

# Finding family relations: About quality issues regarding family immigration statistics

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# Agenda

## 1. Statistics on reason for immigration

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- Data sources
  - Family immigration and the person of reference (PoF)
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## 2. Directive 2004/38/EC and its consequences

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- The registration scheme and loss of data
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## 3. Some considerations on potential solutions



# 1. Statistics on reason for immigration

# Data sources for reason for immigration

- **The Central Population Register (CPR)**

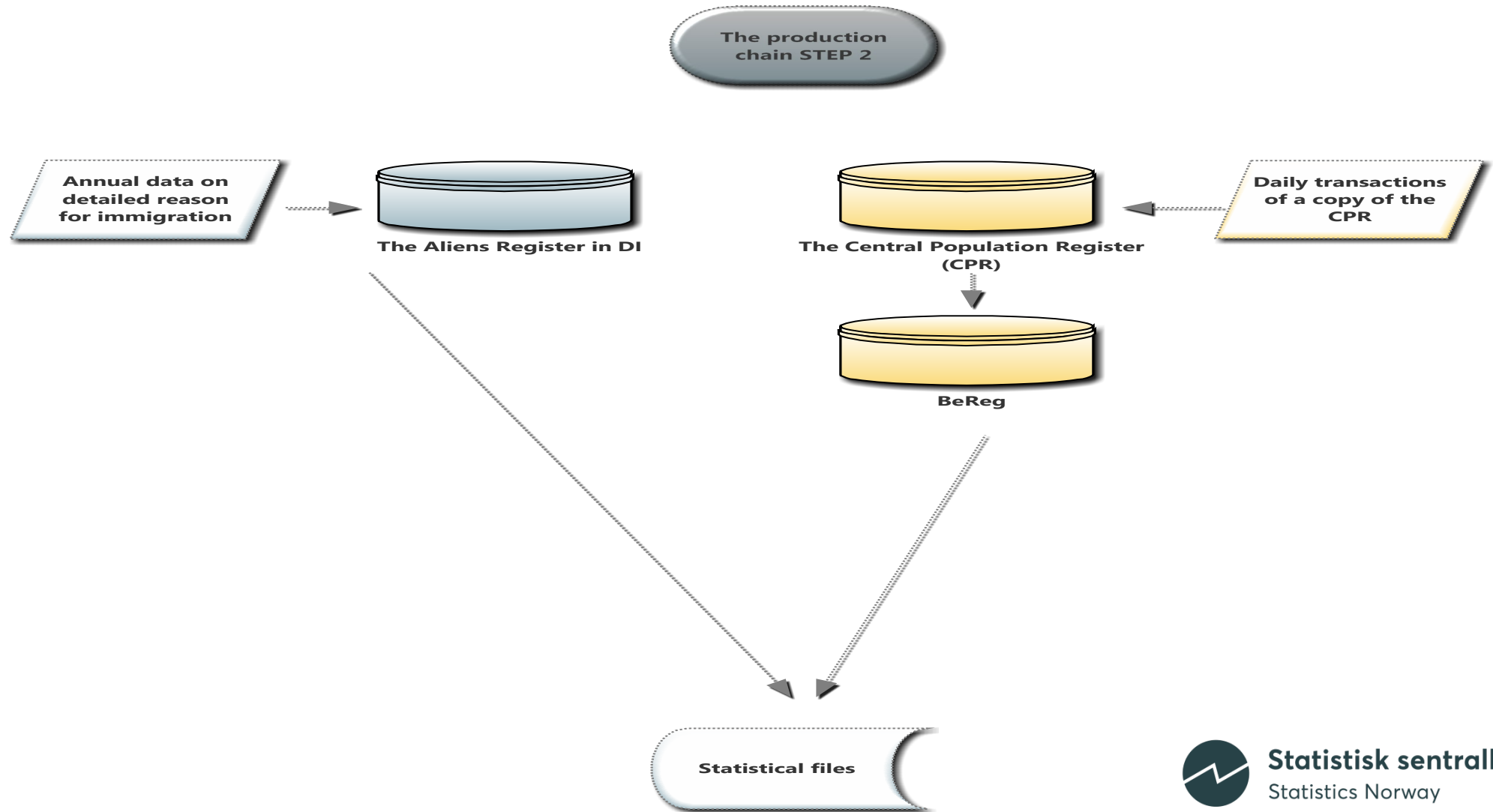
Managed by the Norwegian Tax Administration (Skatteetaten)

