanent geographic mobility and their correlates. (Our research is still ongoing; this document contains preliminary results and draft text.) We examine:

- The prevalence of temporary migration among those who continued to reside in the rural area and those who left
- The distribution of reasons cited for engaging in temporary migration
- The demographic characteristics that predict the likelihood of engaging in temporary migration versus permanent migration vs. remaining the rural origin
- The interrelationship of these two types of geographic mobility over time (across survey waves)

Migrants are decidedly a select group of individuals—in that they differ in systematic ways from non-migrants. We intend that our analysis will help illuminate features of this selectivity, probing more deeply that space-time features of geographic redistribution than is commonly possible with census or conventional survey data.

Data

Migrant Health Follow-Up Study (MHFUS) drew a simple random sample of 3,800 adults aged 18-40 from the rural Agincourt Health and Demographic Surveillance Site (AHDSS) in Mpumalanga Province, northeast South Africa. Initial household visits were conducted in 2017 to obtain contact information for the 3,800 AHDSS residents; contact information was successfully obtained for 3,491. Of these, 3,103 were successfully contacted and interviewed in 2018-2019 during the Wave 1 data collection. The cohort was re-interviewed three times (in 2019-2020, 2021, 2022) for a total of four waves of data. Remarkably, response rates in Waves 2, 3, and 4 ranged from 95-98 percent so that the integrity of the cohort remains intact throughout the study period despite the high level of geographic mobility in this population. (Ginsburg et al. 2021). Waves 2 and 3 were conducted by telephone, while Waves 1 and 4 were conducted by in-person interviews, at which time biometric information was also collected. The multi-site fieldwork team followed AHDSS residents to urban destinations whenever they moved out—and continued following residents if they subsequently moved to new urban locations or back to the AHDSS community.

Preliminary and Illustrative Results

Our work to date with the MHFUS panel indicates that the experience of migration is quite widespread in this young adult population. This table below indicates that on the order of half of our sample resided outside of the rural-origin district (composed of 31 villages) throughout the study period, moving to nearby towns as well as the more distant conurbation of Johannesburg-Pretoria (Gauteng Province).

MHFUS Migrant Sample Waves 1-4 (2018-2022)

|	Wave 1	Wave 2	Wave 3	Wave 4
Migrants (%)	42.83	52.15	51.23	55.92
Non-migrant (%)	57.17	47.85	48.77	44.08
Total N	**3,103**	**3,026**	**2,975**	**3,049**

For the most recent completed Wave 4 we have examined the prevalence of Temporary migration (aka Short-Term absence), defined as an absence for the permanent residence of less than 6 months. We find, for instance, that 11.6% of Nonmovers (Wave4, N=354) reported short-term absence from their current usual residence since the last interview. Reasons reported (see chart below) for this absence were overwhelmingly related to human capital considerations: job, looking for work, attending school. A substantial fraction of respondents cited family reasons, which included both positive and negative aspects of the individual's family relationships.

Insight into the prevalence and persistence of Temporary Migration is available through a joint analysis of sample members interviewed in both wave 3 and Wave 4. We find, unsurprisingly, that 89% of sample members engage in no temporary migration in that interval, while 1% of the respondents indicate short-term absences of between and 6 months from their usual place of residence in **both** annual waves.
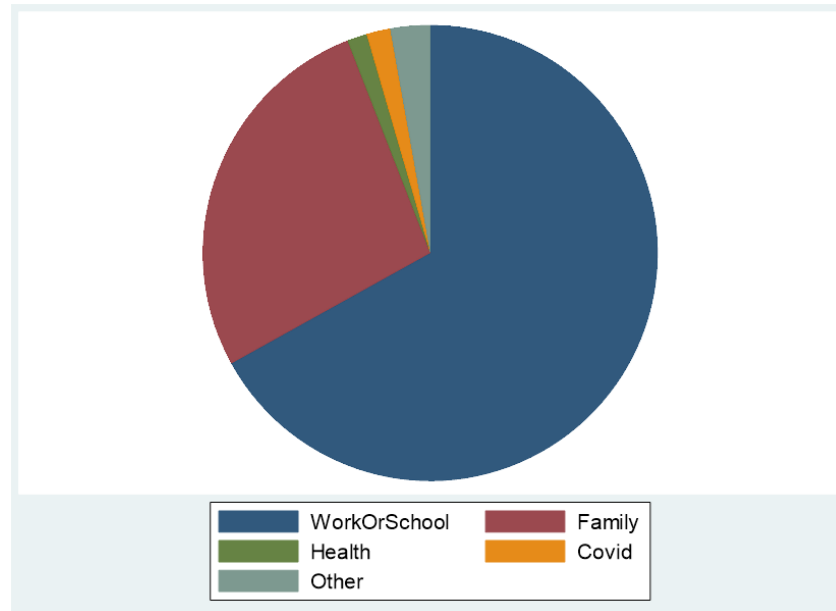
Distribution of Reasons Cited for Temporary Absence
N=354 Residents of Origin Community, Wave 4

