

Cross-Border workers

Methods and Definitions

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0. Introduction

This document outlines the data requirements for the DG REGIO project Study on Cross-Border Data, which aims to collect data on cross-border workers based on administrative data. This project is a follow-up to the DG REGIO pilot project Border Region Data Collection (BRDC). The final report of the BRDC is available [here](#).

1. Methods

1.1. Scope and objectives

The primary objective of this study is to develop indicators to measure the level of cross-border movements in border regions in EU/EFTA countries. To achieve this, we require a relative high geographical granularity (NUTS3). Given the current limitations of widely available datasets, this level of granularity can only be achieved by using administrative sources.

This study focuses exclusively on *incoming* cross-border workers working as employees in the target country. Measuring incoming or outbound cross-border workers is not feasible for most countries and could result in redundant or potentially conflicting information. We build on the previous BRDC project, in which for eight countries data on incoming cross-border workers was successfully collected using social security files. By adopting a pragmatic approach, we aim to maximize the likelihood of success.

1.2. Data set

The population of the data set consists of all employees working in the country. The statistical unit is a person. This implies that we do not want to measure jobs. If an employee has more than one job over the year or at a certain point in time, this should be counted as one. In the case of a person having several jobs as an employee, the main job should be considered. This is generally the job with the highest contractual hours per week or a similar method.

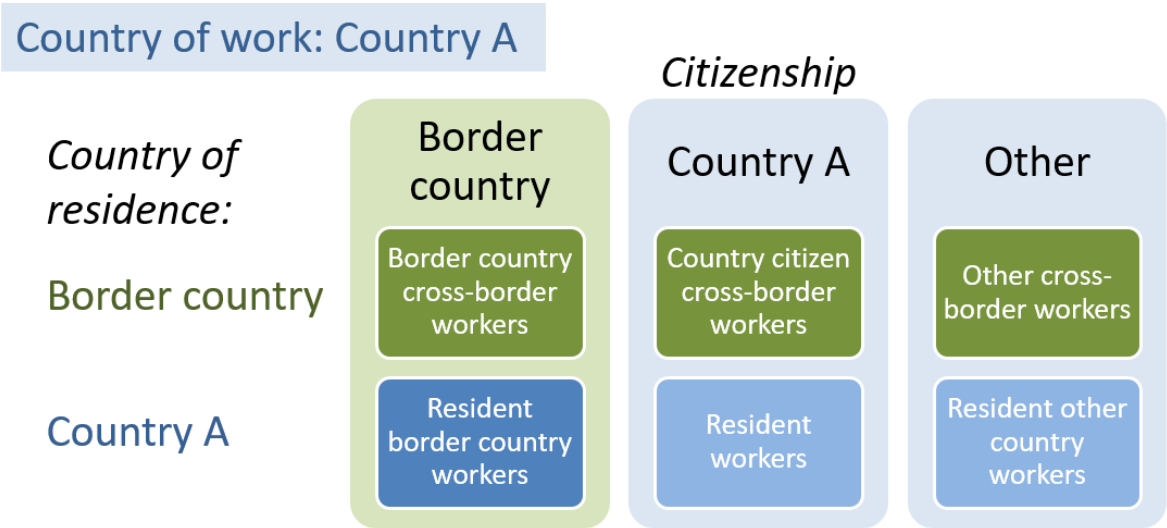
We want to measure the number of incoming cross-border workers in a certain country. These persons are employees who work in the country at hand but live in one of the bordering countries. This requires information identifying employees by their country of residence for both the target country and all its bordering countries. The minimal set of categories to be distinguished are therefore: the country in question and all the bordering countries.

Since cross-border phenomena are local in their impact it is imperative to have a relatively high regional granularity. Therefore we need data by work region at NUTS3 level including the higher levels according to the 2021 version of NUTS-codes.

In addition, we would like a breakdown of the cross-border workers by citizenship and a second breakdown by sex. Citizenship is informative to be able to compare the number of cross-border workers

with the number of resident workers from a bordering country and to identify country citizen cross-border workers. For the rationale behind this see scheme 1 and the BRDC-report. A cross-tabulation of the breakdowns citizenship and sex is not necessary.

Scheme 1. Different categories of cross-borders workers and resident workers



1.3. Sources

The data should be derived from administrative sources. This means that we accept that the indicators reflect the administrative reality that could differ from the factual situation. The administrative source of measuring the employees by place of work would generally be the social security files. To determine the employees’ country of residence or citizenship, it may be necessary to combine this dataset with information from population registers.

