Ethnic Discrimination in the Rental Housing Market
The Role of Additional Information and Market Structure

Knut Petzold

Seminar Analytische Soziologie: Theorie und empirische Anwendungen
Venice International University, San Servolo
20.-23. November 2017
Introduction

Zuwanderung nach Deutschland so hoch wie nie

Stand: 14.07.2016 | Lesedauer: 3 Minuten

BMI-Lexikon

Zum Glossar

Integration

Introduction

Ethnic discrimination

“refers to unequal treatment of persons or groups on the basis of their race or ethnicity.” (Pager & Shepherd 2008, 182)

Unequal treatment of migrants in rental housing markets

- Sweden (Ahmed & Hammarstedt 2008; Ahmed et al. 2010; Bengtsson et al. 2011; Carlson & Eriksson 2014)
- Norway (Andersson et al. 2012; Beatty & Sommervoll 2012)
- US (Carpursor & Loges 2006; Hanson & Hawley 2011; Ewens et al. 2014)
- Canada (Hogan & Berry 2011)
- Italy (Baldini & Frederici 2011)
- Spain (Bosch et al. 2010)
- Czech Republic (Bartoš et al. 2013)
- Belgium (Van der Bracht et al. 2015)
- Germany (Auspurg et al. 2017)

→ Clear evidence for ethnic discrimination
→ Mixed evidence regarding (contextual) moderators
Research questions

- Can evidence for ethnic discrimination in the rental housing market be replicated for Arabic applicants in Germany?
- Does ethnic discrimination vary according to applicant’s characteristics?
- Does ethnic discrimination vary across regional and market conditions?
Theoretical framework

Preference-based discrimination (Becker 1957)

- Results from affective tastes for and against particular social groups, i.e. Arabs
- Objectives against certain social groups are part of individuals' utility function
- Offenders have to bear a costly 'tax' for discrimination
- Discrimination should decline in contested markets
Theoretical framework

**Statistical discrimination** (Phelps 1972; Arrow 1973)

- Results from imperfect information
- Offenders use observable markers for assessment of others, i.e. ethnicity
- Related expectations are based on previous interactions and commonly known average values
- Especially effective in situations of high risk, i.e. high rents (cf. Hogan & Berry 2011; Bengtsson et al. 2012; Auspurg et al. 2017)
- Discrimination should decrease if missing information is added (cf. Bosch et al. 2010; Baldini & Frederici 2011; Auspurg et al. 2017)
Theoretical framework

Discrimination by customers (Becker 1957)

- Lessors discriminate migrants to avoid trouble with existing tenants
- Customers preferences and minority group size
  - Ethnic competition theory (Shepers et al. 2002), Social identity theory (Tajfel & Turner 1979)
  - Intergroup contact theory (Allport 1954)

- When lessors have doubts, they will play it save
- The larger the minority group size, the more should lessors discriminate against migrants (see also Ewens et al. 2014; Hogan & Berry 2011)

→ In contrast to spatial steering
Set of hypotheses

Causal hypotheses

- H1: If the sender has an Arabic name as compared to a German name, enquiries will gain less response.
- H2: If additional information is provided, ethnic discrimination will be reduced.

Moderation hypotheses

- H3a: The higher the financial risk, the stronger will be ethnic discrimination.
- H3b: The higher the financial risk, the more will ethnic discrimination be reduced by additional information.
- H4a: The less the market situation is in favour of the lessor, the lower will be ethnic discrimination.
- H4b: The lower ethnic discrimination, the less important will be additional information.
- H5a: The larger the minority group size, the stronger will be ethnic discrimination.
- H5b: The larger the minority group size, the less will information reduce ethnic discrimination.
## Experimental design

**Correspondence test** (see Riach & Rich 2002; Pager 2007; Keuschnigg & Wolbring 2015; Bertrand & Duflo 2017)

- Two e-mail enquiries for appointments regarding vacant rental apartments
- \(2 \times 2 \times 2 \times 2 = 16\) experimental conditions
  - Within variation: applicants name
  - Between variation: applicants gender, information about employment, information about family background
- Behavioural outcome: response by lessors