A companion tabulation offers further insight into the fluidity of residence and "home-vs-away". Among those who report their *usual* place of residence *outside* of the origin district, there is still considerable attachment to the origin household.   (These individuals are typically classified as permanent migrants, or simply "migrants.") Thinking through this, the engagement of migrants (including regular visits) with the home community, along with the prevalence of short-term absence does call into question the utility of any simple binary time-space dividing line separating "migrants" from "non-migrants". Our curiosity about the nature of this fluidity and the patterns that derive from it motivate this analysis.
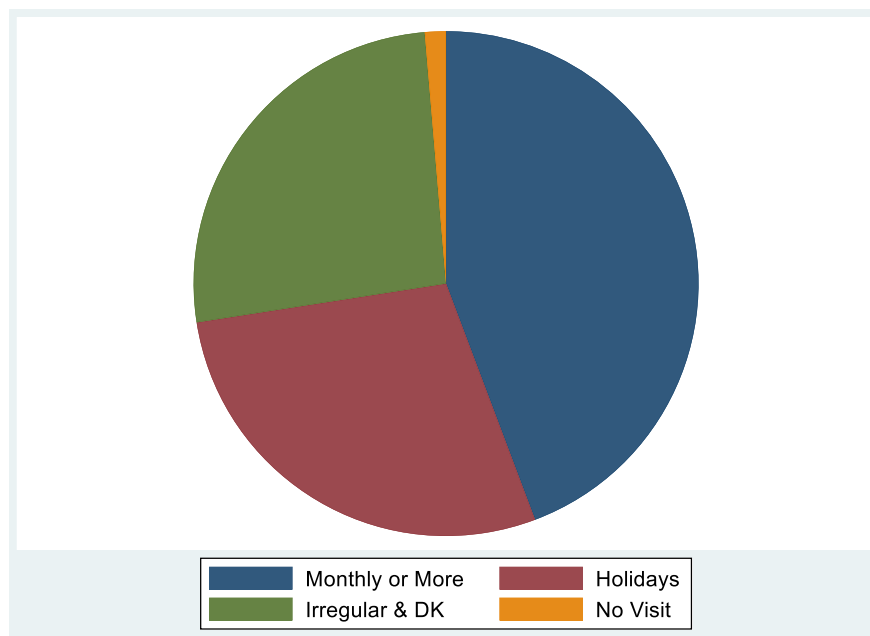
Frequency of Origin Household Visits among "migrants" residing outside district
N=1708, Wave 4

As a further illustration of our investigation, we examine a multinomial logit regression model, constructed to predict the classification of an individual as an "Annual Mover" (reporting a change in "usual" place of residence between Wave 3 and Wave 4 of MHFUS) and "Short Term Mover" reporting the same usual residence in Waves 3 and 4, but indicating short term absence in the interim. These two categories are contrasted in the model below with Nonmovers over that interval.

We observe intriguingly that core demographic characteristics, age, sex, and educational status (here denoted as passing "matric", an indication of the completion of secondary education) do *not* actually differentiate these two mobility categories very well. We see only that with increasing age, individuals are less likely to be an Annual Mover, i.e., have changed their usual place of residence.

Multinomial Logit Regression for Geographic Mobility Status, MHFUS Wave 4

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-------------------------------------------------------------------------------
 W4_MoverStatus |    Coef.   Std. Err.      z     P>|z|     [95% Conf. Interval]
----------------+--------------------------------------------------------------
Nonmover        |  (base outcome)
----------------+--------------------------------------------------------------
ShortTerm_Mover |
          Male  |   .0191735   .1305705     0.15   0.883     -.23674      .275087
           Age  |  -.0129889   .0114496    -1.13   0.257    -.0354297     .009452
        Matric  |   .1173641   .1329332     0.88   0.377    -.1431802    .3779084
         _cons  |  -1.717747   .3889014    -4.42   0.000     -2.47998    -.9555146
----------------+--------------------------------------------------------------
Annual_Mover    |
          Male  |  -.0279293    .092654    -0.30   0.763    -.2095277    .1536692
           Age  |  -.0572202   .0083318    -6.87   0.000    -.0735502    -.0408901
        Matric  |   .0265256   .0937201     0.28   0.777    -.1571625    .2102136
         _cons  |   .5828828   .2729229     2.14   0.033     .0479636    1.117802
-------------------------------------------------------------------------------
```

When we test for equivalence of coefficients across just the two Mobility Status outcomes (`ShortTerm_Mover vs Annual_Mover`), we strongly reject the null hypothesis of equivalence of the two sets of equations. Moreover, a deeper look indicates that this within-mobility difference is due to the impact of `Age` (chi-sq = 13.49; p<= 0.0002), while tests of equivalence of sex (`Male`) and secondary education completion (`Matric`) fail to reject the null. This differential pattern of equivalence merits further investigation by us. In very preliminary additional work we find that short-term and annual movers in Wave 3 are more likely to be classified within (transition to) annual mover status in Wave 4.

Next Steps
As MHFUS progressed the questionnaire evolved to incorporate additional topics and refine existing questions within the overall design, including migration-residence related modules. Some of our effort will be devoted to exploiting this variation, making use of consistency from wave-to-wave where possible and abandoning it when an alternative and perhaps more favorable design is introduced. The team members involved in this analysis have both intensive and extensive knowledge of these data.

On substantive matters we also intent to investigate health connections. In one extension, we will examine how the stay-temp-perm migration pattern was influenced during the COVID pandemic. In another extension, we will look more systematically at the relationship between health selectivity and migration type, expanding the knowledge base for a long-running concern in the field.

We anticipate more fully-developed analysis, with accompanying text, to be ready for the 2024 EPC conference.