

Life Expectancy among Immigrants in Sweden pre and during COVID-19: A Consideration of Different Origins and Types of Residence Permits.

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Mortality of immigrants

The Migrant Mortality Advantage (MMA) describes how immigrants in several countries live longer than natives (Guillot et al., 2018).

The advantage has been observed only for migrants from particular world areas, such as Northern Africa, Asia, and Southern Europe, moving to high-income countries (Shor & Roelfs, 2021).

In the U.S.A., there are clear evidence for the Hispanic population advantage. Similar results were found for Australia, New Zealand, and Canada.

In Europe, the results are less homogeneous due the more diversify migrant population (e.g. Ikram, 2015) .

Migrant Mortality Advantage

- The **healthy immigrant effect** (HIE)
- The **salmon bias hypothesis**
- The **cultural effect**
- The **data artefact hypothesis**

Mortality of Refugees

Few studies have reported the mortality for migrants considering the difference between sub-groups of immigrants, such as non-refugees and refugees in Western countries (Aldridge et al., 2018).

For general health, refugees are considered more at risk than other migrants, since the entire migration process—leaving the country, travelling, and requesting asylum in the destination country—is associated with stressful and risky circumstances (Oostrum et al., 2011).

COVID-19

The COVID-19 pandemic hit the world in 2020, and life expectancy in several countries declined (Aburto et al., 2022).

In particular, the pandemic negatively affected the mortality of immigrants in Western countries, reducing the migrant mortality advantage in several countries such as the U.S.A., Italy, France, Belgium, and Spain.

Some of these studies highlighted a major risk for people coming from Africa (Khlat et al., 2022, Vanthomme et al., 2021), South America, and Asia (Aldea, 2022).

The Swedish situation 1/2

Up until the end of the 1990s, the majority of Sweden's migrant population was born in other Nordic and other European countries.

From the beginning of this century, non-European immigrants have become a much more prevalent group in Sweden.

Wallace & Drefahl (2022) found that first-generation non-Western immigrants contributed positively to national life expectancy in Sweden, while Western immigrants contributed negatively.

The Swedish situation 2/2

In 2019, immigrants started to overall contribute positively to life expectancy.

The trend was expected to continue, if it was not for the COVID-19 pandemic.

Compared to native Swedes, low and middle-income countries immigrants were twice as likely to die of COVID-19 (Drefahl et al., 2020).

Immigrants from Somalia, Lebanon, Syria, Turkey, Iran, and Iraq had a higher risk of dying from COVID-19 than other residents in Stockholm (Rostila et al., 2021).

Research Questions

This study investigates two aims of life expectancy in immigrants during 2010-2021, considering groups by the origins of the immigrants and the type of permit.

- 1. Understand whether the recent emergence of a positive impact of immigrants on national life expectancy in Sweden can be attributed to refugees.*
- 2. Understand how much the COVID-19 pandemic and its disproportionate impact on international immigrants interrupted the positive contribution that migrants started to make to national life expectancy levels.*

Data

We used data through the collection of register project REFU-GEN, “A Better Life for the Children of Exile: The Adaptation of Refugees, their Children and their Grandchildren”.

