

Social Homogamy in the Canton of Luzern (Switzerland, 1834-75)

Simon Seiler
Institute of Sociology
University of Bern

April 2, 2016; ESSHC in Valencia (March 30 – April 2 2016)

Research funded by the *Swiss National Science Foundation* and the *IMG Foundation*

Overview

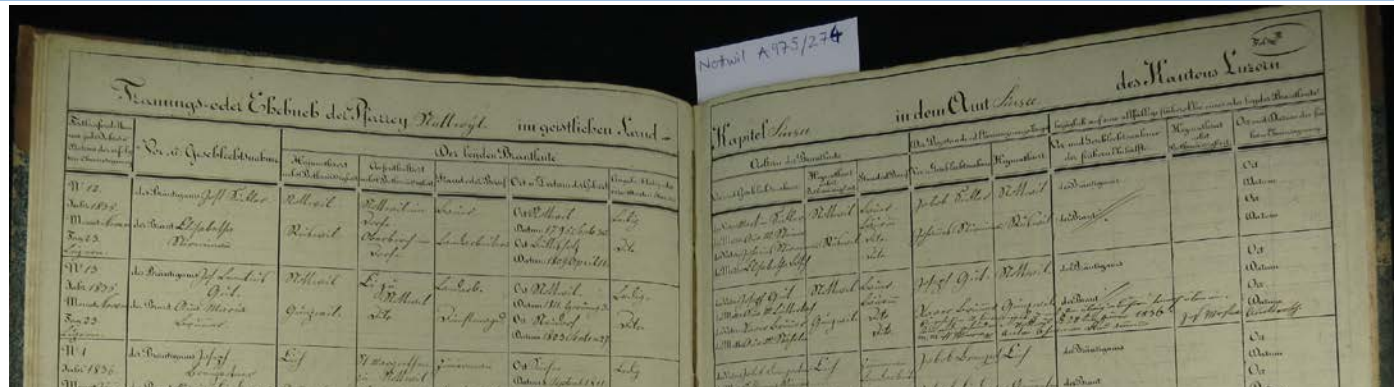
1. Introduction
2. The Canton of Luzern
3. Research Questions and Hypotheses
4. Data and Variables
5. Method
6. Results
7. Conclusion

1 Introduction: The Broader Project

- > Intergenerational social mobility in Switzerland
 - 20th century: gender differences; international comparison.
 - 19th century:
Industrialized (Glarus) vs. mainly rural (Luzern) area;
General Trends.

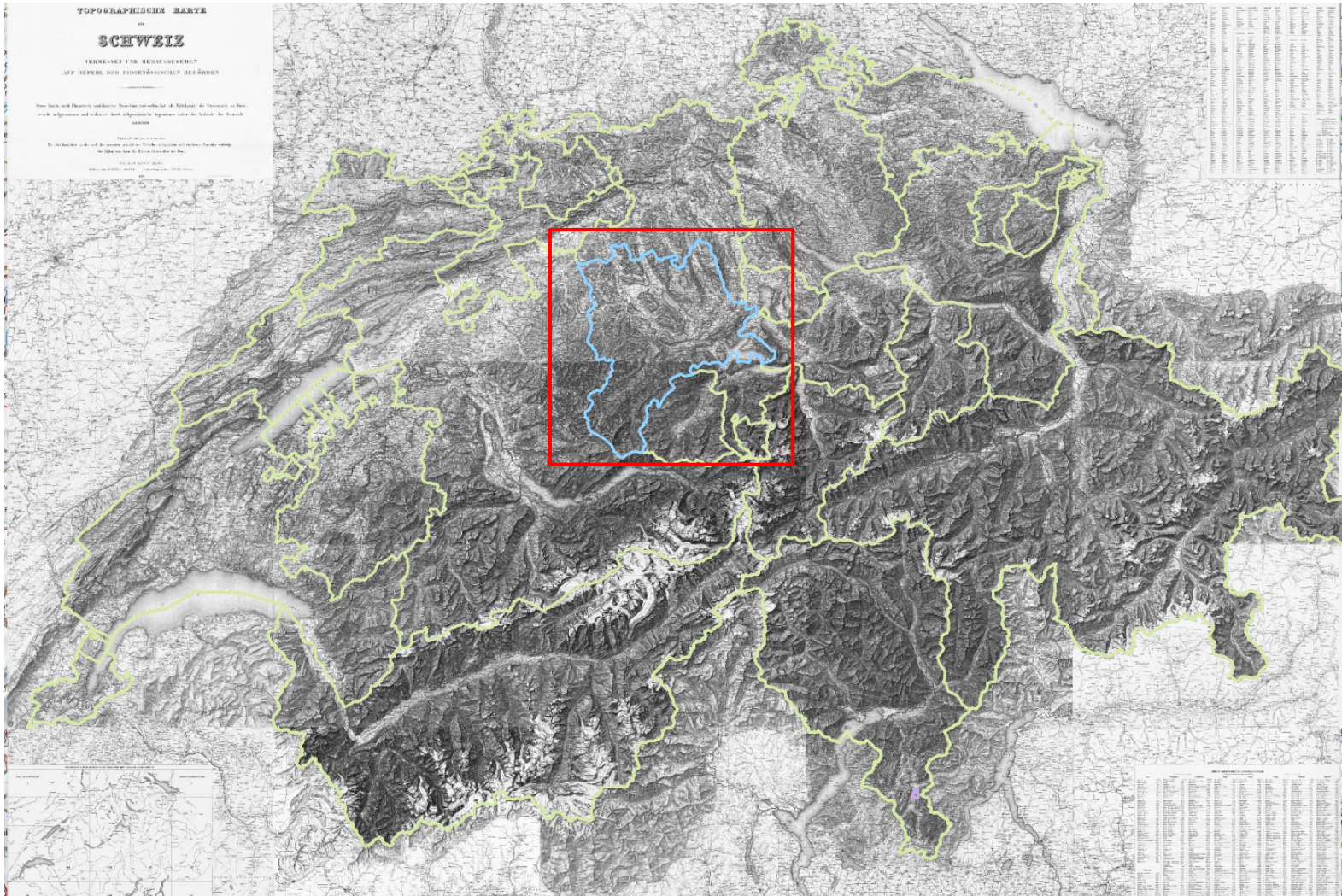
- > Social Homogamy:
Most important path of status transmission for women.

1 Introduction: Marriage Registers (1834-75)



| Trauungs- oder Ehebuch der Pfarrey Nollwil im geistlichen Land | | | | | | |
|--|---|---------------------------|------------------------------|------------------|--|---|
| Zählende Nummer und jedes Mal die Ordnung der eheförmigen Ehereinigung | Vor- u. Geschlechtsname | Der beidenden Brautleute | | | | |
| | | Heimathsort nebst Wohnort | Aufenthaltsort nebst Wohnort | Stand oder Beruf | Ort u. Datum der Heirat | Angabe ob ledig oder verwittweter Stand |
| N ^o 12. Jahr 1835. Monat November Tag 23. Luzern. | des Bräutigams Josef Keller der Braut Elisabeth Wiesinger | Nollwil | Nollwil im Dorf | Luzerner | Ort Nollwil Datum 1795 Sept. 30. | ledig |
| N ^o 13. Jahr 1835. Monat November Tag 23. Luzern. | des Bräutigams Josef Linder Gut. der Braut Anna Maria Linder | Nollwil | Luzern | Landsch. | Ort Nollwil. Datum 1811. Heiratung 2. | ledig. |
| N ^o 14. Jahr 1835. Monat November Tag 23. Luzern. | des Bräutigams Josef Linder der Braut Anna Maria Linder | Güngwil | Wiesinger | Wiesinger | Ort Wiesinger Datum 1803 Sept. 27. | Wito. |

2 The Canton of Luzern (19th Century, I)



2 The Canton of Luzern (19th Century, II)

- > Political:
 - Until 1847: Sovereign state within the Swiss Confederation
 - 1831-47: Oscillation between liberal and conservative poles (culture war)
 - After 1847/48: Partially forced and conflict-laden integration into the liberal federal state of Switzerland (Bossard-Borner, 2010).
- > Economy:
 - Mainly rural canton with the city of Luzern as a clear capitol.
 - Some industry:
Mainly around Luzern and in the Wiggertal (north-east).
 - Acceleration with the connections to the railway system 1856 and 1864
 - With this: strong growth of tourism (2. half of 19th century)
(Dubler, 1983; Schnider, 1996)
- > Marriage: Restricted access to marriage for poor.
Result: Highest illegitimacy rate in Switzerland (Head-König, 1993).
- > City of Luzern: Strong growth, driven by immigration with a high share of female domestic workers (Balthasar, 1988; Head-König, 1999).