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
<th>Contact</th>
<th>Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stephan Unger</td>
<td>Programmer</td>
<td>(<a href="mailto:stephan.unger@posteo.de">stephan.unger@posteo.de</a>)</td>
<td>Wife &amp; child</td>
</tr>
<tr>
<td>Omar Benali</td>
<td>IT sector</td>
<td>(<a href="mailto:omar.benali@mailbox.org">omar.benali@mailbox.org</a>)</td>
<td>Wife &amp; child</td>
</tr>
<tr>
<td>Julia Brockmann</td>
<td>Bank clerk</td>
<td>(<a href="mailto:julia.brockmann@mailbox.org">julia.brockmann@mailbox.org</a>)</td>
<td>Husband &amp; child</td>
</tr>
<tr>
<td>Fatima Aynan</td>
<td>Insurance sector</td>
<td>(<a href="mailto:fatima.aynan@posteo.de">fatima.aynan@posteo.de</a>)</td>
<td>Husband &amp; child</td>
</tr>
</tbody>
</table>
Examples of e-mail enquiries

---

**Sender:** Stephan Unger  
**Empfänger:** daniela.schmitz@leg-wohnen.de  
**Betreff:** Besichtigung Wohnung 92460914

Sehr geehrte Damen und Herren,


Sollte die Wohnung noch verfügbar sein, würde ich mich sehr freuen, wenn Sie sich bei mir melden, damit wir einen Termin in dieser oder der nächsten Woche vereinbaren können.

Mit freundlichen Grüßen  
Stephan Unger

---

**Sender:** Omar Benali  
**Empfänger:** daniela.schmitz@leg-wohnen.de  
**Betreff:** Anfrage Besichtigungstermin Zum Hillenwasser

Sehr geehrte Damen und Herren,


Mit freundlichem Gruß  
Omar Benali
Data collection

- Advertisements for rental 2/3 room-apartments from www.immobilienscout24.de
- January - February 2017
- Regional quotation, random (‘route’) selection
  - Urban & rural areas
  - East, West, North, South
- Enquiries via e-mail
  - Lessors were subjected only once to the study
  - Two days between both enquiries, balanced order
  - Recherche of e-mail addresses when missing
- Final sample
  - 1768 enquiries according to 884 vacant rental apartments (196 deleted)
  - 223 counties
Proportions of experimental conditions

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Percent</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic name</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>884</td>
<td>50.0%</td>
<td>0</td>
</tr>
<tr>
<td>Arabic</td>
<td>884</td>
<td>50.0%</td>
<td>1</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>892</td>
<td>50.5%</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>876</td>
<td>49.5%</td>
<td>1</td>
</tr>
<tr>
<td>Job status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No information</td>
<td>860</td>
<td>48.7%</td>
<td>0</td>
</tr>
<tr>
<td>Information</td>
<td>908</td>
<td>51.3%</td>
<td>1</td>
</tr>
<tr>
<td>Family background</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No information</td>
<td>850</td>
<td>48.1%</td>
<td>0</td>
</tr>
<tr>
<td>Information</td>
<td>918</td>
<td>51.9%</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>1768</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Pearson's r; * p < 0.01

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ethnic name</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Gender</td>
<td>0.0000</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Information job status</td>
<td>0.0000</td>
<td>0.0138</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>4 Information family background</td>
<td>0.0000</td>
<td>0.0239</td>
<td>-0.0246</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Ethnic Discrimination in the Rental Housing Market | Venice | 22.11.2017
## Sample composition

