

# MICRI: Measuring immigration related conflict risk index

A novel composite indicator for measuring  
conflict risk at sub-regional level



**Helina Maasing, Oliver Nahkur, Ave Roots and Mare Ainsaar**

Conference „Social Monitoring and Reporting in Europe”

Rising Conflicts and Polarisation in European Societies?

Indicators, Empirical Evidence and Future Prospects

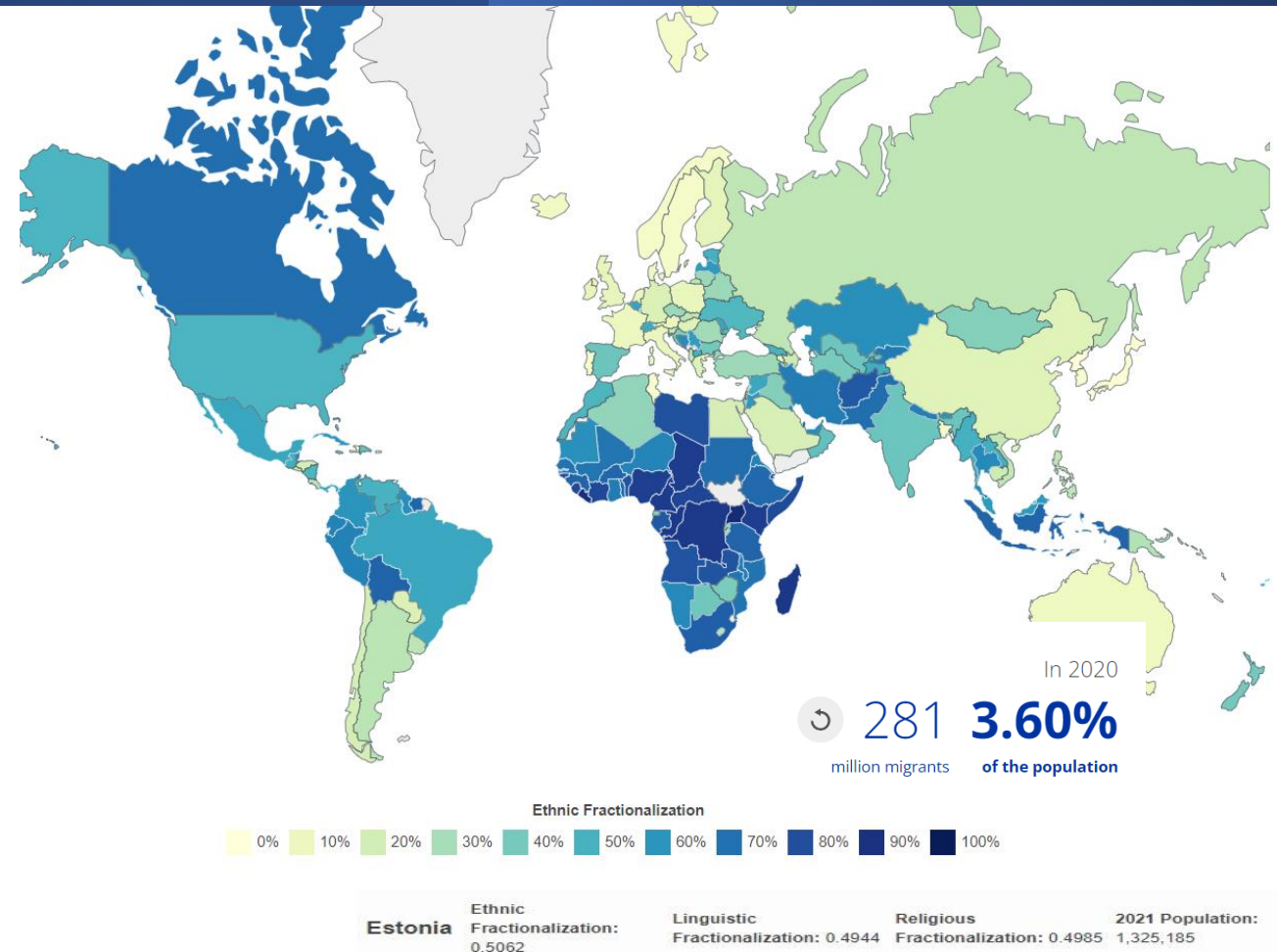
Villa Vigoni 9-11/2023

# Frame of the presentation

1. Why? What is the importance of monitoring and measuring potential immigration related conflict risk in the society.
2. How? We propose MICRI index as a tool to measure the risk of immigration related conflicts.
3. What's the methodology behind this Index?
4. Does it work and what it tells about Estonia?
5. Some additional steps done
6. What's next?