3 Research Questions and Hypotheses

- > Research Questions:
 - Did social homogamy differ between area (no industry, some industry, city of Luzern)?
 - Did it change over time?
 - Can social homogamy be explained by individual and contextual factors?

3 Research Questions and Hypotheses: Clusters (I)

| Clusters | Aspects | Variables | Effect on homogamy | Change of aspect |
|---------------------------------|----------------------------|-----------|--------------------|------------------|
| Meet someone from another class | Universal Education | | | |
| | Associational life | | | |
| | Ethnic/religious diversity | | | |
| | Modern labor market | | | |
| | Spatial social segregation | | | |
| Marriage horizons | Means of transportation | | | |
| | | | | |
| | Means of communication | | | |
| | Conscriptions | | | |
| Social pressure | Parental control | | | |
| | Communal traditions | | | |
| | Peer group control | | | |
| | Adult mortality | | | |
| Personal autonomy | Economic independence | | | |
| | Social security schemes | | | |
| Personal preferences | Notions of romantic love | | | |

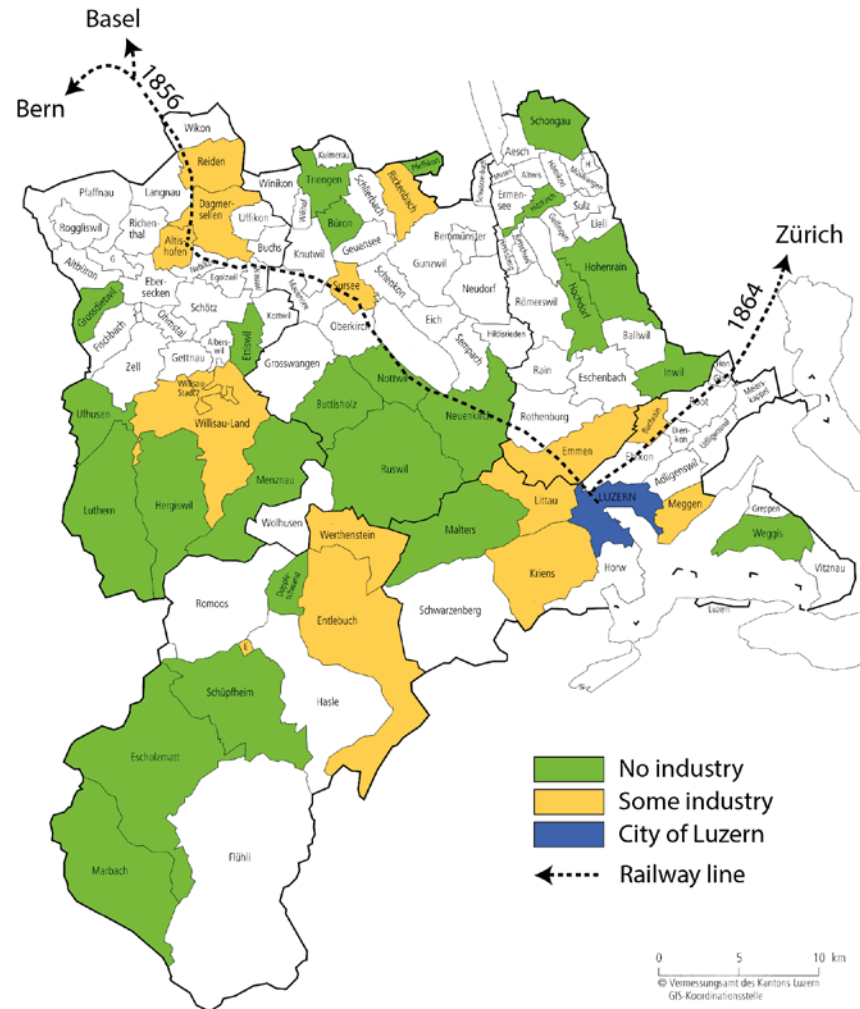
3 Research Questions and Hypotheses: Clusters (II)

| Clusters | Aspects | Variables | Effect on homogamy | Change of aspect |
|---------------------------------|----------------------------|--------------------------------|--------------------|------------------|
| Meet someone from another class | Universal Education | | | |
| | Associational life | | | |
| | Ethnic/religious diversity | | | |
| | Modern labor market | “Some industry” area | - | + |
| | Spatial social segregation | | | |
| Marriage horizons | Means of transportation | Nearby train station | - | + |
| | | Locally rooted | + | - |
| | Means of communication | | | |
| | Conscriptions | | | |
| Social pressure | Parental control | Father: 1 st sector | + | - |
| | Communal traditions | | | |
| | Peer group control | | | |
| | Adult mortality | | | |
| Personal autonomy | Economic independence | Age of bride and groom | - | + |
| | Social security schemes | | | |
| Personal preferences | Notions of romantic love | | | |

3 Research Questions and Hypotheses: Clusters (II)

| Clusters | Aspects | Variables | Hypotheses |
|---------------------------------|-------------------------|--|------------|
| Meet someone from another class | Modern labor market | “Some industry” area / City of Luzern | - |
| Marriage horizons | Means of transportation | Nearby train station | - |
| | Migration | Locally rooted: Bride | + |
| | | Locally rooted: Groom | |
| Social pressure | Parental control | 1 st sector: Bride’s father | + |
| | | 1 st sector: Bride’s father | |
| Personal autonomy | Economic independence | Age of Bride | - |
| | | Age of Groom | |

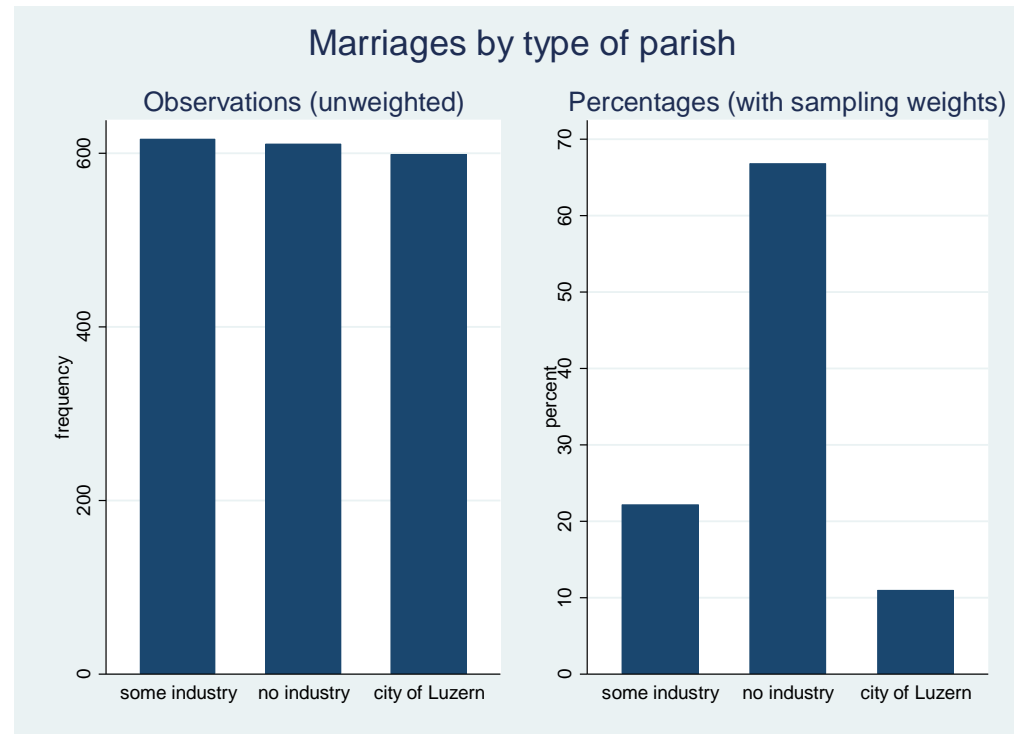
4 Data and Variables: Sampling (I)





Source: Vermessungsamt des Kantons Luzern; Schnider, 1996, p. 48, 261; railway lines: Wägli & Jacobi, 2010; own coloration.