- **The Aliens Register (UDB)**

Managed by the Norwegian Directorate of Immigration (UDI)



# CPR → BEREG + AR = The annual statistics on reasons for immigration



# Main reasons for immigration

Five main categories of reasons for immigration (*inngrunn1*) on the finished file:

- Labour
- **Family**
- Refuge
- Education
- Other

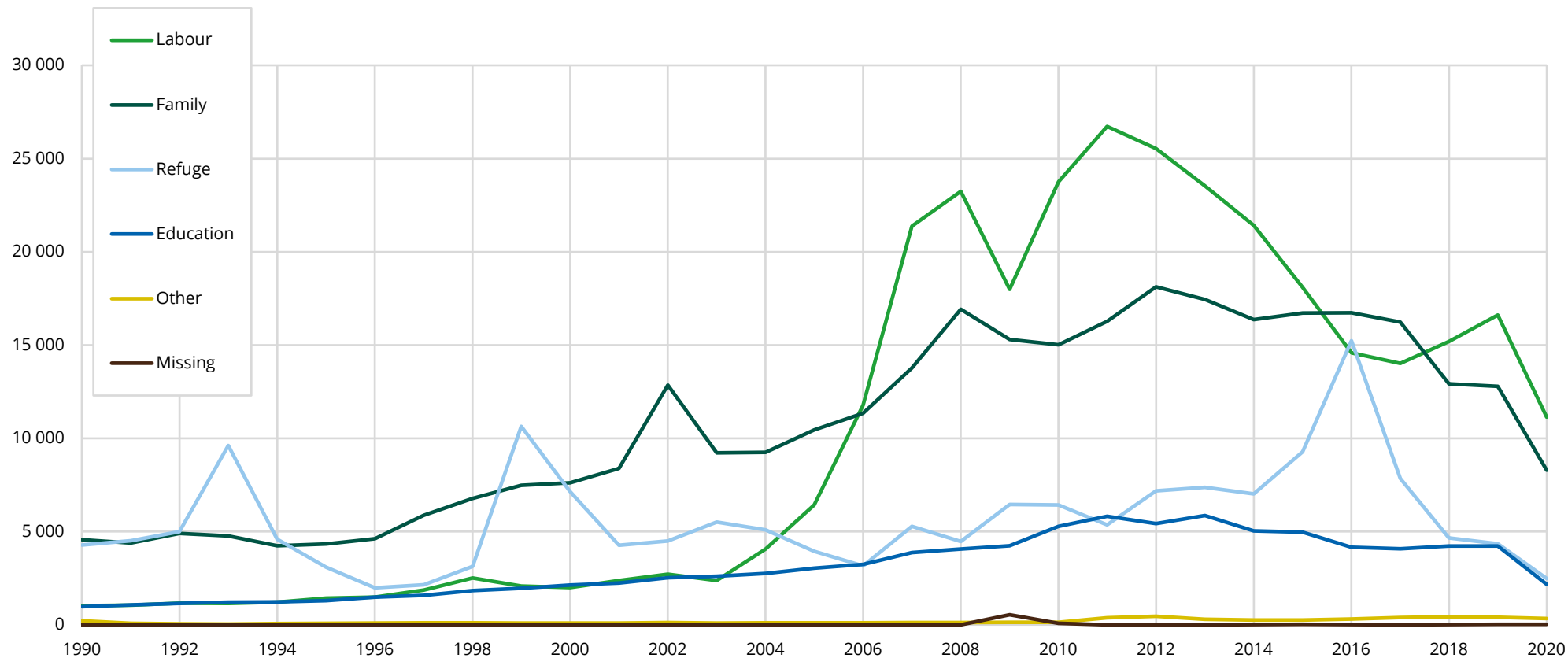
The file only includes non-Nordic immigrants who arrived in 1990 or later

# The person of reference (PoF) and background variables about her/him

- The person of reference (PoF): the person to which family migrant is immigrating
  - Background information regarding the PoF is added from data derived the CPR:
    - Country of birth (*rpfodeland*)
    - First citizenship (*rpforststatsborg*)
    - Immigrant background (*rpinvkat*)
    - Country background (*rplandbak3gen*)
    - Registry status (*rpregstatus*)
- etc.