# Why Measure the Potential for Immigration-Related Conflicts?

- Diversity is growing in many nations, often as a result of increased immigration.
- Sudden influx of immigrants has been linked to negative attitudes and intergroup conflict (Halevy & Cohen, 2019; Marozzi, 2016; Barbulescuc & Beaudonnet, 2014; Dancygier, 2010)
- In order to prevent intergroup frictions in the society, policy makers and security analysts should systematically monitor the potential risk in the society.



# Theory: risk for conflict is increasing if

...

1. Groups have strong group identity (ethnic, religious etc.)
2. Low general trust between the members of community as well as trust in institutions.
3. Difference in belief systems.
4. Negative attitudes and stereotypes towards immigration.
5. Threat perception, including to its own group.
6. Dissatisfaction, perceived inequality and feelings of exclusion.
7. Competition for resources.
8. Intensive immigration to a region.

+ mobilization of different groups often arise as deliberate political strategies employed by leaders and groups.

# How MICRI can help to measure and monitor potential conflict risk?

Our research team has constructed a composite index – MICRI.

Advantages of MICRI:

- It allows to measure risk at sub-national level, allowing to capture regional differences.
- It includes subjective indicators (13 out of 17 indicators), which characterize groups' grievances.

Many scholars have indicated the importance of the local dimension and the need to use regionally disaggregated data in the conflict studies (Cederman & Girardin, 2007; Cederman et al., 2009; Ward et al., 2010; Costalli & Moro, 2011; Stroschein, 2017), which might generate a better out-come in predictions.

# Methodology: steps for constructing MICRI

## 1. Theoretical framework

- What can elevate conflict risk

## 2. Indicator/variable selection

## 3. Multivariate analysis

- Relationships between indicators

## 3. Normalization of indicators

## 4. Weighting and aggregating

## 5. Validity analysis

# Constructing an Index to measure immigration related conflict risk at subnational level

**41**

risk indicators identified based on literature and theories

**17**

risk indicators met the requirement for the index

**10**

dimensions from the indicators

13 subjective  
4 objective

*Requirements for the indicators:*

- *the data should be regularly updated;*
- *the data must be reliable;*
- *relevant;*
- *accessible for international use;*
- *and can be measured on regional level.*



data of 75 out of 79 Estonian municipalities  
- three ESS waves (2014 – 2018) merged

# Dimensions and indicators:

all indicators were transformed to a scale of 0 to 1

1. Identity/sense of belonging	2. Distrust	3. Conflicting values	4. Feelings of threat	5. Inequality
ID1= Ethnic groups ID2= Religious groups	DT1=generalised trust to other people DT2=institutional trust	V1= negative immigration attitude V2= negative stereotypes V3= <i>value gap</i>	TH1= cultural threat TH2= economic threat TH3= physical threat	IN = discrimination perception
6. Dissatisfaction	7. Poor communication	8. Low norm obedience	9. Lack of economic resources	10. Immigration
D= feelings of dissatisfaction	PC = understanding different people, incl contacts	LNO = people who say it is not important to follow rules	LER1 = feelings of poverty LER2= registered unemployment	IM = average immigration rate to region