4 Data and Variables: Sampling (II)

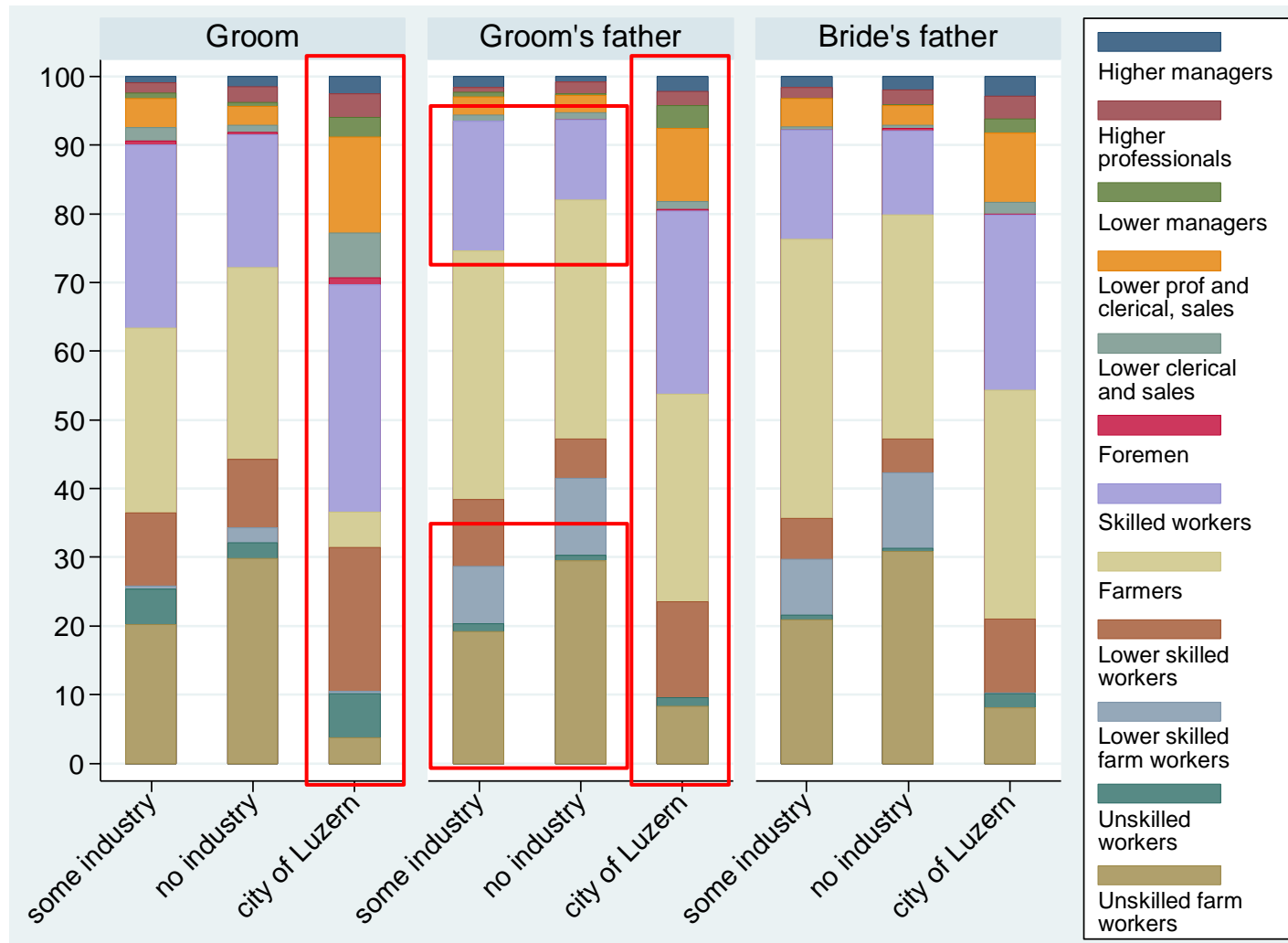
- > 3 strata:
 - No industry: 25 of 63 parishes
 - Two-stage sampling (Jann, 2007).
 - Some industry: all 13 parishes
 - City of Luzern:
Catholic and protestant parish
- > Aim: 750 observations per strata
 - Parish size: Estimation
(counting 10% of entries).
- > Realized: 2 212
- > Usable for this study: 1 825



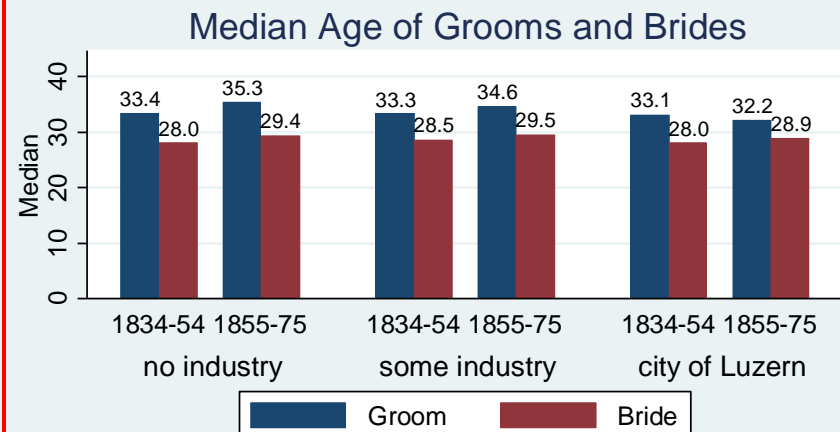
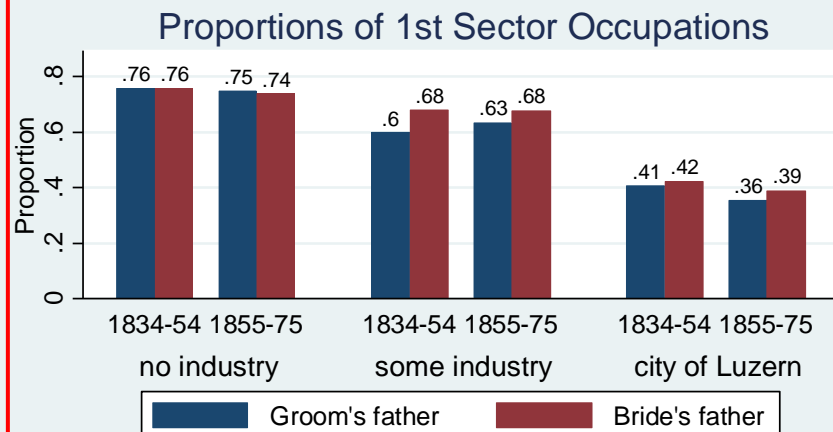
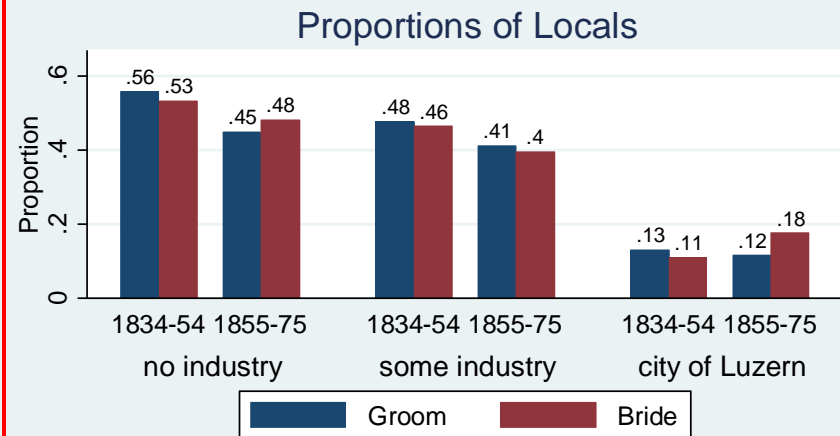
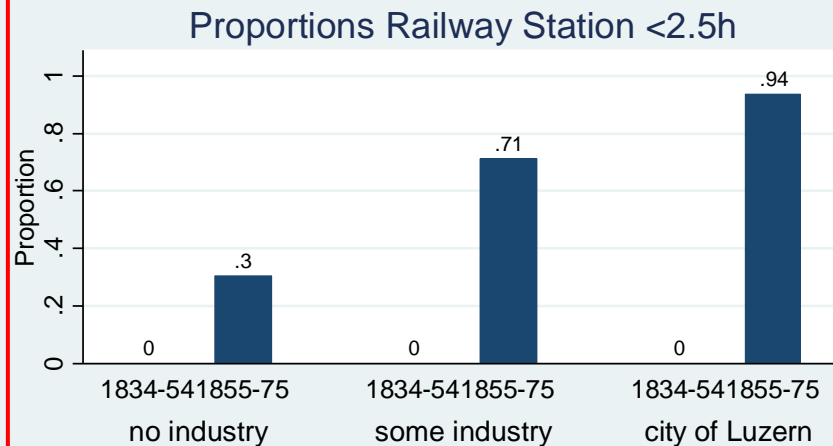
4 Data and Variables: Occupations

- > **Occupational titles** of groom, bride and fathers (rarely: mothers).