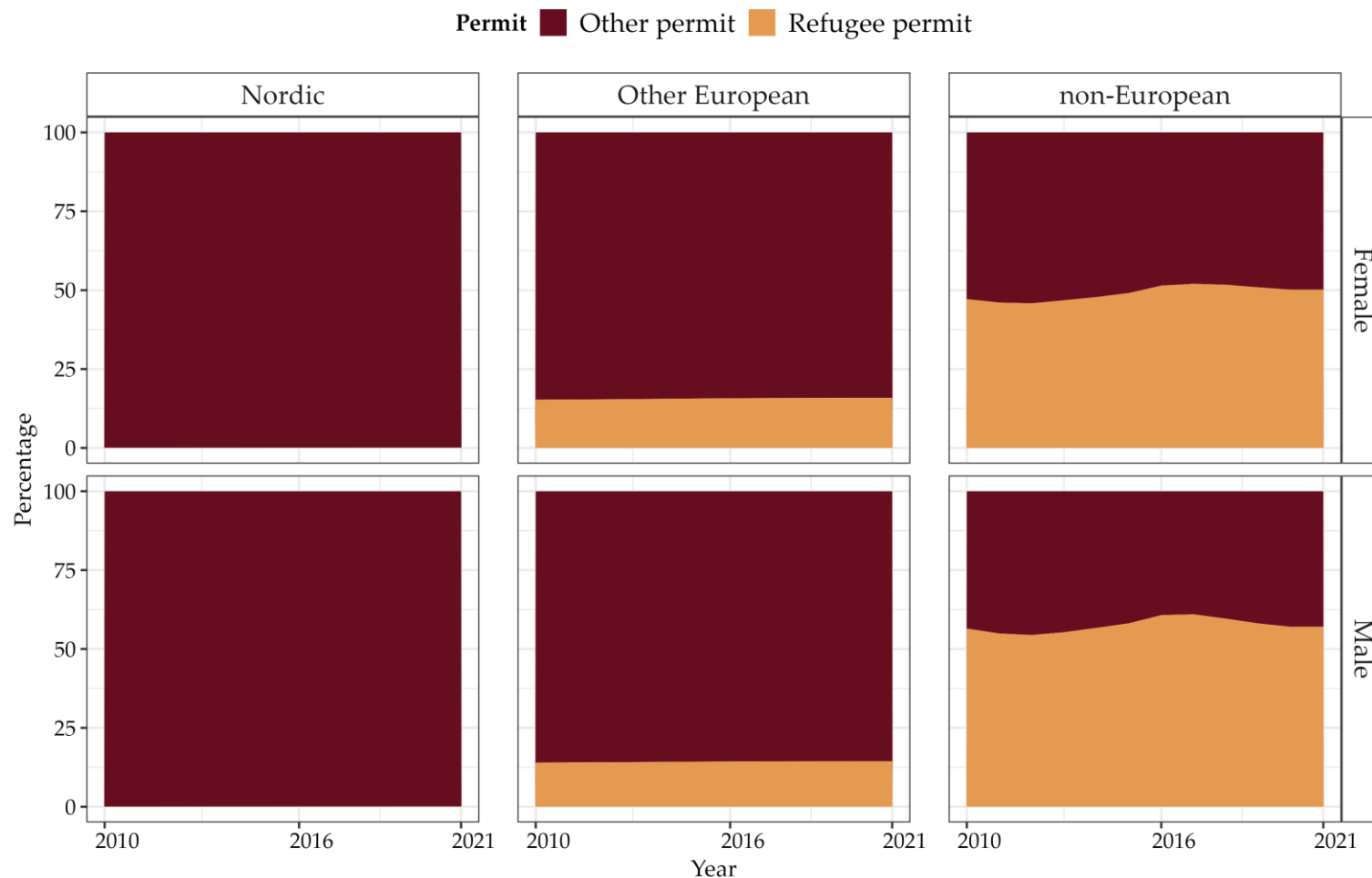
We decided to assess the refugee/non-refugee status, using the permit that the immigrant had the year of the estimate or the previous last recorded permit. If in the following years, the refugee status changed, the observation was included in the other group for the following years' estimates.