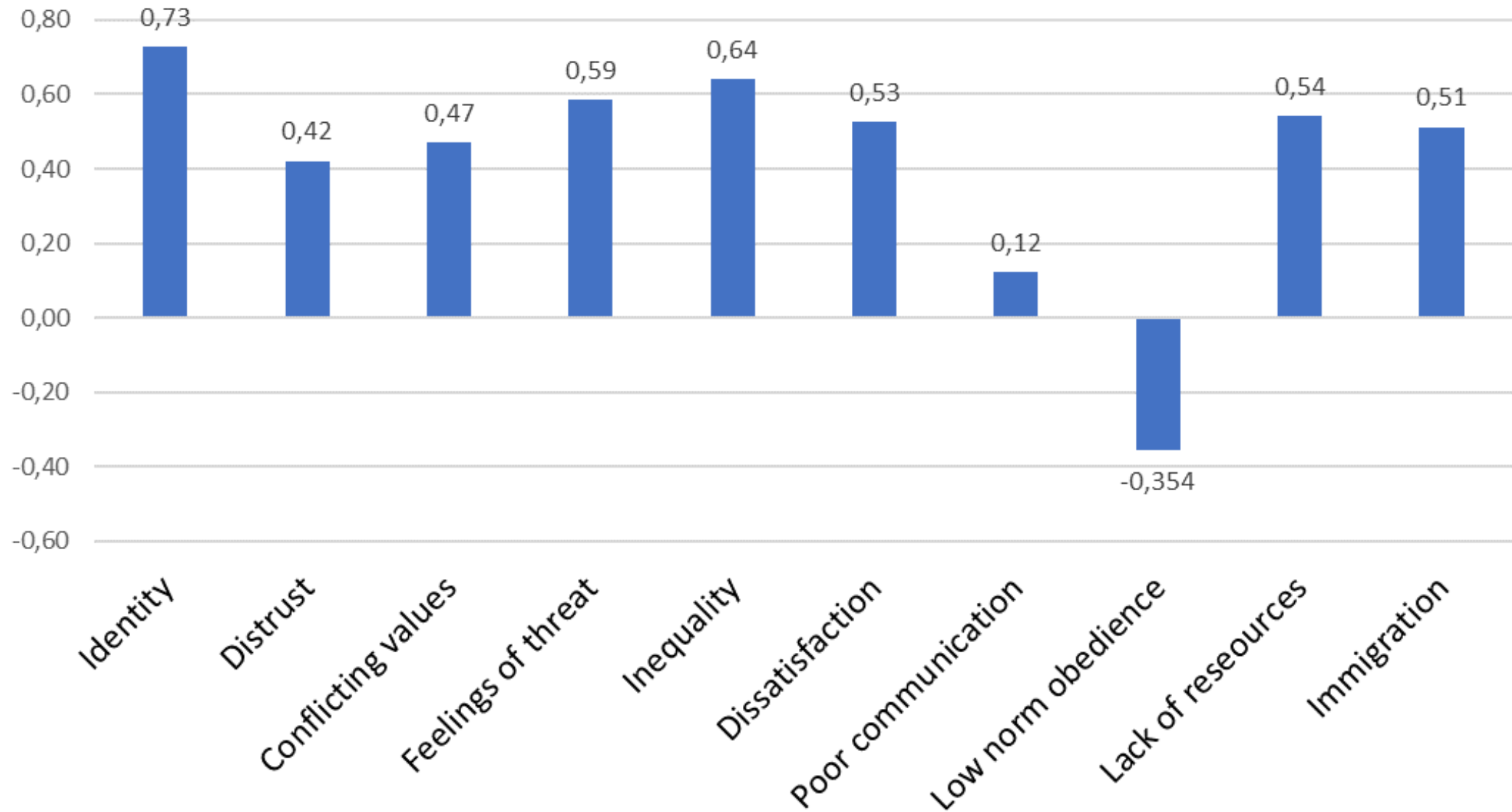


# MICRI =

$$\begin{aligned} & \text{ID1} + \text{ID2} + \text{DT1} + \text{DT2} + \text{V1} + \text{V2} \\ & + \text{V3} + \text{TH1} + \text{TH2} + \text{TH3} + \text{IN} * 10 \\ & + \text{D} * 5 + \text{PC} + \text{LNO} + \text{LER1} + \\ & \text{LER2} * 10 + \text{IM} \end{aligned}$$