- > Coded to **HISCO** (van Leeuwen, Maas, & Miles, 2002).

- > Assigned to **HISCAM**: single dimensional, **continuous scale of stratification** (Lambert et al., 2013).
 - Version 1.3.1 E (constructed for the period 1800-1890) is used here (HISCAM, 2013).
- > Recoded to HISCLASS: Historical class-scheme (van Leeuwen & Maas, 2011).

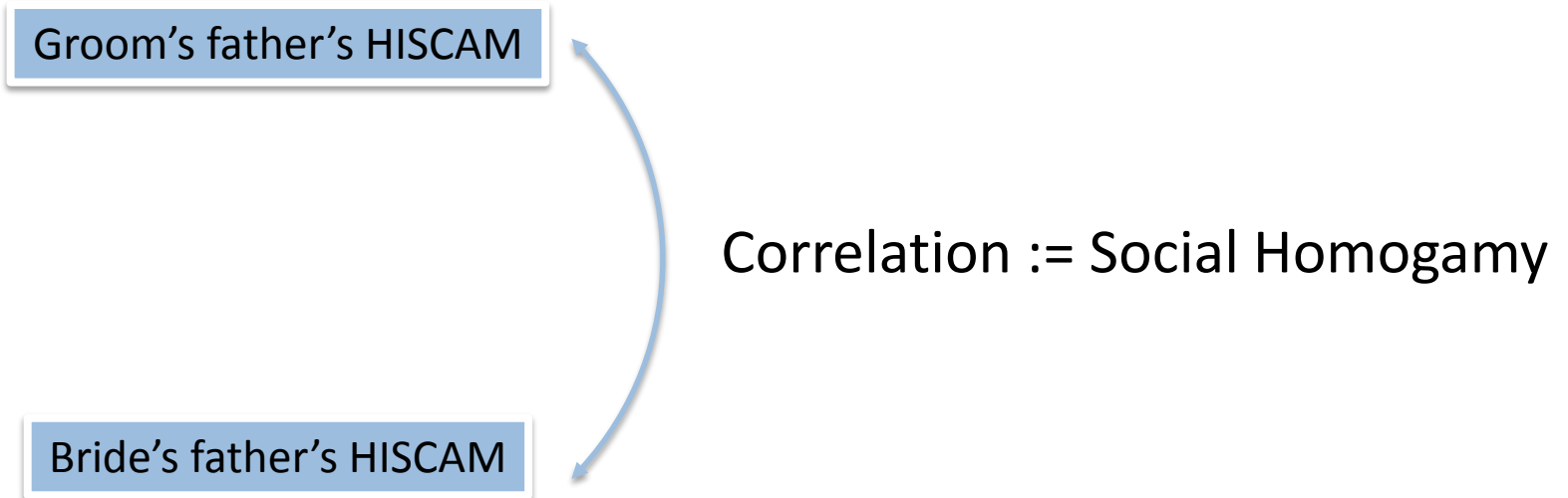
4 Data and Variables: Occupations (HISCLASS)



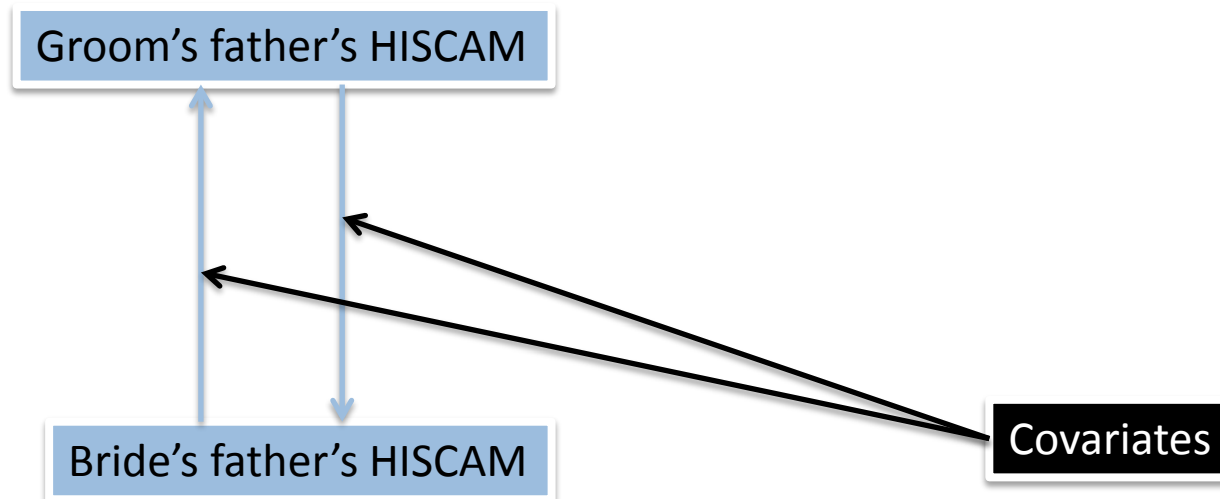
4 Data and Variables: Covariates by Area and Cohort



5 Method: Measuring Social Homogamy



5 Method: Multilevel Mixed Effect Model



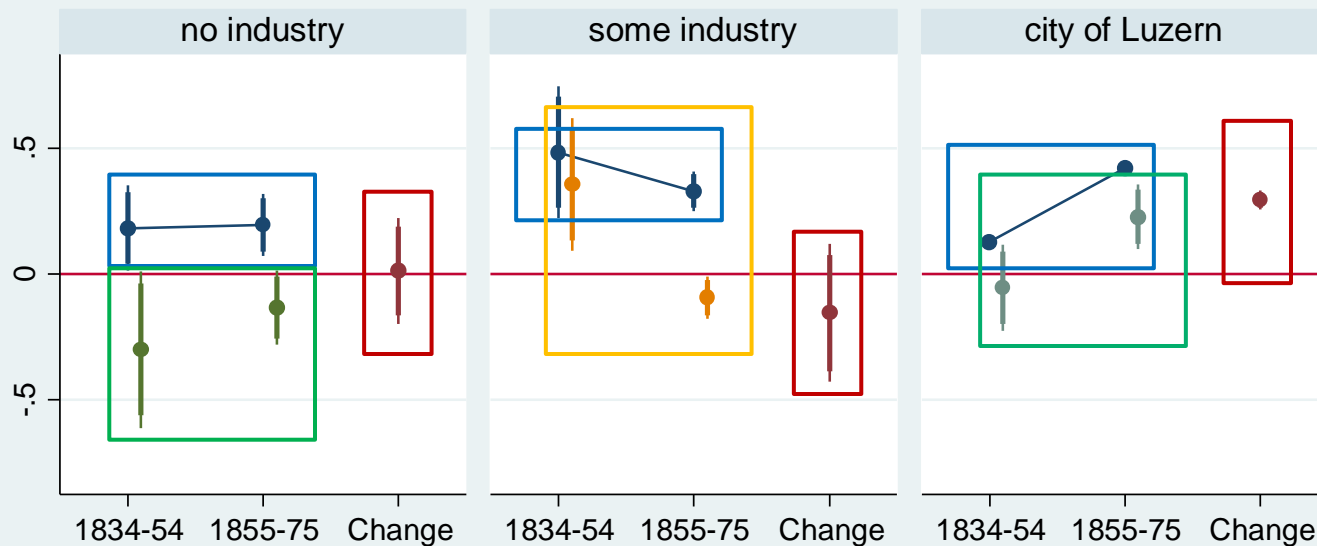
5 Method: Multilevel Mixed Effect Model

$$\ln(\text{HISCAM}_{ij}^{bf}) = (\mu_1 + \zeta_{1j}) + \beta_2 \ln(\text{HISCAM}_{ij}^{gf}) + \delta_1 x_{ij1} + \dots + \delta_k x_{ijK} + \ln(\text{HISCAM}_{ij}^{gf}) (\gamma_1 x_{ij1} + \dots + \gamma_k x_{ijK}) + \epsilon_{ij}$$