<table>
<thead>
<tr>
<th>Variables</th>
<th>N / M</th>
<th>Percent / SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rooms</td>
<td></td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td>2-room</td>
<td>438</td>
<td>49.5 %</td>
<td></td>
</tr>
<tr>
<td>3-room</td>
<td>446</td>
<td>50.5 %</td>
<td></td>
</tr>
<tr>
<td>Living space in m²</td>
<td>68.5</td>
<td>19.6 %</td>
<td>30-183</td>
</tr>
<tr>
<td>Basic rent in €</td>
<td>552.8</td>
<td>331.4 %</td>
<td>165-2550</td>
</tr>
<tr>
<td>Lessor type</td>
<td></td>
<td></td>
<td>0-2</td>
</tr>
<tr>
<td>Private landlord</td>
<td>26</td>
<td>2.9 %</td>
<td></td>
</tr>
<tr>
<td>Housing association</td>
<td>308</td>
<td>62.2 %</td>
<td></td>
</tr>
<tr>
<td>Real estate agent</td>
<td>550</td>
<td>34.9 %</td>
<td></td>
</tr>
<tr>
<td>Region</td>
<td></td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Urban</td>
<td>613</td>
<td>69.3 %</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>271</td>
<td>30.7 %</td>
<td></td>
</tr>
<tr>
<td>Federal state</td>
<td></td>
<td></td>
<td>1-16</td>
</tr>
<tr>
<td>Bavaria</td>
<td>90</td>
<td>10.2 %</td>
<td></td>
</tr>
<tr>
<td>North Rhine-Westphalia</td>
<td>100</td>
<td>11.3 %</td>
<td></td>
</tr>
<tr>
<td>Saxony-Anhalt</td>
<td>107</td>
<td>12.1 %</td>
<td></td>
</tr>
<tr>
<td>Thuringia</td>
<td>103</td>
<td>11.7 %</td>
<td></td>
</tr>
<tr>
<td>Schleswig-Holstein</td>
<td>61</td>
<td>6.9 %</td>
<td></td>
</tr>
<tr>
<td>Berlin</td>
<td>33</td>
<td>3.7 %</td>
<td></td>
</tr>
<tr>
<td>Baden-Württemberg</td>
<td>59</td>
<td>6.7 %</td>
<td></td>
</tr>
<tr>
<td>Rhineland-Palatinate</td>
<td>35</td>
<td>4.0 %</td>
<td></td>
</tr>
<tr>
<td>Hesse</td>
<td>35</td>
<td>4.0 %</td>
<td></td>
</tr>
<tr>
<td>Lower Saxony</td>
<td>58</td>
<td>6.5 %</td>
<td></td>
</tr>
<tr>
<td>Saxony</td>
<td>73</td>
<td>8.3 %</td>
<td></td>
</tr>
<tr>
<td>Brandenburg</td>
<td>35</td>
<td>4.0 %</td>
<td></td>
</tr>
<tr>
<td>Mecklenburg-Vorpommern</td>
<td>37</td>
<td>4.2 %</td>
<td></td>
</tr>
<tr>
<td>Saarland</td>
<td>20</td>
<td>2.3 %</td>
<td></td>
</tr>
<tr>
<td>Hamburg</td>
<td>21</td>
<td>2.4 %</td>
<td></td>
</tr>
<tr>
<td>Bremen</td>
<td>17</td>
<td>1.9 %</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>884</td>
<td>100 %</td>
<td></td>
</tr>
</tbody>
</table>
### Merged contextual information

- **Additional county-level data from INKAR & GENESIS (for 2015)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>478171</td>
<td>697456</td>
<td>45362-3520031</td>
</tr>
<tr>
<td>Population density (inhabitants per km²)</td>
<td>2531</td>
<td>1495</td>
<td>527-6234</td>
</tr>
<tr>
<td>Average age in years</td>
<td>44.4</td>
<td>2.2</td>
<td>40.6-49.4</td>
</tr>
<tr>
<td>Rent index in €</td>
<td>7.5</td>
<td>2.6</td>
<td>3.4-19.8</td>
</tr>
<tr>
<td>Average living space per capita in m²</td>
<td>43.4</td>
<td>4.2</td>
<td>36.9-60.5</td>
</tr>
<tr>
<td>Proportion of 2/3-room apartments in %</td>
<td>34.9</td>
<td>10.4</td>
<td>12.5-56.1</td>
</tr>
<tr>
<td>Average net household income in €</td>
<td>1673.5</td>
<td>237.0</td>
<td>1362.1-3450.7</td>
</tr>
<tr>
<td>Housing allowance in % of households</td>
<td>15.8</td>
<td>6.8</td>
<td>2.0-31.3</td>
</tr>
<tr>
<td>Proportion of foreigners in %</td>
<td>8.4</td>
<td>6.4</td>
<td>1.0-27.2</td>
</tr>
<tr>
<td>Proportion of foreigners - km²-grid in %</td>
<td>9.8</td>
<td>8.7</td>
<td>0.0-51.5</td>
</tr>
<tr>
<td>Demand for new apartments 2030</td>
<td>15.3</td>
<td>10.5</td>
<td>0-46</td>
</tr>
</tbody>
</table>
Net discrimination effect (response rates)

![Graph showing net discrimination effect response rates]

- Net discrimination effect (response rates): 36.6% vs. 63.4%
- Proportion response: 70.3% vs. 56.6%
- ATT = -13.7%

Comparison between German and Arab names:
- German name:
  - 621 responses, 70.3% response rate
  - ATT = -13.7%
- Arab name:
  - 500 responses, 56.6% response rate
Treatment effects

Model 1: logit, no covariates
Model 2: LPM/OLS, no covariates
Model 3: LPM/OLS, covariates (characteristics of apartment and region)
Clustered SE, 95% CI
Napartments = 884; Nenquiries = 1768
Taste-based discrimination and statistical discrimination

Conditional discrimination effects

Name * Job information:
\( b = 0.08, p = 0.036 \)