	The most risk-prone	Average	The least risk-prone
Identity	2.0	0.7	0.0
Distrust	1.0	0.7	0.5
Values	1.7	1.2	0.7
Feelings of threat	1.4	0.9	0.5
Inequality	1.4	0.5	0.0
Dissatisfaction	1.7	0.6	0.4
Poor communication	0.1	0.1	0.1
Norm obedience	0.3	0.3	0.3
Lack of resources	0.8	0.6	0.5
Immigration	2.4	0.9	0.6
Total risk score	12.84	6.8	3.6

# Internal validity



MICRI's c-alpha 0.698

Indicators European Social Survey + statistics	Average	G 1	G 2	G 3	G 4
1. Distribution of minority groups	0.31	0.00	0.00	1.00	0.60
2. Different religious groups	0.37	0.00	1.00	1.00	0.00
3. Generalised distrust	0.23	0.23	0.18	0.24	0.30
4. Distrust of state institutions	0.49	0.49	0.44	0.50	0.57
5. Negative immigration attitudes	0.52	0.49	0.58	0.53	0.63
6. Negative stereotypes about immigrants	0.46	0.46	0.46	0.47	0.40
7. Values conflict	0.23	0.23	0.21	0.21	0.19
8. Immigration as fret for culture	0.35	0.34	0.29	0.39	0.35
9. Immigration as fret for economy	0.43	0.42	0.48	0.42	0.46
10. Lack of physical security	0.15	0.10	0.14	0.18	0.38
11. Feeling of injustice	0.48	0.26	0.19	0.56	2.43
12. Dissatisfaction	0.59	0.49	0.55	0.70	1.01
13. Communication wish (skills)	0.15	0.14	0.26	0.11	0.12
14. Low norm obedience	0.34	0.35	0.41	0.30	0.28
15. Poverty level	0.27	0.24	0.29	0.25	0.50
16. Unemployment %	0.31	0.28	0.31	0.31	0.54
17. Immigration rate	0.87	0.74	0.93	1.06	1.02