- > HISCAM_{ij}^{gf} : Bride's father's HISCAM
- > HISCAM_{ij}^{bf} : Groom's father's HISCAM
- > Covariates (x_{ijk}):
 - Nearby train station (<2.5h)
 - Local bride, local groom
 - First sector occupation (bride's father, groom's father)
 - Age: linear and quadratic (bride, groom)
 - Full interaction between type of area and cohorts
- > ζ_{1j} : Random intercept
- > Clusters: Parish x cohort

6 Results: Area and cohort

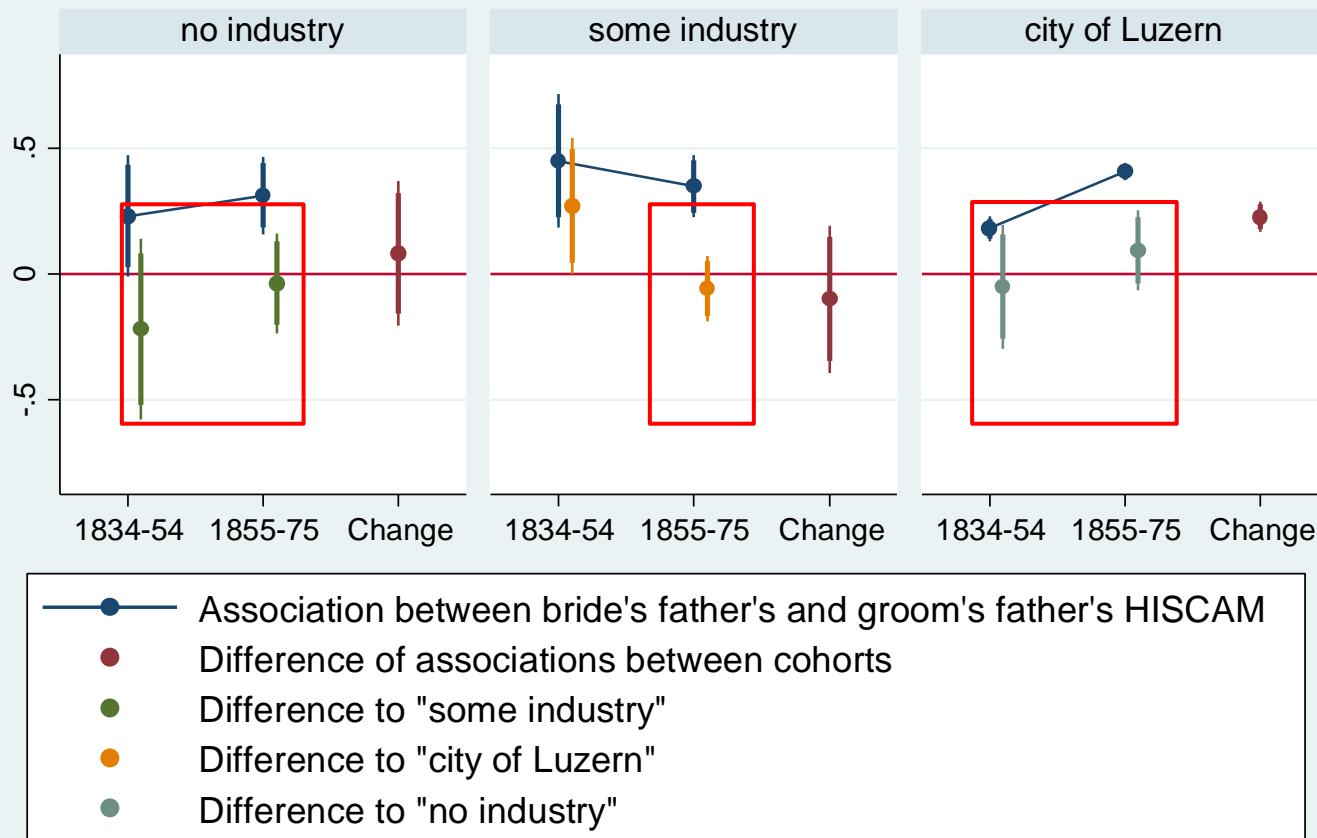
Homogamy by area and cohort (bride's father->groom's father)



Note: Spikes represent 90% (thick) and 95% (thin) confidence intervals

6 Results: Area and cohort

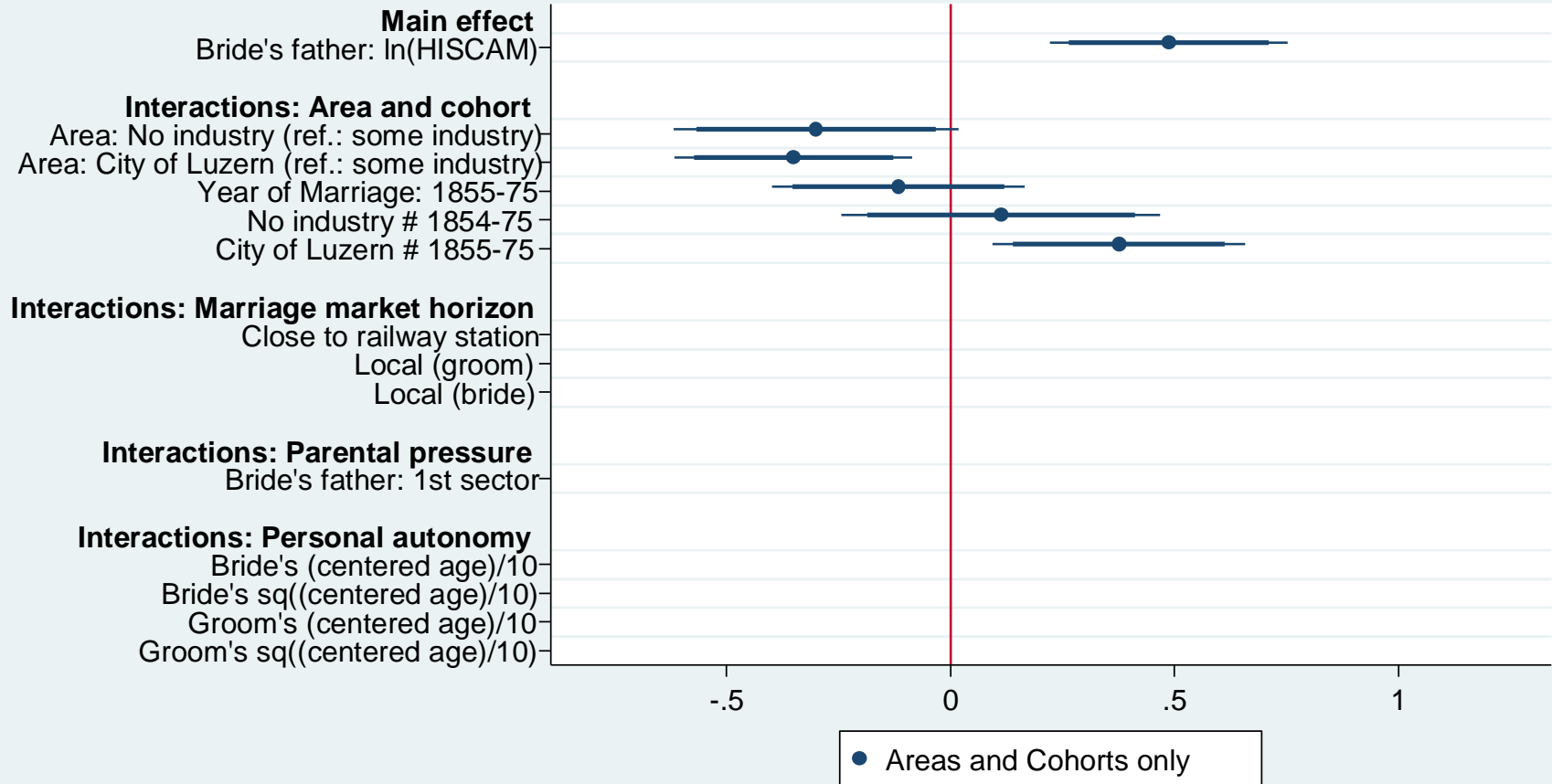
Homogamy by area and cohort (groom's father->bride's father)