# Family immigration is too a large extent an extension of other types of immigration

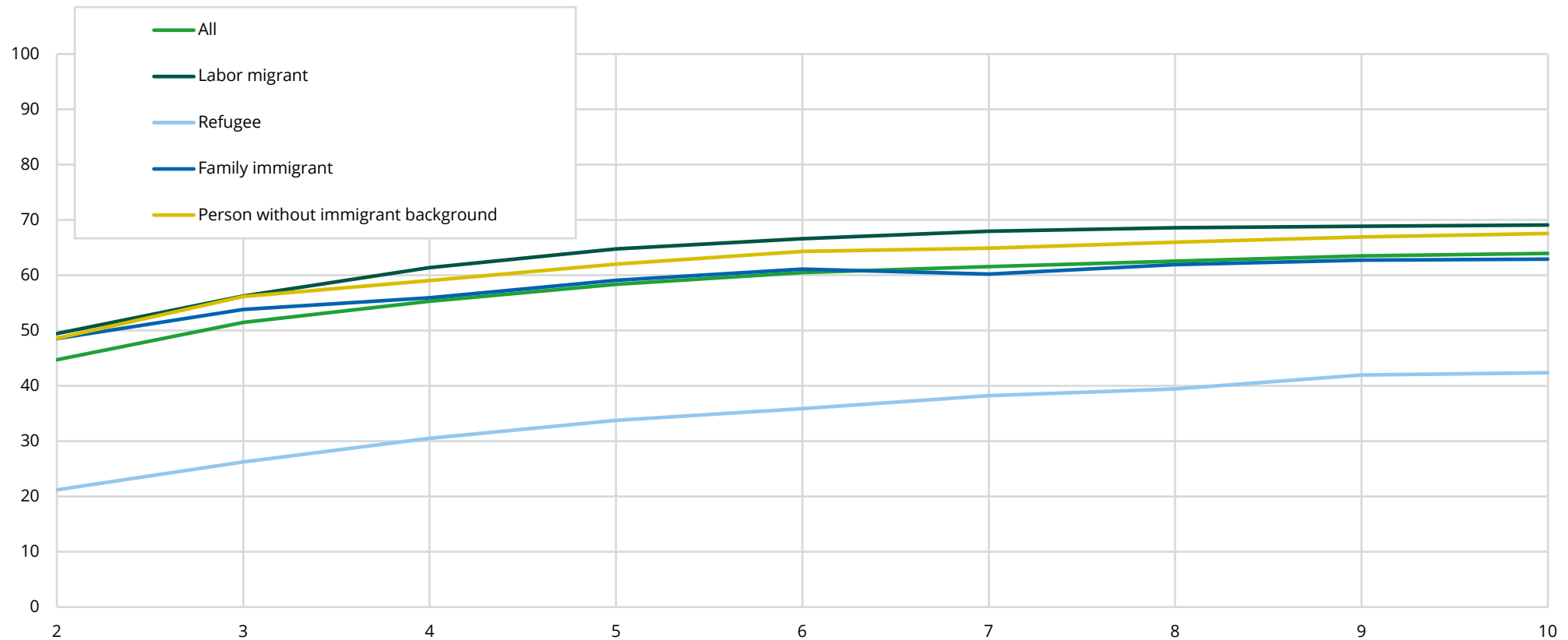


Immigrations to Norway, by reason, 1990-2020

Source: Division for Population Statistics



# ... and integration of family immigrants seem to vary with the background of the PoF



Family immigrants (arrived in 2006-2008) by PoF's reason for immigration/immigrant background. Percentage employed 2-10 years after immigration