1.4. Reference period

We aim to collect data on an annual basis. For administrative data, it is common to use a specific reference date to assess the situation at that point in time, and we expect this approach to be followed. Countries are free to select their preferred reference date. In case of no preference we recommend using a date in the second quarter. For countries that typically produce quarterly data on cross-border workers, we would like to receive the data from the second quarter. If countries (want to) produce annual estimates only, this is can also be accepted at this stage. It is essential, however, that the applied method and reference date are clearly documented in the accompanying metadata form.

We aim to collect data spanning multiple years. However, to avoid excessive demands, we propose a five-year series. Recognizing the time lag often associated with administrative data, we request data for the years 2019 to 2023.

2. Definitions

Region of work

Region of work refers to the place of work. In cases where a company operates across multiple locations in different regions, it is preferable to record the location where the employee is actually

working, rather than the company's main or headquarters location. If an employee has more than one job on the reference day, the characteristics of the job, like the place of work, should refer to the main job.

Regions are coded according to the NUTS-2021 classification. All levels from NUTS3 to NUTS0 should be included as well.

Country of residence

The country of residence must, at a minimum, be identified as either the country where the employee works or one of its bordering countries using the standard country codes within the EU. The annex lists per country all codes of the bordering countries. Note that this includes also the outside borders and therefore codes of non-EU members. Annex 1 presents a comprehensive list of country codes of the bordering countries per country. If deemed relevant, additional countries may be included beyond this minimum requirement. For this, the code list on countries codes separately provided should be used. Finally, the total should account for all employees irrespective of their country of residence, including the employees for which country of residence is unknown.

Breakdown 1: citizenship

What to collect: nationality or citizenship? While nationality and citizenship are distinct concepts, they are often used interchangeable in the context of cross-border issues. To simplify data collection, we would like to take a pragmatic attitude to this issue. We leave it to the countries to choose the concept that is in line with the country's practices or is easiest to implement in case of administrative data. This decision should be documented in the accompanying metadata. Since most countries are expected to report citizenship, this term will be used for consistency.

Citizenship should follow the same coding principles as the country of residence. That means that, at a minimum, citizenship should be identified as either the country where the employee works or one of its bordering countries using the provided codes in annex 1. If countries deem it relevant to distinguish more countries, they are free to do so. The total should account for all employees regardless of their citizenship and including the employees for which citizenship is unknown.

Breakdown 2: sex

In the data set we only want to identify males and females. Employees whose sex is unknown or unspecified should be included in the total but not as a separate category included in the data set. For this variable the code list separately provided should be used.

Annex 1. List of relevant country codes for country of residence per country

Country	code_1	code_2	code_3	code_4	code_5	code_6	code_7	code_8	code_9	code_10
AT	AT	CH	CZ	DE	HU	IT	LI	SI	SK	
BE	BE	DE	FR	LU	NL					
BG	BG	EL	MK	RO	RS	TR				
CH	CH	AT	DE	FR	IT	LI				
CZ	CZ	AT	DE	PL	SK					
DE	DE	AT	BE	CH	CZ	DK	FR	LU	NL	PL
DK	DK	DE	SE							
EE	EE	LV	RU							
EL	EL	AL	BG	MK	TR					
ES	ES	AD	FR	PT						
FI	FI	NO	RU	SE						
FR	FR	AD	BE	CH	DE	ES	IT	LU	MC	
HR	HR	BA	HU	ME	RS	SI				
HU	HU	AT	HR	RO	RS	SI	SK	UA		
IE	IE	UK								
IT	IT	AT	CH	FR	MC	SI	SM			
LT	LT	BY	LV	PL	RU					
LU	LU	BE	DE	FR						
LV	LV	BY	EE	LT	RU					
NL	NL	BE	DE							
NO	NO	FI	RU	SE						
PL	PL	BY	CZ	DE	LT	RU	SK	UA		
PT	PT	ES								
RO	RO	BG	HU	MD	RS	UA				
SE	SE	DK	FI	NO						
SI	SI	AT	HR	HU	IT					
SK	SK	AT	CZ	HU	PL	UA				
TR	TR	AM	AZ	BG	EL	GE	IQ	IR	SY	
UK	UK	IE								