Note: Spikes represent 90% (thick) and 95% (thin) confidence intervals

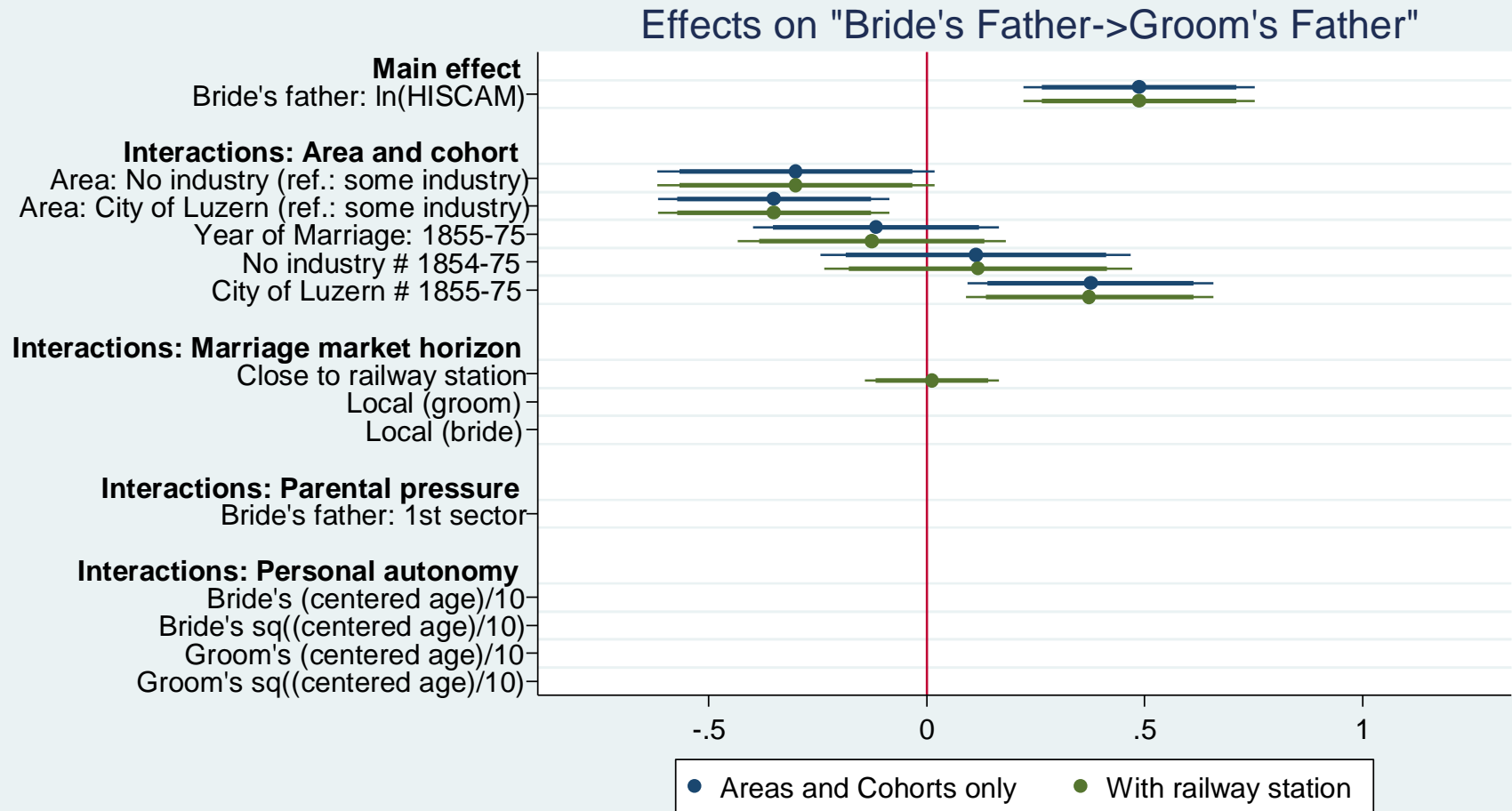
6 Results: Explaining Factors (Base Model)

Effects on "Bride's Father->Groom's Father"



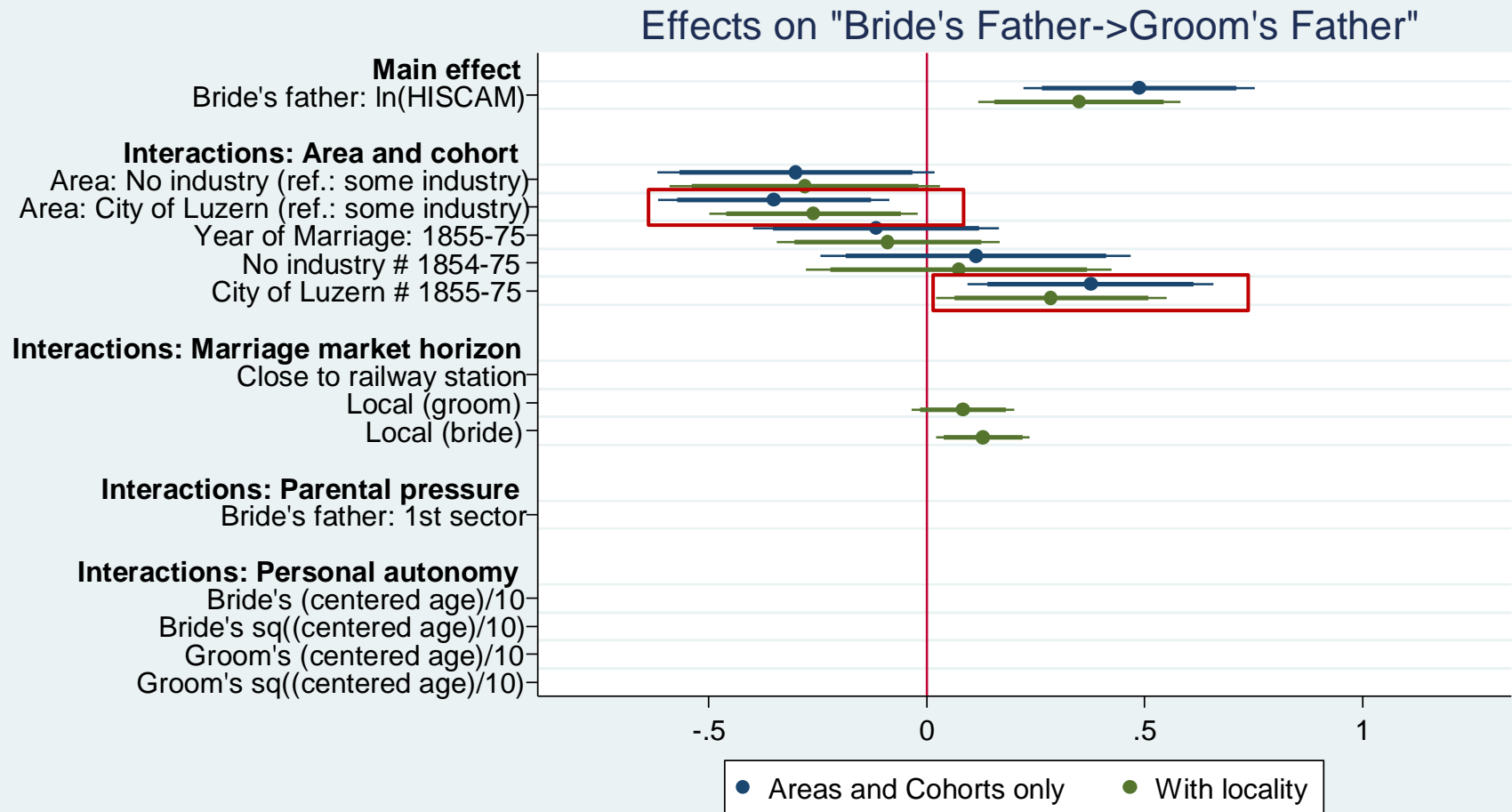
Note: Spikes represent 90% (thick line) and 95% (thin line) confidence intervalls.