Data – Share of the population

The migrants are divided for resident permits, year 2010-2021



Data – Comparison between origin areas and permit type



Methods

- Partial life expectancy at age 1
- Arriaga decomposition between age 1 and 95+

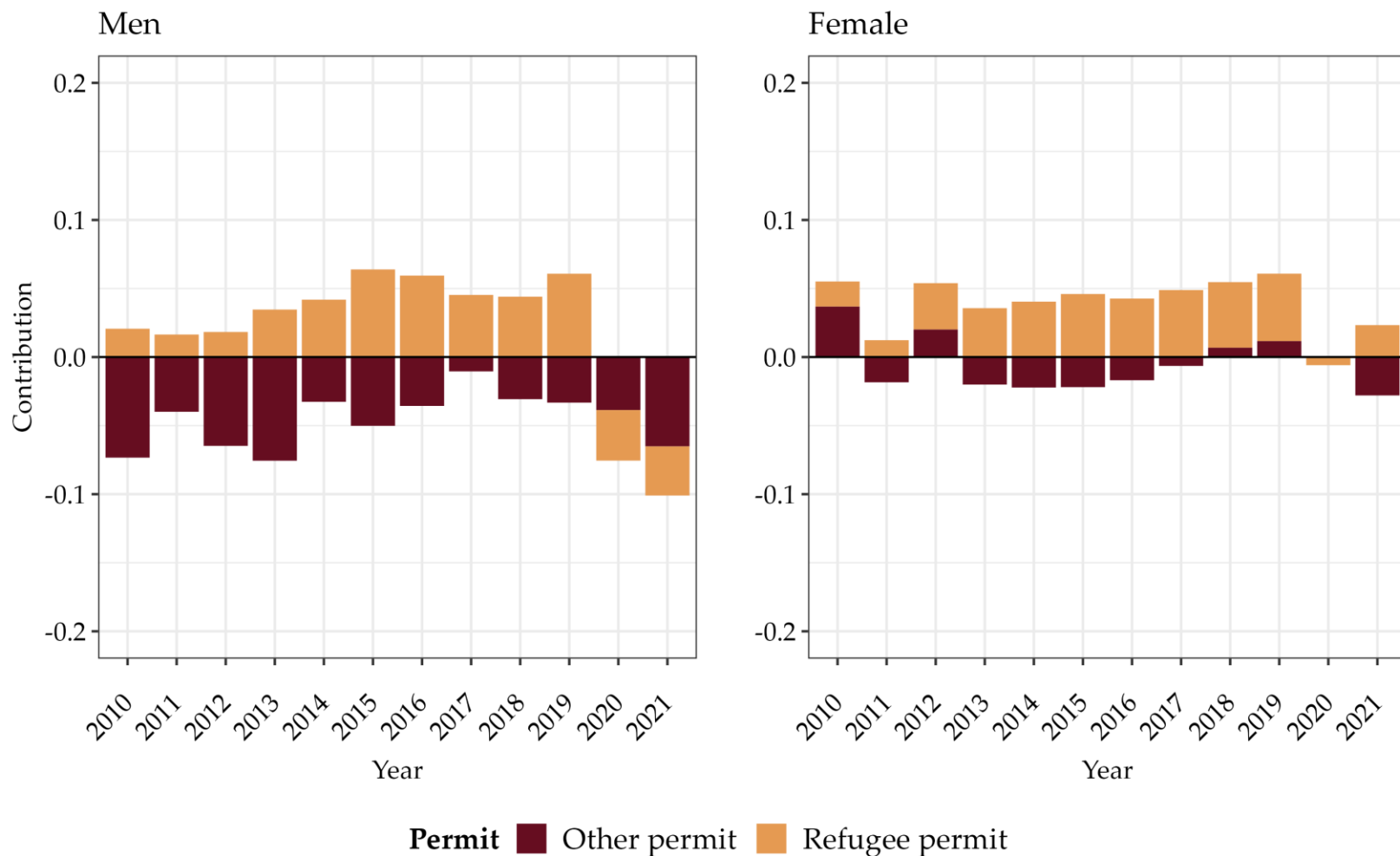
Partial life expectancy (age 1)

