Evaluation of A New Approach to Estimating Migration:
Matching Tax Returns for All Individuals

Hyo Park, U.S. Census Bureau Andrew J. Reese, U.S. Census Bureau

The U.S. Bureau of the Census annually produces estimates of the population for states and counties using demographic components of change (births, deaths, domestic and international migration) as inputs to the population estimates. Estimates of domestic migration are based on migration rates derived from summarized administrative data and changes in the group quarters population. We produce the annual domestic migration data using the Internal Revenue Service administrative records for the post-censal population estimates program by matching 1040 individual income tax returns for the filers only for two consecutive years. The spouse and the dependents on the same return are assigned the same migration status as the filer. By matching on the filers only, the migration data omit the information for those who file a tax return as a primary filer in only one of the two years.

The purpose of person-based migration research is to develop and evaluate a method that would create migration data from separate records for: (1) the filer, (2) the spouse of the filer, and (3)

the dependents (exemptions) represented on the income tax returns. The migration data from these records are called "person-based migration" as opposed to "return-based migration," that were developed from matched returns between two consecutive years. We also expect the new methodology will provide a more accurate measure of migration by tracking the flow of certain individuals from one county to another (e.g., first time filer after college).

A second objective of the person-based methodology is to improve the quality of county and state migration data for demographic characteristics. The return-based methodology presently relies on an imputation method to obtain the characteristics of the spouse and the dependents (i.e., age, sex, race and Hispanic origin). By matching all individuals to the Person Characteristics File (PCF), we expect the person-based methodology will improve the data quality of these characteristics by minimizing imputation.

This paper presents a new way of creating migration data by matching all individuals on the tax return and discusses the differences between the results from the person-based method and the return-based method. The result from the preliminary analysis shows that the inter-county migration rates for the

person-based method are higher than the return-based methods for all migration years (2000-2001 through 2003-2004). The annual rates are also consistent within each method.