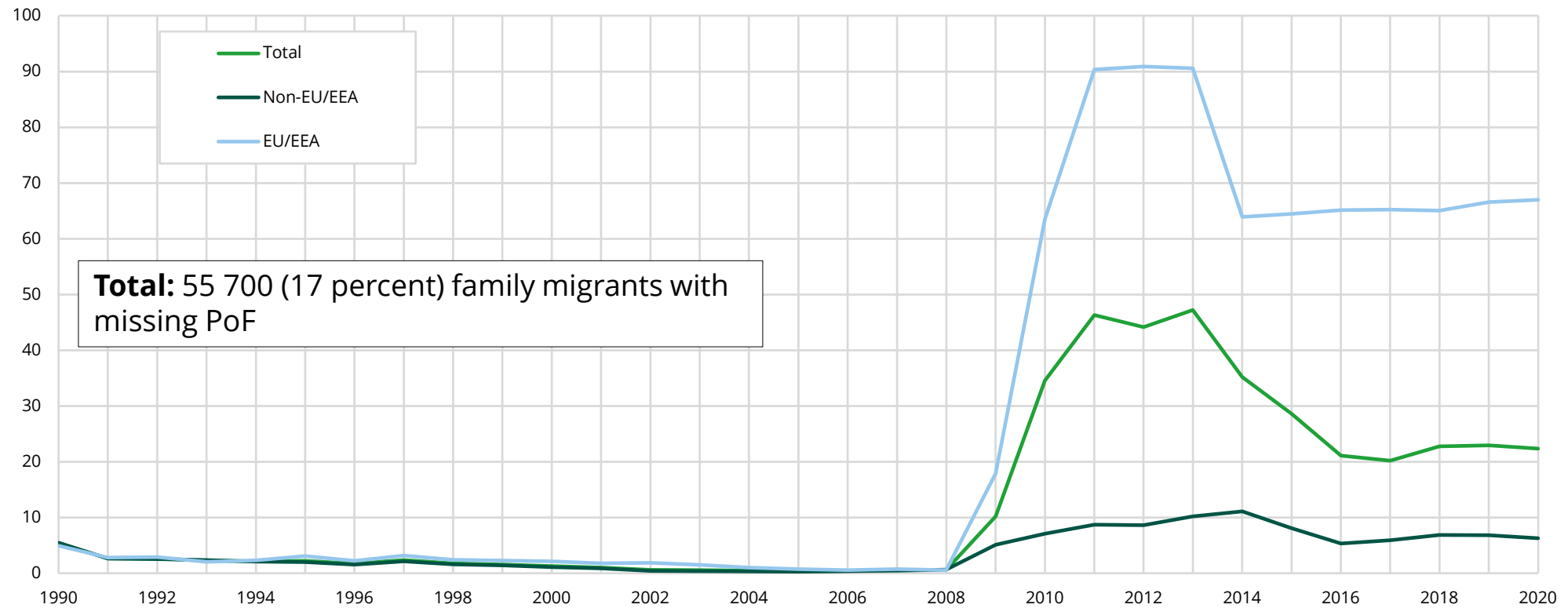
Source: Molstad et al, 2022, p. 65

## **2. Directive 2004/38/EC and its consequences**

# Directive 2004/38/EC

- The directive grants citizens of the European Union “the right to move and reside freely within the territory of the Member States”. This right is “also granted to their family members, irrespective of nationality” (EUR-Lex, 2022, pp. 78-79)
- A simplified registration scheme was introduced by UDI in 2009, through which EU/EEA-citizens and family members of these have been required to register within three months of arrival

# Increase in missing PoF among family migrants from both inside and outside the EU/EEA



Family immigrations to Norway, percentage missing person of reference, 1990-2020

Source: Division for Population Statistics

# **3. Some considerations on potential solutions**

# The project and its scope

- A project, financed by the Ministry of Labour and Social Inclusion (AID), has been initiated to attempt to cover the information loss
- Project deadline: March 2023
- Methods for imputation of missing data, applying a near-neighbour methodology, have been used for linking households and dwellings (Zhang & Hendriks, 2012) and imputing missing data among immigrants in the Register of the Population's Level of Education (BU) (Jentoft, 2014)
- In the current project we hope to avoid wholesale imputation and to be able to successfully identify the actual PoF for each family immigrant using data derived from administrative records



# Starting point for development of method(s)

Preliminary steps to be performed:

1. Identify the possible constellations of family relations that qualify for family immigration
2. Identify data available, either in UDB or CPR or in other administrative data sources, that may be utilized to distinguish family migrants according to their probable relation to their person of reference as identified in step 1
3. Identify data that can act to utilize this relation to link the family migrant to a person registered in CPR