Migrants for permits group, Years 2010-2021



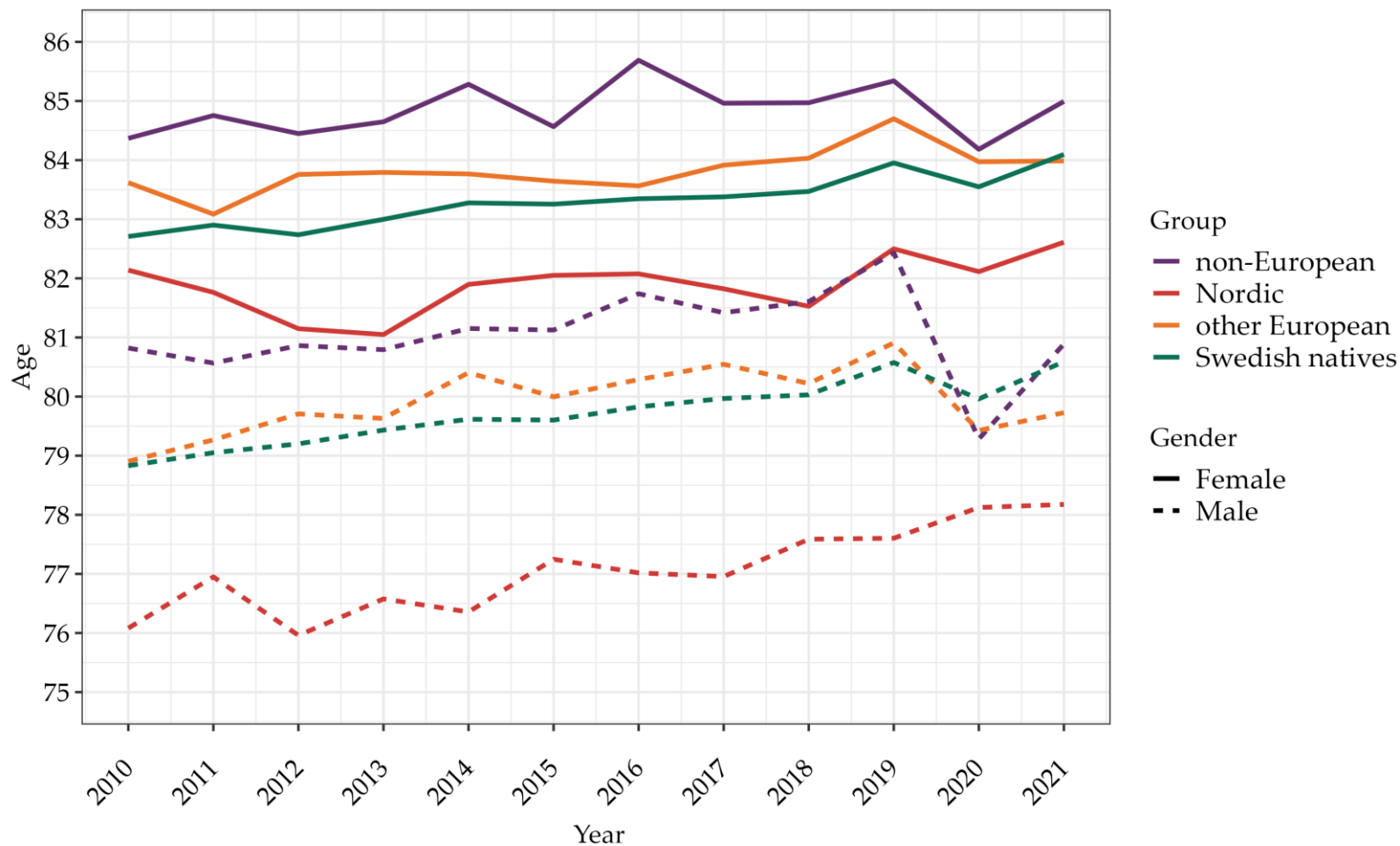
Arriaga decomposition (age 1-95+)

