

The socio-demographic determinants of solid waste generation in municipalities



Mgr. Kristýna Rybová

Charles University in Prague
Faculty of Science
Department of Demography and
Geodemography

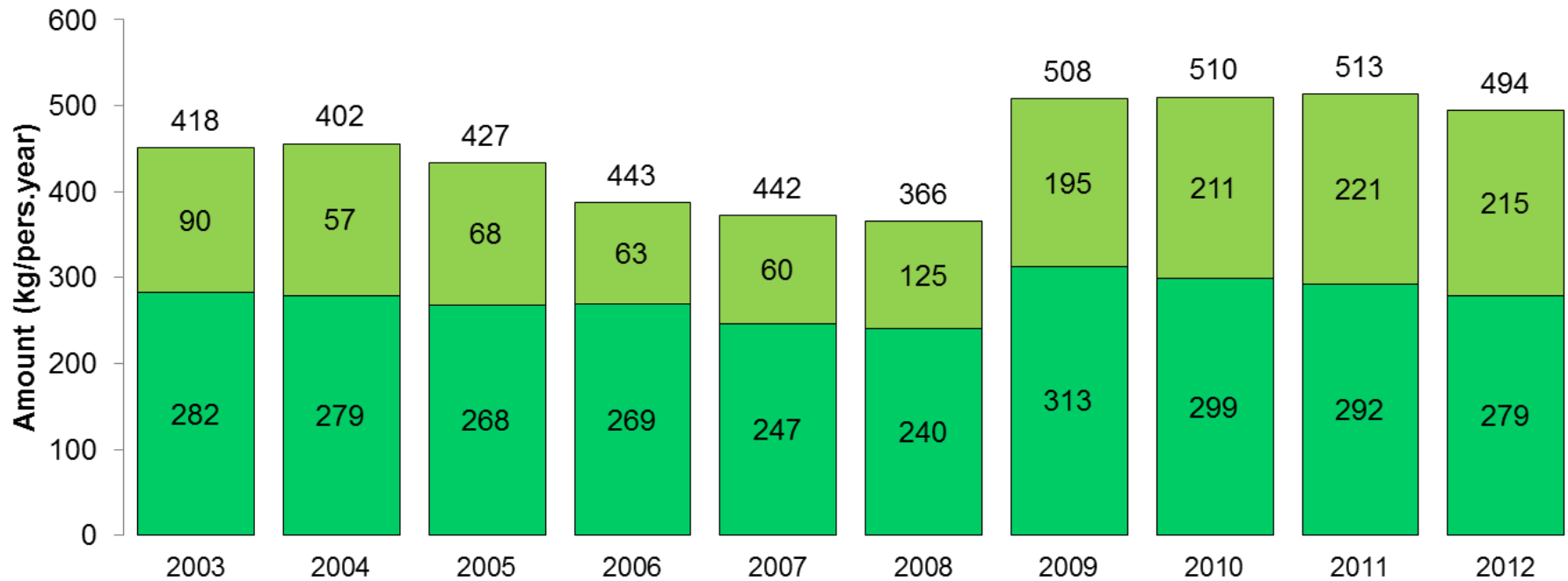
Outline

- Importance of this topic
- Review of influencing variables
 - Personal variables
 - Situational variables
- Design of model for the Czech Republic

Importance of the topic

- Amount of generated municipal waste per year
- Responsibility of municipalities for waste collection and management
- Demographic changes