Model: LPM/OLS, covariates (characteristics of apartment and region)
Clustered SE, 95% CI
Napartments = 884; Nenquiries = 1768
Basic rent

- Total rent in Euro without heating and electricity

![Histogram of basic rent in Euro]

- Median rent: M = 541
Basic rent

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 874; Nenquiries = 1748
AIC: 2345.461, BIC: 2525.846

Name * Basic rent:
b= .000, p= 0.273
Basic rent and job

Effects on response probability

Basic rent in Euro

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 874; Nenquiries = 1748; AIC: 2342.179, BIC: 2533.497

No information  Information job
Discrimination and living space per capita

Living space per capita

- Living space in residential buildings per inhabitant in square meters

![Histogram of average living space per capita](image)
Average living space

Name * Average living space:
b = .014, p = 0.002

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 878; Nenquiries = 1756
AIC: 2326.955, BIC: 2502.020
Average living Space and job

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 878; Nenquiries = 1756; AIC: 2326.955, BIC: 2502.020
Discrimination and foreigners proportion

Foreigners proportion

- Proportion of (all) foreigners of all inhabitants

![Bar chart showing the proportion of foreigners in percent](image-url)
Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 884; Nenquiries = 1768
AIC: 2357.073, BIC: 2526.879

Name * Proportion foreigners: b = -.004, p = 0.070
Proportion foreigners and job

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 884; Nenquiries = 1768; AIC: 2360.191, BIC: 2562.862
One additional consideration

- H6a: The better financial risk can be assessed by context information, the lower will be ethnic discrimination.
- H6b: The better financial risk can be assessed by context information, the less important will additional information be.
Discrimination and housing allowance

Housing allowance

- Households who receive housing allowance
- Per 1,000 households
Housing allowance

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 884; Nenquiries = 1768
AIC: 2358.020, BIC: 2538.781

Name * Housing allowance:
$\beta = 0.000, p = 0.778$
Housing allowance and job

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 884; Nenquiries = 1768; AIC: 2360.191, BIC: 2562.862
Summary

- There is remarkable ethnic discrimination in the rental housing market (H1)

- **Ethnic discrimination is moderated by**
  - information about employment status (H2)
  - competition among applicants (living space) (H4a)
  - minority group size (H5a)
  - (financial risk (basic rent, H3a))

- **Employment status is disregarded when**
  - relevant information is provided by context (housing allowance, H6b)
  - there is low competition among applicants (living space, H4b)
Discussion & conclusions

- Evidence for preference-based and statistical discrimination
- Evidence for interaction between the objections against certain social groups and regional and market conditions

Open questions

- How can we explain the discriminatory baseline?
- What are the sources of tastes against Arabs?
- Is there still imperfect information?
- What is the “true causally relevant geographic context“ (Kwan 2012)?
Limitations & prospects

- Treatment construction
- Sampling and sample size (external validity)
- Context variable choice
- Regional scale of context information
- Content of response mails

→ Further replications are needed!
Thank you for your attention and your comments!

knut.petzold@rub.de
Theoretical framework

Preference formation

Realistic Group Conflict Theory (Coser 1956; LeVine & Campbell 1972)
Social Identity Theory (Tajfel & Turner 1979)
Ethnic Competition Theory (Scheepers et al. 2002)
- The larger a (threatening) outgroup, the more ethnic threat is perceived and negative attitudes are developed (Empirical evidence: e.g. Weins 2011; Wagner et al. 2006)

Intergroup Contact Theory (Allport 1954; Pettigrew 1998)
- The larger an outgroup, the more intergroup interaction. Intergroup contact as efficient means to reduce prejudice (Empirical evidence: e.g. Schneider 2008; Savelkoul et al. 2011)

Discrimination by customers (Becker 1957)
- Lessors discriminate migrants to avoid trouble with existing tenants
- The larger the minority group size, the more should lessors discriminate against migrants (see also Ewens et al. 2014; Hogan & Berry 2011)
- (In contrast to spatial steering)
Robustness check treatment effects

Treatment effects

Arab name (ref. German)
Female (ref. male)
Information job (ref. no)
Information family (ref. no)

95% CI

Covariates (characteristics of apartment and region)

95% CI
Napartments = 884; Nenquiries = 1768

Logit/AME-clustered SE
OLS-clustered SE
GLS-cases
GLS-counties
OLS+covar-clustered SE
Basic rent ML model

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 874; Nenquiries = 1748
AIC: 2345.461, BIC: 2525.846
Living space per capita ML model

Average living space

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 878; Nenquiries = 1756
AIC: 2326.955, BIC: 2502.020
Housing allowance ML model