Migrants for permits group, Years 2010-2021



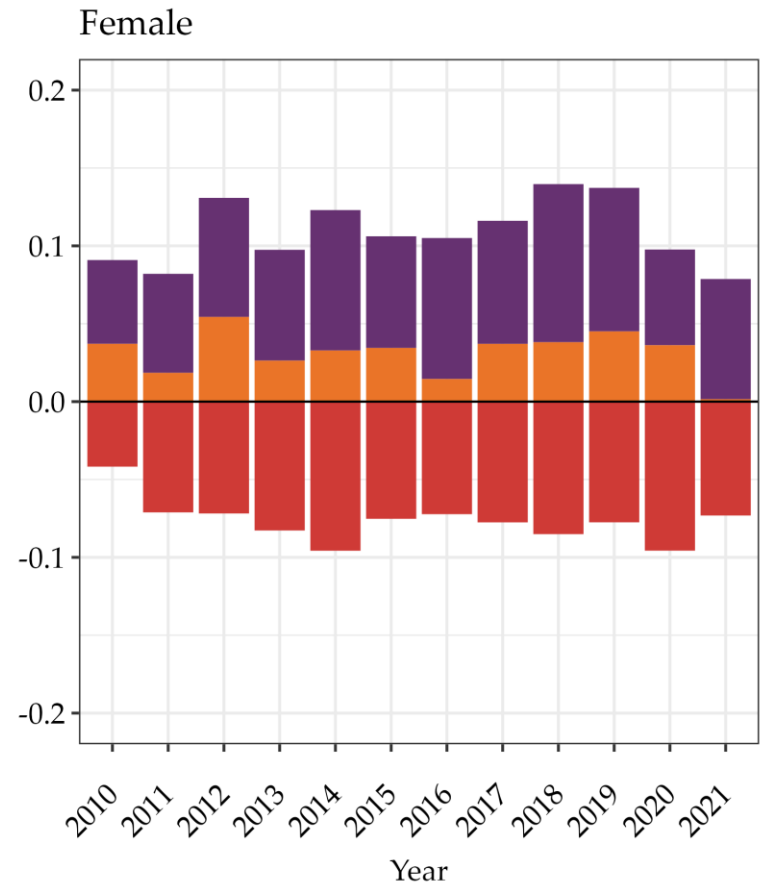
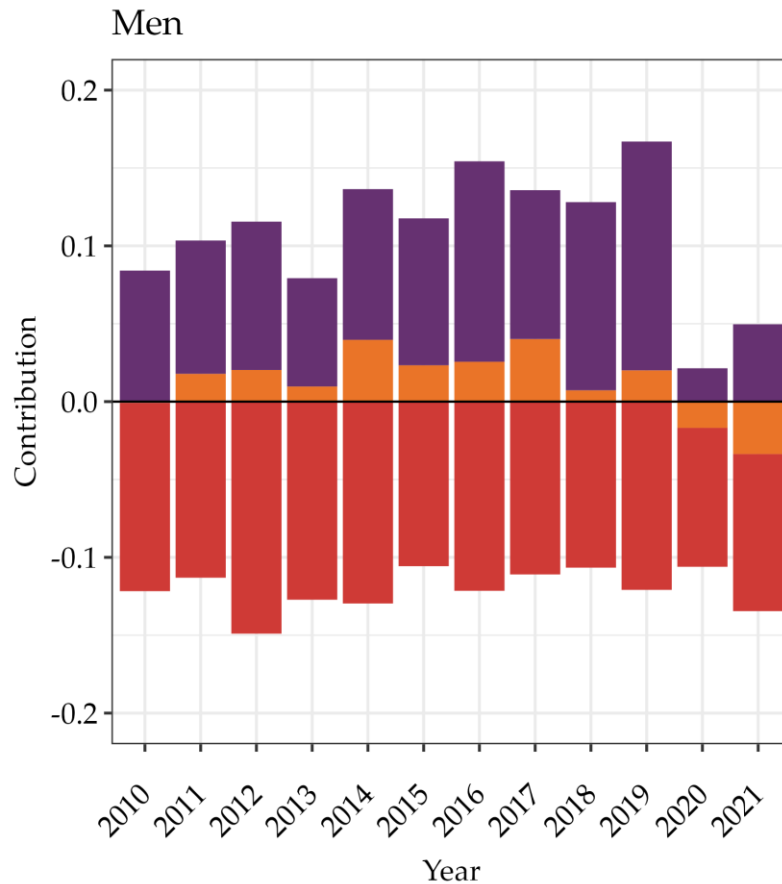
Partial life expectancy (age 1)