6 Results: Explaining Factors (Train Station)



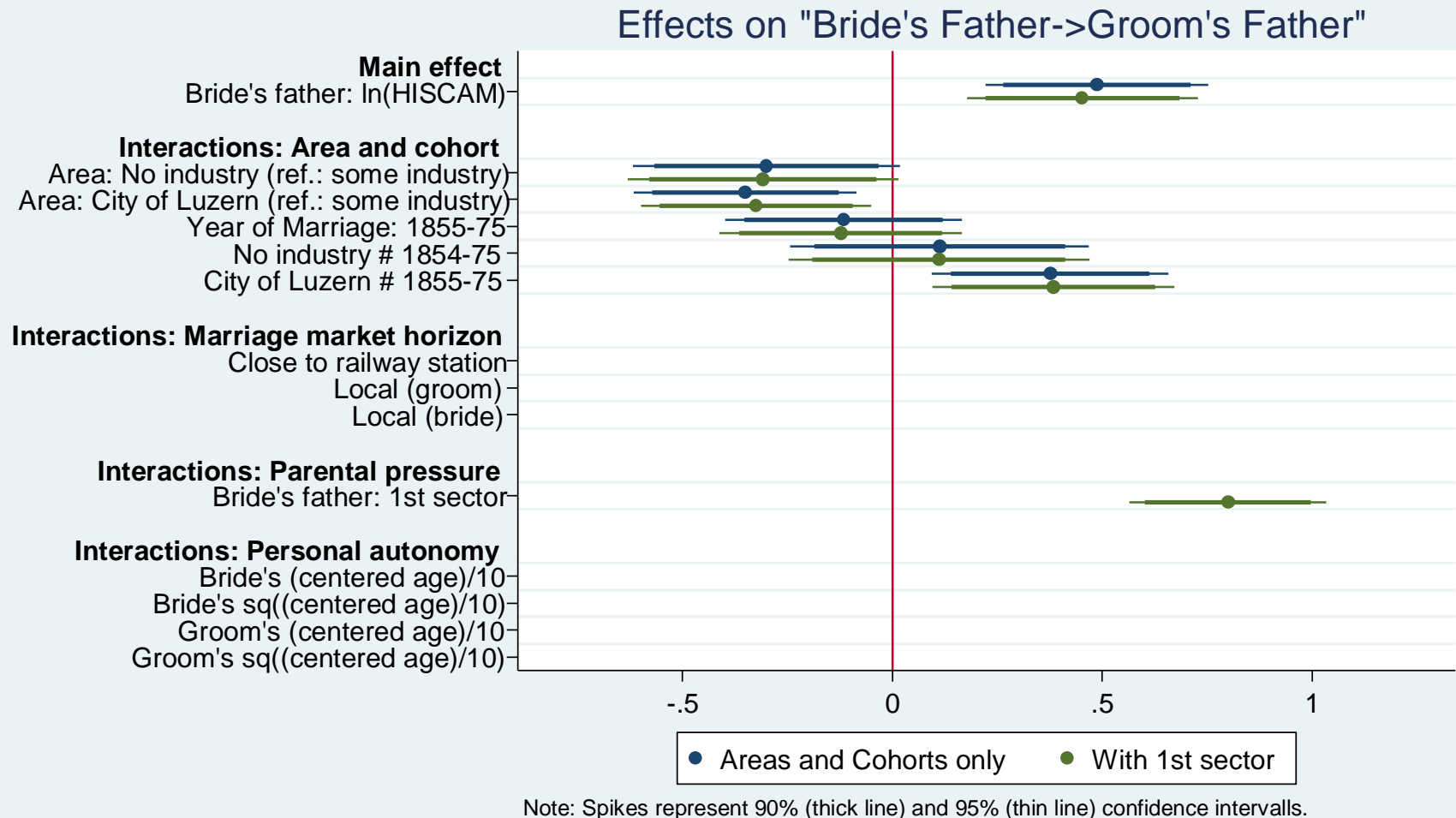
Note: Spikes represent 90% (thick line) and 95% (thin line) confidence intervals.

6 Results: Explaining Factors (Locals)



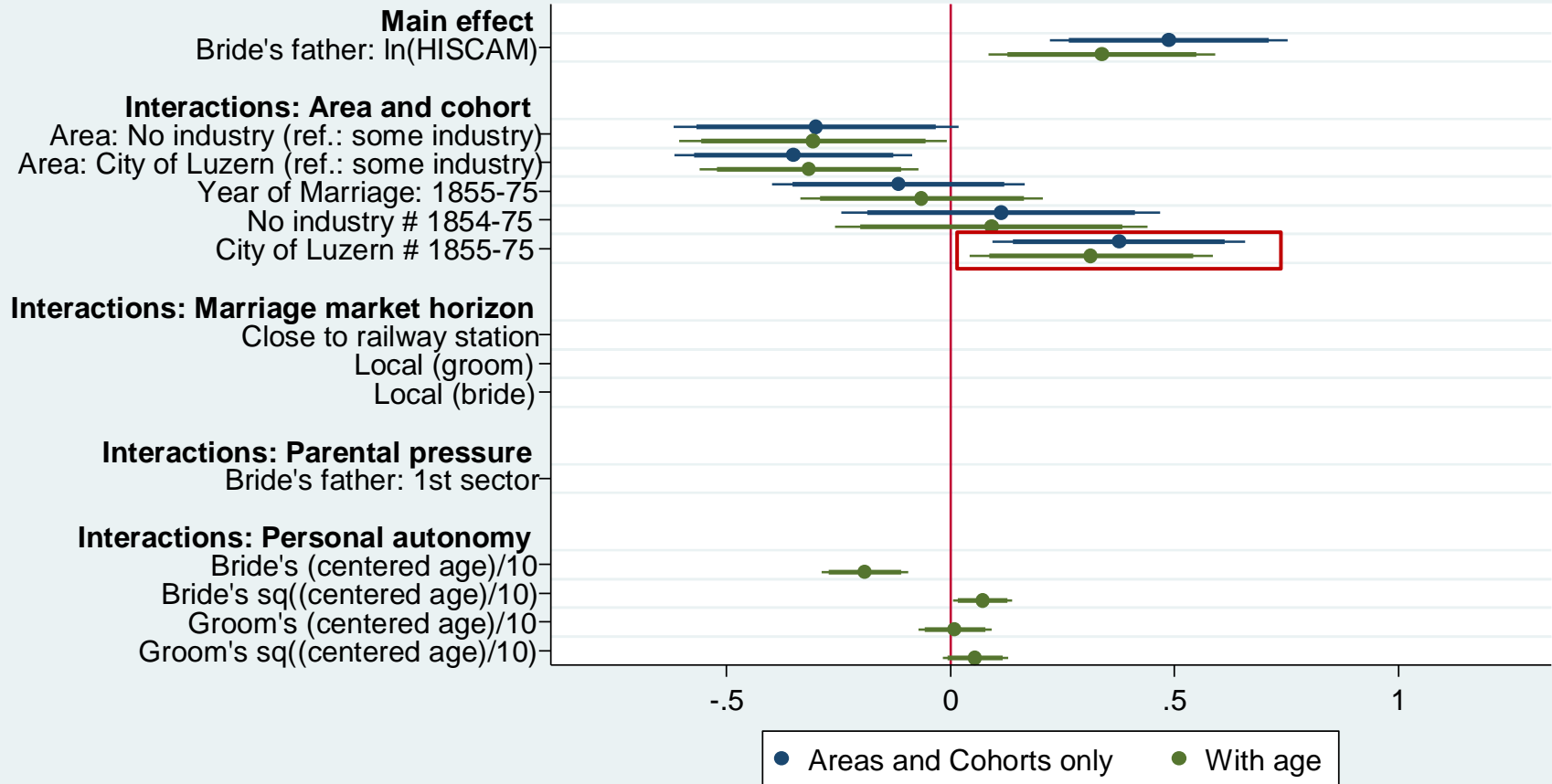
Note: Spikes represent 90% (thick line) and 95% (thin line) confidence intervals.