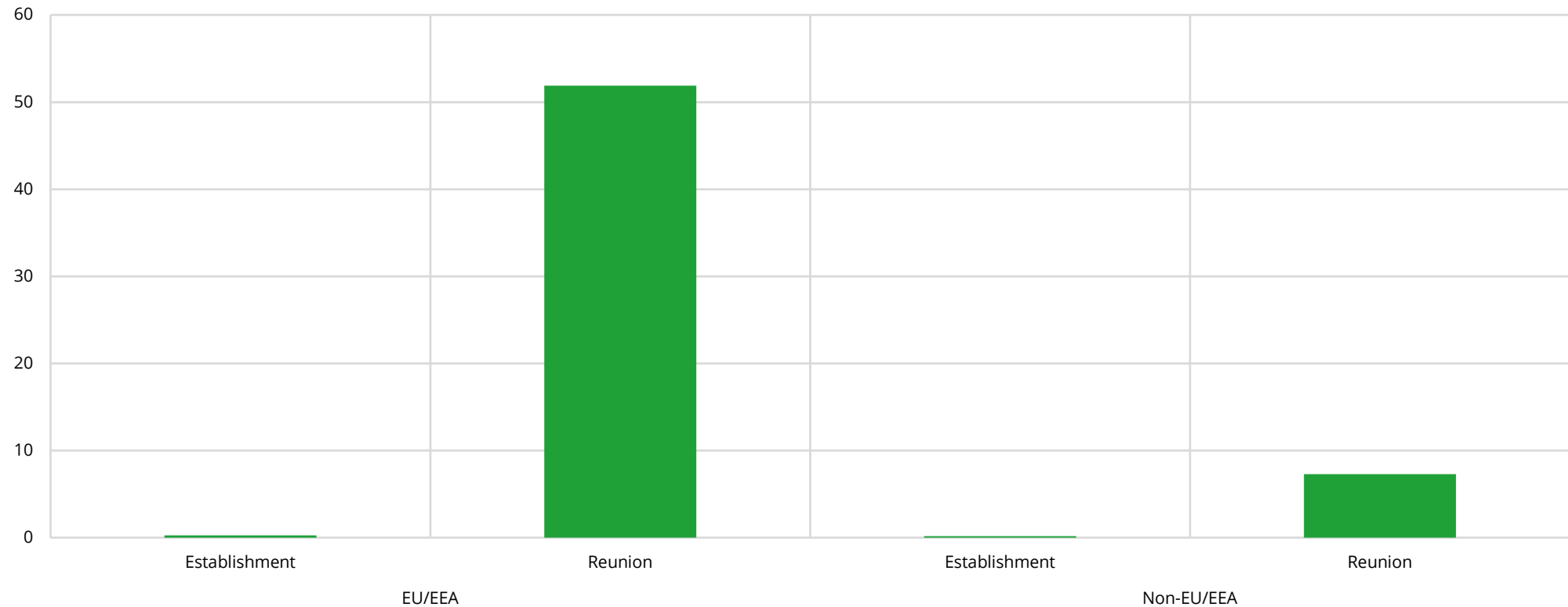
The result is most probably a range of methods, each different according to each “class” of family relation

# Example: Existing method for family establishments

- Family migration due to spouse is possible to identify through the variable *inngrunn*, derived from data from UDB
- Marital data concerning the identity of married individuals' spouses is present in CPR and available to Statistics Norway through the variable *ekt\_fnr*
- This data is used to identify the spouse (i.e. PoF) of the family immigrant and add variables regarding the background of this person to the file



# The result: Few family establishment with missing PoF



**Percentage family immigrants with missing person of reference, by type of family immigration**

**Source:** Division for Population Statistics

# Thank you for your attention!



# References

EUR-Lex (2022). Directive 2004/38/EC of the European Parliament and of the Council of 29 April 2004 on the right of citizens of the Union and their family members to move and reside freely within the territory of the Member States, 47 77 (2022). <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32004L0038&from=EN>

Jentoft, S. (2014). *Imputation of missing data among immigrants in the Register of the Population's Level of Education (BU)* (Notater/Documents 2014/27). Statistisk Sentralbyrå. [https://www.ssb.no/utdanning/artikler-og-publikasjoner/\\_attachment/183364?\\_ts=146a98197c8](https://www.ssb.no/utdanning/artikler-og-publikasjoner/_attachment/183364?_ts=146a98197c8)

Molstad, C. S., Gulbrandsen, F. B., & Steinkellner, A. (2022). *Familieinnvandring og ekteskapsmønster 1990-2020*. (2022/03). Statistisk Sentralbyrå. <https://www.ssb.no/befolkning/innvandrere/artikler/familieinnvandring-og-ekteskapsmonster-1990-2020>

Zhang, L.-C., & Hendriks, C. (2012). Micro integration of register-based census data for dwelling and household. *United Nations Economic Commission for Europe (UNECE): Conference of European Statisticians. Work Session on Statistical Data Editing* [https://unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.44/2012/16\\_Norway.pdf](https://unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.44/2012/16_Norway.pdf)