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates

Nappartments = 874; Nrequests = 1748

AIC: 2359.020, BIC: 2598.761
Proportion foreigners ML model

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 884; Nenquiries = 1768
AIC: 2357.073, BIC: 2526.879
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Rent index</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Average living space per capita</td>
<td></td>
<td>-0.4192*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Proportion of 2/3-room apart.</td>
<td>0.3767*</td>
<td></td>
<td>-0.8538*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Average net household income</td>
<td>0.5804*</td>
<td>0.1783*</td>
<td></td>
<td>-0.2322*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5 Housing allowance</td>
<td></td>
<td>-0.4329*</td>
<td>-0.3403*</td>
<td>0.4217*</td>
<td>-0.7218*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Proportion of foreigners</td>
<td>0.7426*</td>
<td></td>
<td>-0.4250*</td>
<td>0.4082*</td>
<td>0.5371*</td>
<td></td>
<td>-0.4884*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Proportion of foreigners - km² grid</td>
<td>0.4198*</td>
<td></td>
<td>-0.0905*</td>
<td>0.1167*</td>
<td>0.4093*</td>
<td>-0.3473*</td>
<td>0.5297*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Population</td>
<td>0.4336*</td>
<td></td>
<td>-0.3938*</td>
<td>0.4548*</td>
<td>0.0934*</td>
<td>-0.2008*</td>
<td>0.4644*</td>
<td>0.1697*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Population density</td>
<td>-0.6534*</td>
<td>0.4417*</td>
<td></td>
<td>-0.3613*</td>
<td>-0.3792*</td>
<td>0.3559*</td>
<td>-0.7606*</td>
<td>-0.3716*</td>
<td>-0.4197*</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Average age in years</td>
<td>0.6943*</td>
<td></td>
<td>-0.7345*</td>
<td>0.7527*</td>
<td>0.2011*</td>
<td>-0.1062*</td>
<td>0.8040*</td>
<td>0.3637*</td>
<td>0.6437*</td>
<td>-0.7469*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>11 Demand for new apart. 2030</td>
<td>0.5322*</td>
<td>0.0358</td>
<td></td>
<td>-0.1296*</td>
<td>0.5839*</td>
<td>-0.6244*</td>
<td>0.4869*</td>
<td>0.3077*</td>
<td>0.2553*</td>
<td>-0.4808*</td>
<td>0.2501*</td>
<td>1.000</td>
</tr>
<tr>
<td>12 Region (urban / rural)</td>
<td>-0.4376*</td>
<td>0.4266*</td>
<td></td>
<td>-0.4278*</td>
<td>-0.1936*</td>
<td>0.1024*</td>
<td>-0.5395*</td>
<td>-0.2637*</td>
<td>-0.3133*</td>
<td>0.6034*</td>
<td>-0.6485*</td>
<td>-0.1338*</td>
</tr>
</tbody>
</table>

*Pearson’s r; * p < 0.01
Rent index in Euro

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Nappartments = 874; Nrequests = 1748
AIC: 2345.461, BIC: 2525.846
Rent index and job

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 874; Nrequests = 1748; 2331.446, BIC: 2522.563

Effects on response probability

Rent index in Euro

No information  |  Information job

3.4 €  |  5.4 €  |  7.4 €  |  9.4 €  | 11.4 €  | 13.4 €  | 15.4 €
Average household income

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Nappartments = 874; Nrequests = 1748
AIC: 2358.848, BIC: 2545.086
Average household income and job

Effects on response probability

Average household income in Euro

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 878; Nrequests = 1756; AIC: 2360.191, BIC: 2562.862
Average living space

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 874; Nrequests = 1748
AIC: 2326.002, BIC: 2512.009
Average living Space and job

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 878; Nrequests = 1756; AIC: 2329.404, BIC: 2548.236
Proportion 2/3-room

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Nappartments = 874; Nrequests = 1748
AIC: 2326.002, BIC: 2512.009
Proportion 2/3-room and job

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 878; Nrequests = 1756; AIC: 2354.591, BIC: 2573.695

No information  Information job
Proportion foreigners

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Nappartments = 874; Nrequests = 1748
AIC: 2359.951, BIC: 2540.712
Proportion foreigners and job

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 878; Nrequests = 1756; AIC: 2360.191, BIC: 2562.862
Proportion foreigners 1km2

Model: LPM/OLS, conditional effects, clustered SE, 95% CI, covariates
Napartments = 854; Nrequests = 1708; AIC: 2291.021, BIC: 2470.642