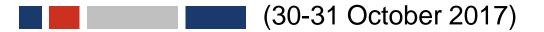


Migration estimates from Portuguese tax records combined with other administrative registers and estimation methods

UNECE, Work Session on Migration Statistics



Outline



- Background
- Data Sources
- Methodology
- ☐ Results (preliminary)
- Conclusions





Background



- Statistics Portugal is currently studying and exploring the use of administrative data in the production of official population statistics
- Annual estimates of immigrants and emigrants released by Statistics Portugal are only available at the national level
- Previous work by Statistics Canada points to the possibility of producing migration estimates of good quality at sub national levels based on tax records







- □ The Portuguese tax payers' register provides information at postcode level on national and foreign individuals of all ages, residing in Portugal or abroad
- □ However, a change in the concept of tax residency which entered into force in January 1, 2015 will have to be accounted for



Data Sources



Tax Registers (2014-2016)

Sex, date of birth, country of citizenship, place of birth, address, country of residence



Statistical Register Prototype

Based on several administrative files (2+) Population Count Prototype (2015) Estimates of International Migration (2014-2016)

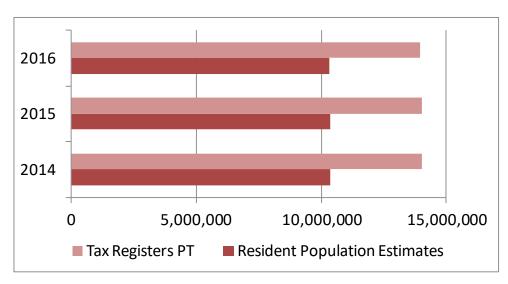
LFS, Foreign
Population
Registers and
Emigration Survey



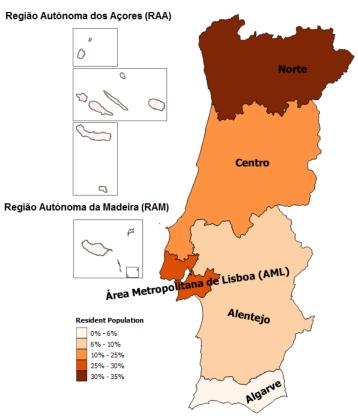
Data Sources







The tax registers show an obvious overcoverage

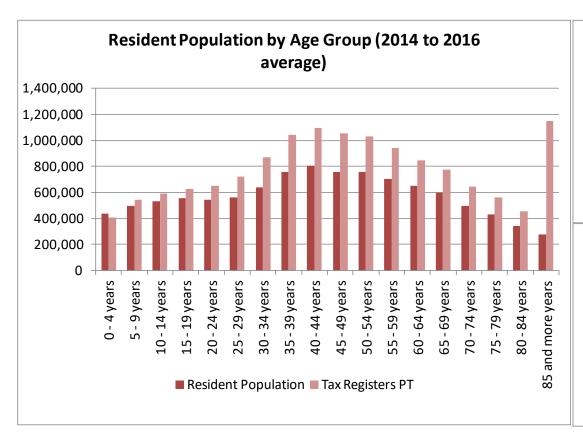


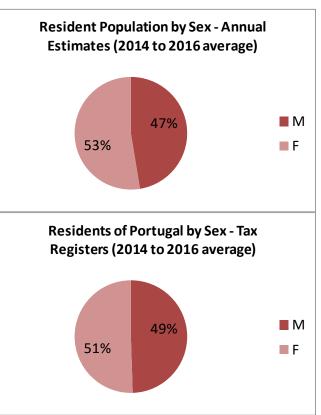


Data Sources











Methodology



The transition method will be adopted for the identification of migrant tax payers, that is, a person will be considered:

A potential emigrant when he or she is present in the country (PT=V) at t but absent (PT=F) at t+1 (excluding deaths)

A potential immigrant if absent at t but counted in the country at t+1 (excluding newborn infants)

A potential internal migrant if present in the country at t and t+1 with different postal codes in each year



Methodology



Correction for overcoverage

- Sign-of-life methodology
- Weight calibration

Distribution ratio calculation

 Distribution ratio by NUTS 2 based on the administrative divisions corresponding to valid postal codes