Average amount of generated waste, CR, 2003-2012



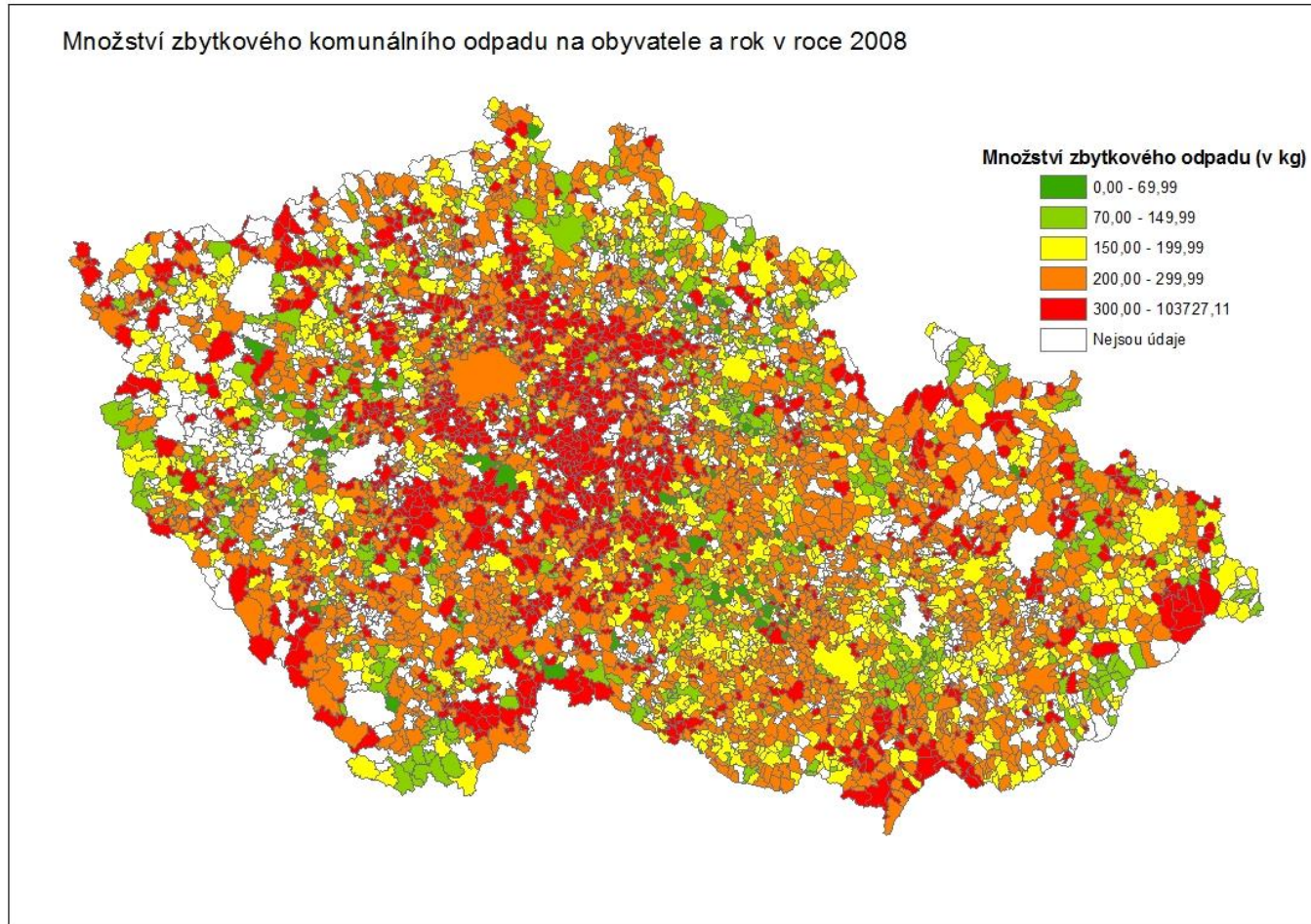
Municipal solid waste

Other than residual waste

Residual waste

Source: CENIA

Waste generation in Czech municipalities, 2008



Source: EKO-KOM

Review of influencing variables

- Personal variables
- Situational variables

- Availability of data on municipal level

Personal variables

- Demographic characteristics
 - Household size
 - Age
 - Gender
 - Educational level
- Income
- Environmental attitudes

Situational variables

- Waste collection fees
 - Flat-rate system vs. pay as you throw
- Method of waste collection
 - Kerbside collection vs. bring systems
 - Size and type of bin
- Frequency of waste collection
 - Every week vs. every 2-4 weeks

Model for the Czech Republic

- Sample of Czech municipalities
- Regression analysis
- Mentioned variables plus more data from census 2011
 - Households with dependent child/children
 - Type of dwelling
 - Way of heating
- Hypothesis – personal variables as more important than situational variables

**THANK YOU FOR YOUR
ATTENTION**