Migrants for origin area, Years 2010-2021



Arriaga Decomposition (age 1-95+)

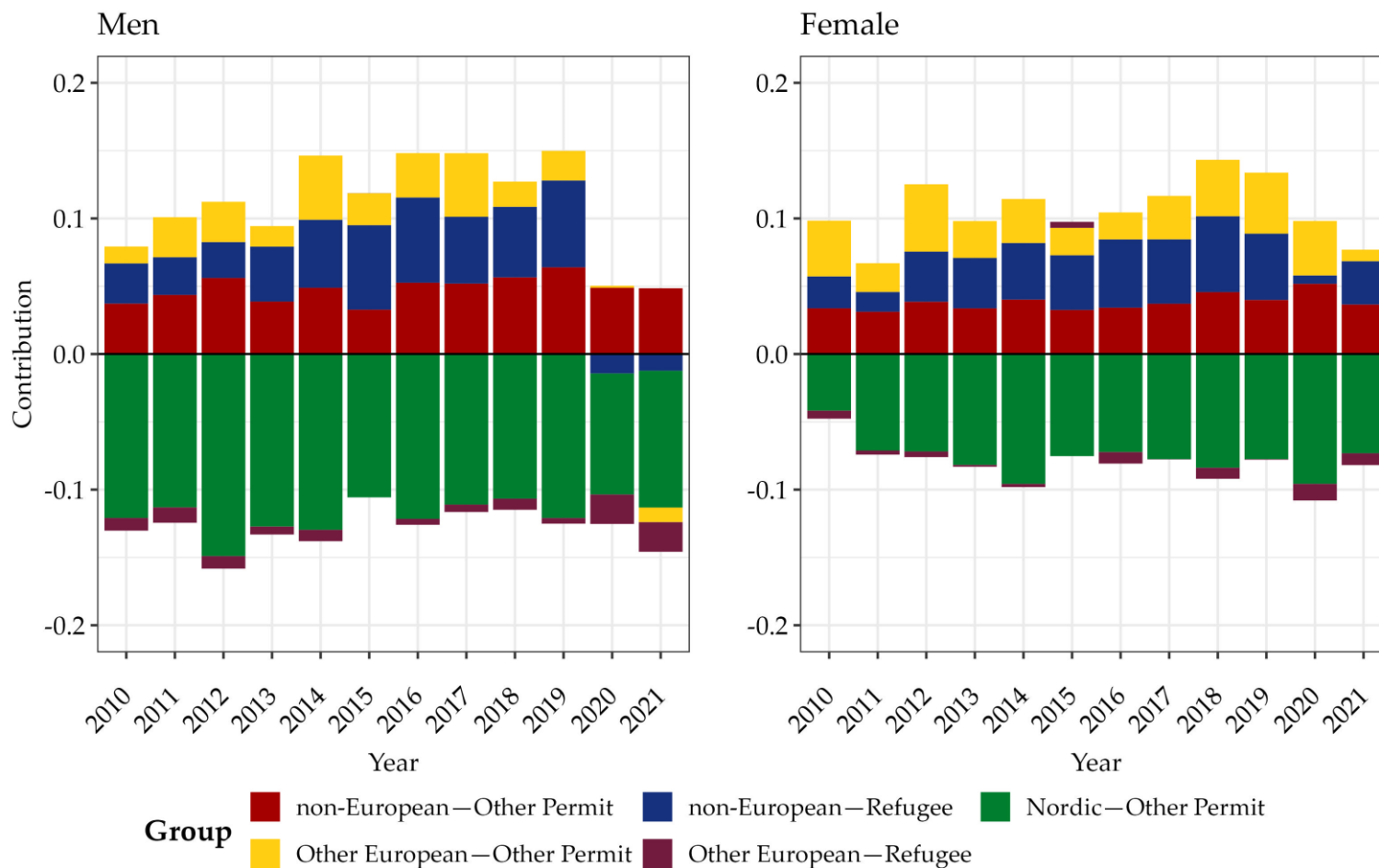
Migrants for origin area, Years 2010-2021



Origin ■ non-European ■ Nordic ■ Other European

Arriaga decomposition (age 1-95+)

Migrants for permits group and origin area, Years 2010-2021



Discussion

1) Understand whether the recent emergence of a positive impact of immigrants on national life expectancy in Sweden can be attributed to refugees.