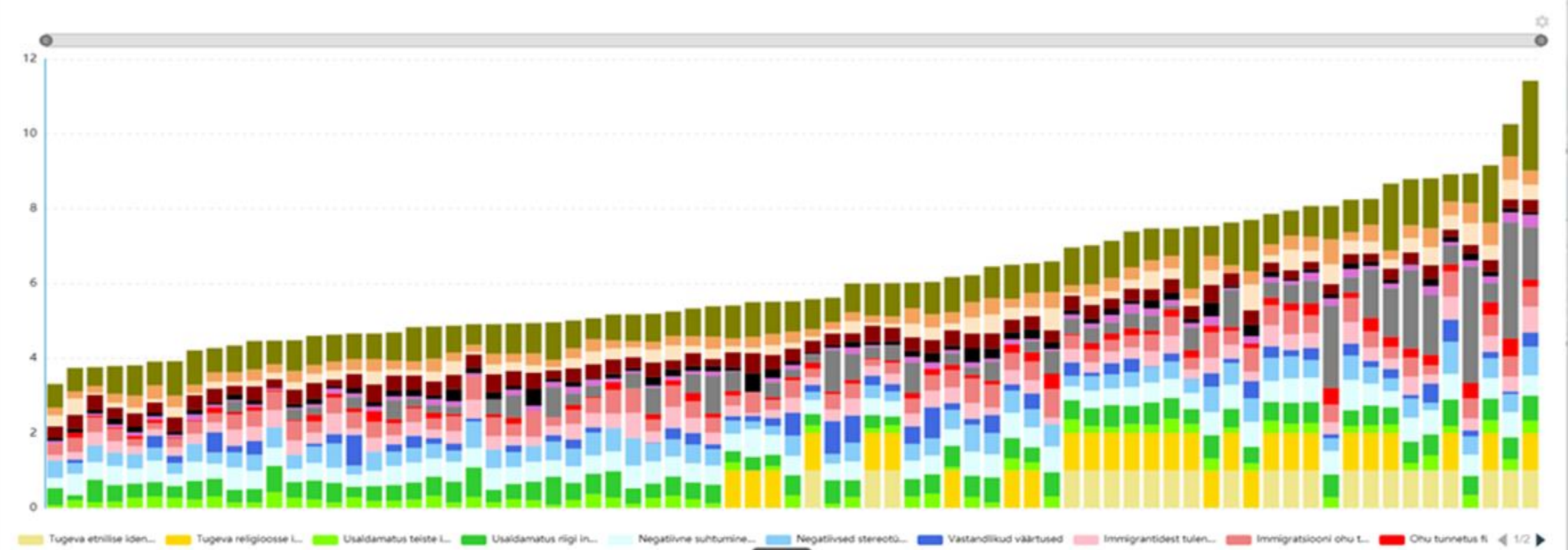
Risk level is not high in Estonia

# Regionally unequally distributed

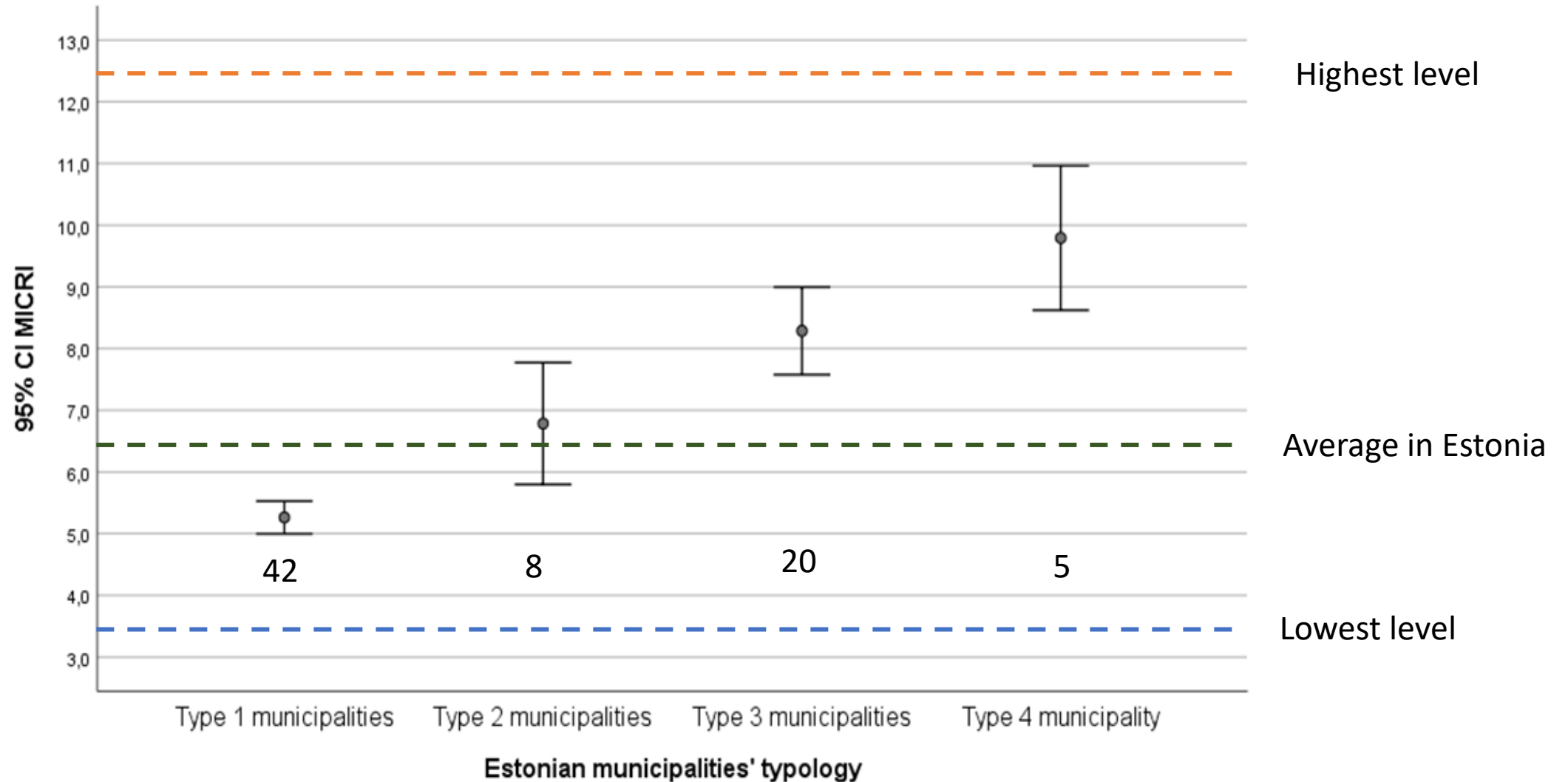


## Etnilise konflikti riski indeks

Indikaatorite jaotus KOV



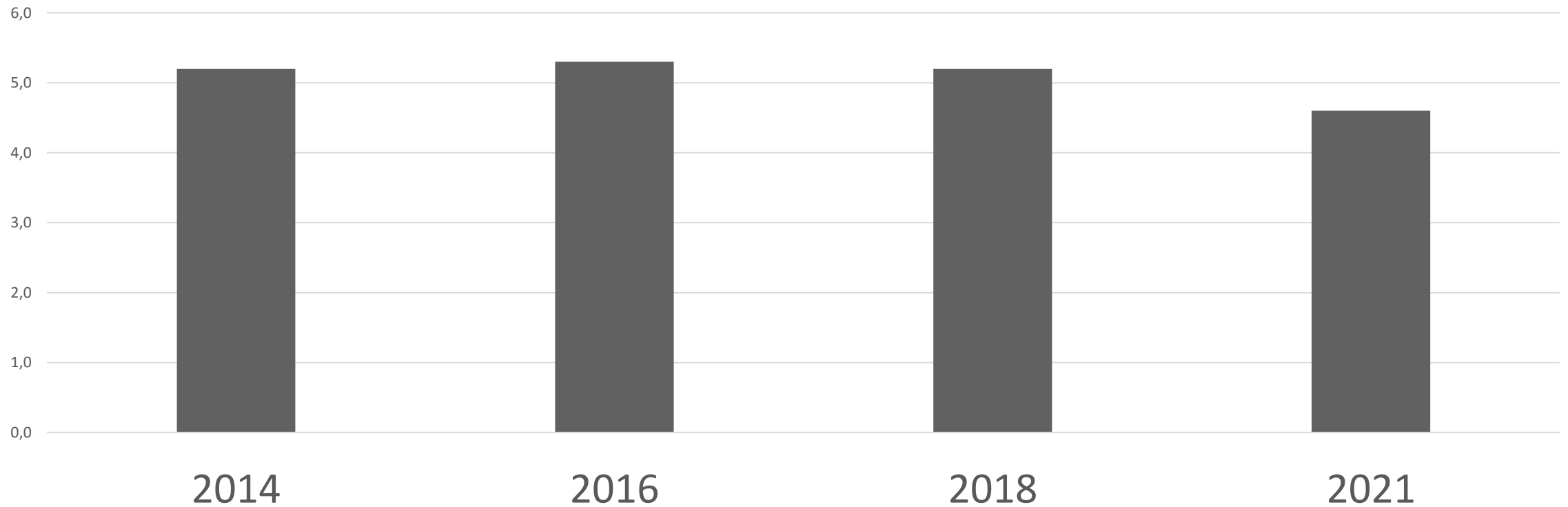
# 4 types of municipalities in Estonia



	Average	Group 1	Group 2	Group 3	Group 4
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# Estonian average immigration-related conflict risk between 2014 to 2021





# What's next?

- External validation of the index
  - We have found some evidence that inhabitants of Estonian cities with higher immigration related conflict risk were less supporting welcoming Ukrainian refugees to Estonia
- Expand it to other countries
  - Countries where European Social Survey have been run?
    - Including Sweden

Cooperation needed! If interested, please contact us

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# Q&A

Thank  
you!



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## MEASURING THE RISK OF IMMIGRATION RELATED CONFLICTS

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