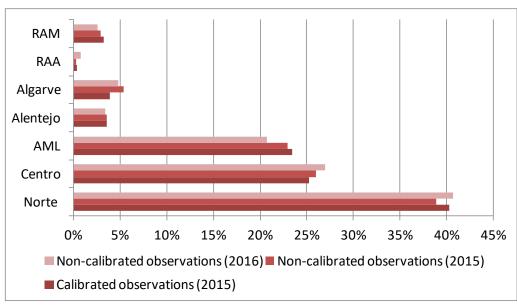
Text fields analysis

 Destination countries' analysis based on the registered residence



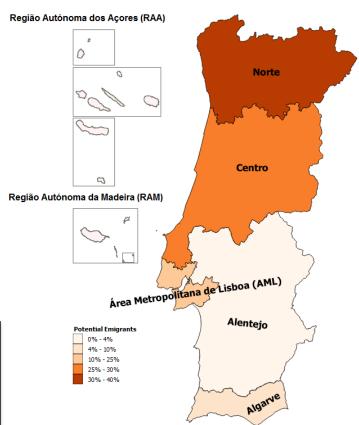






Non-calibrated registers confirm

overcoverage but are highly correlated



with the calibrated ones





Main European countries of destination ranking (by ascending order)

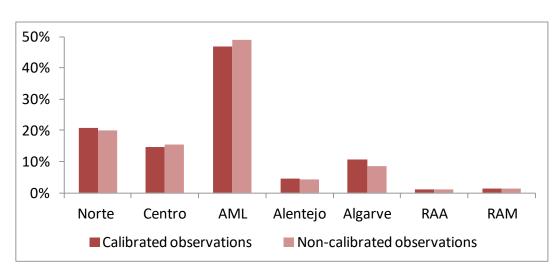
Country	Emigration Report (2015)	Tax Registers (2015)
UK	1	2
France*	2	1
Switzerland	3	7
Germany	4	4
Spain	5	5
Belgium*	6	6
Luxembourg	7	3

^{*}Data from the Emigration Report relate to the year 2013

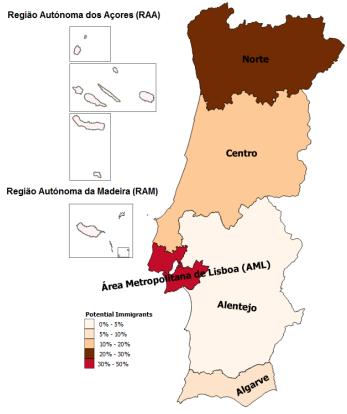


Potential immigrants by destination region (NUTS 2, 2015)





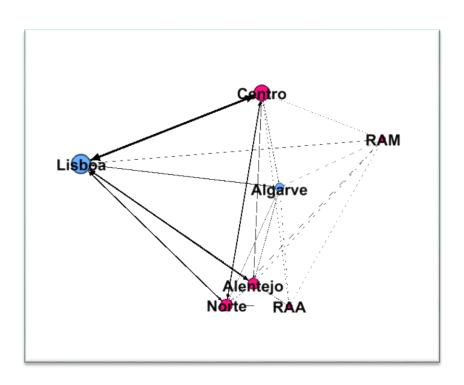
The figures for potential immigrants based on the tax registers and population count prototype are very close to the official estimates (29 896)





Potential internal migrants by NUTS 2 (2015)





- □ Preliminary results point to 104 216 internal migrants by NUTS 2
- Only the NUTS 2
 regions of Lisboa and
 Algarve evidence a
 greater number of
 inflows than outflows



Conclusions



- ☐ The currently available tax data present some limitations, the most important of which relates to the reference period of the registers
- ☐ Future quarterly updates will enable to determine more effectively the volume of migrations
- □ The results obtained so far appear to point to the possible use of tax registers within the production of migration estimates at a more detailed geographic level



Conclusions



- ☐ However, the actual number of immigrants/emigrants at the national level will continue to be estimated according to the current methods
- □ A more ambitious approach will require a close cooperation with the Portuguese Tax and Customs Authority

Thank you for your attention! paula.cruz@ine.pt