The refugees have a positive impact on the PLE at age 1 up until 2019. But it also appear to be origin area component in the positive impact.

2) Understand how much the COVID-19 pandemic and its disproportionate impact on international immigrants interrupted the positive contribution that migrants started to make to national life expectancy levels.

For the origin area, we show that the there was a reduction of the positive impact of the non-European migrants. For the refugees, 2020 and 2021, the impact of the male refugee is negative, while for the female is negative only for 2020.

Limitations

- The composition of the groups changes every year.
- It is not possible to create the LE and decomposition for smaller groups.

Reference

- Aburto, J. M., et al.. (2022). Quantifying impacts of the COVID-19 pandemic through life-expectancy losses: A population-level study of 29 countries.
- Aldea, N. (2022). Mortality impact of the Covid-19 epidemic on immigrant populations in Spain.
- Aldridge et al.(2018). Global patterns of mortality in international migrants: A systematic review and meta-analysis.
- Drefahl, S., et al. (2020). A population-based cohort study of socio-demographic risk factors for COVID-19 deaths in Sweden.
- Guillot, M., et al. (2018). Understanding age variations in the migrant mortality advantage: An international comparative perspective.
- Khlat, M., & Darmon, N. (2003). Is there a Mediterranean migrants mortality paradox in Europe?
- Oostrum, I. E. A. et al. (2011). Mortality and causes of death among asylum seekers in the Netherlands, 2002–2005.
- Rostila, M., et al. . (2021). Disparities in Coronavirus Disease 2019 Mortality by Country of Birth in Stockholm, Sweden: A Total-Population–Based Cohort Study. Shor, E., & Roelfs, D. (2021). A global meta-analysis of the immigrant mortality advantage.
- Vanthomme et al. (2021). A population-based study on mortality among Belgian immigrants during the first COVID-19 wave in Belgium. Can demographic and socioeconomic indicators explain differential mortality?
- Wallace, M., & Drefahl, S. (2022). Against the Grain: International Migration, Mortality and Population Health in Sweden, 1990-2019 (Version 1).

Non-European immigrants

Three most common country of birth for age class

		2010			2016			2021		
	Ages	<30	30-69	70+	<30	30-69	70+	<30	30-69	70+
MALE	Other	Turkey, Iran, China	Turkey, Iran, China	Turkey, Iran, China	Iraq, Turkey, India	Iraq, Turkey, India	Iraq, Turkey, India	Iraq, Turkey, India	Iraq, Turkey, India	Iraq, Turkey, India
	Refugee	Somalia, Iraq, Iran	Somalia, Iraq, Iran	Somalia, Iraq, Iran	Somalia, Syria, Iraq	Somalia, Syria, Iraq	Somalia, Syria, Iraq	Somalia, Syria, Iraq	Somalia, Syria, Iraq	Somalia, Syria, Iraq
FEMALE	Other	Turkey, China, Thailand	Turkey, China, Thailand	Turkey, China, Thailand	Iraq, China, Thailand	Iraq, China, Thailand	Iraq, China, Thailand	India, China, Thailand	India, China, Thailand	India, China, Thailand
	Refugee	Somalia, Iraq, Iran	Somalia, Iraq, Iran	Somalia, Iraq, Iran	Somalia, Syria, Iraq	Somalia, Syria, Iraq	Somalia, Syria, Iraq	Somalia, Syria, Iraq	Somalia, Syria, Iraq	Somalia, Syria, Iraq