6 Results: Explaining Factors (1st Sector)



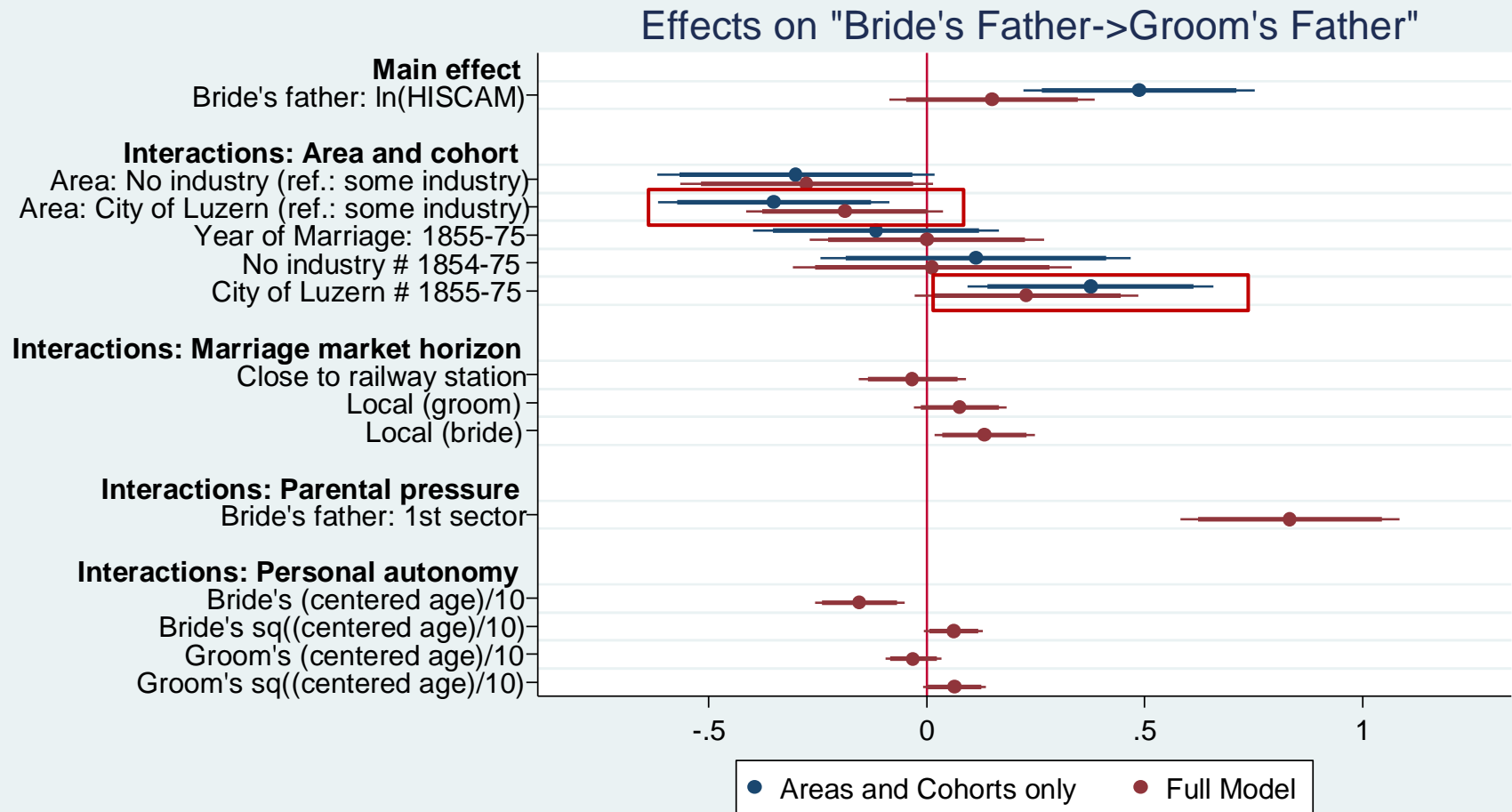
6 Results: Explaining Factors (Age)

Effects on "Bride's Father->Groom's Father"



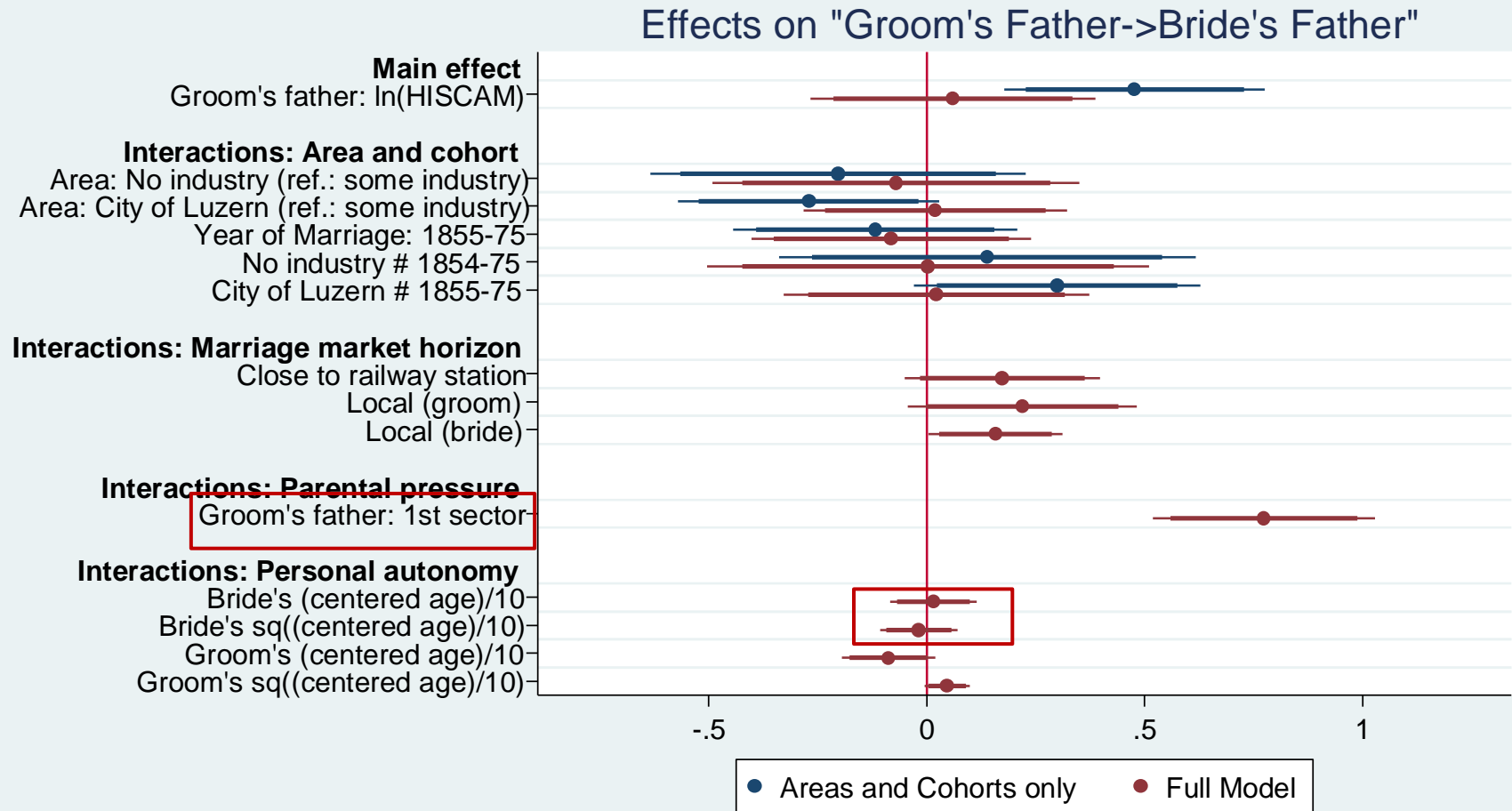
Note: Spikes represent 90% (thick line) and 95% (thin line) confidence intervals.

6 Results: Explaining Factors (Full model)



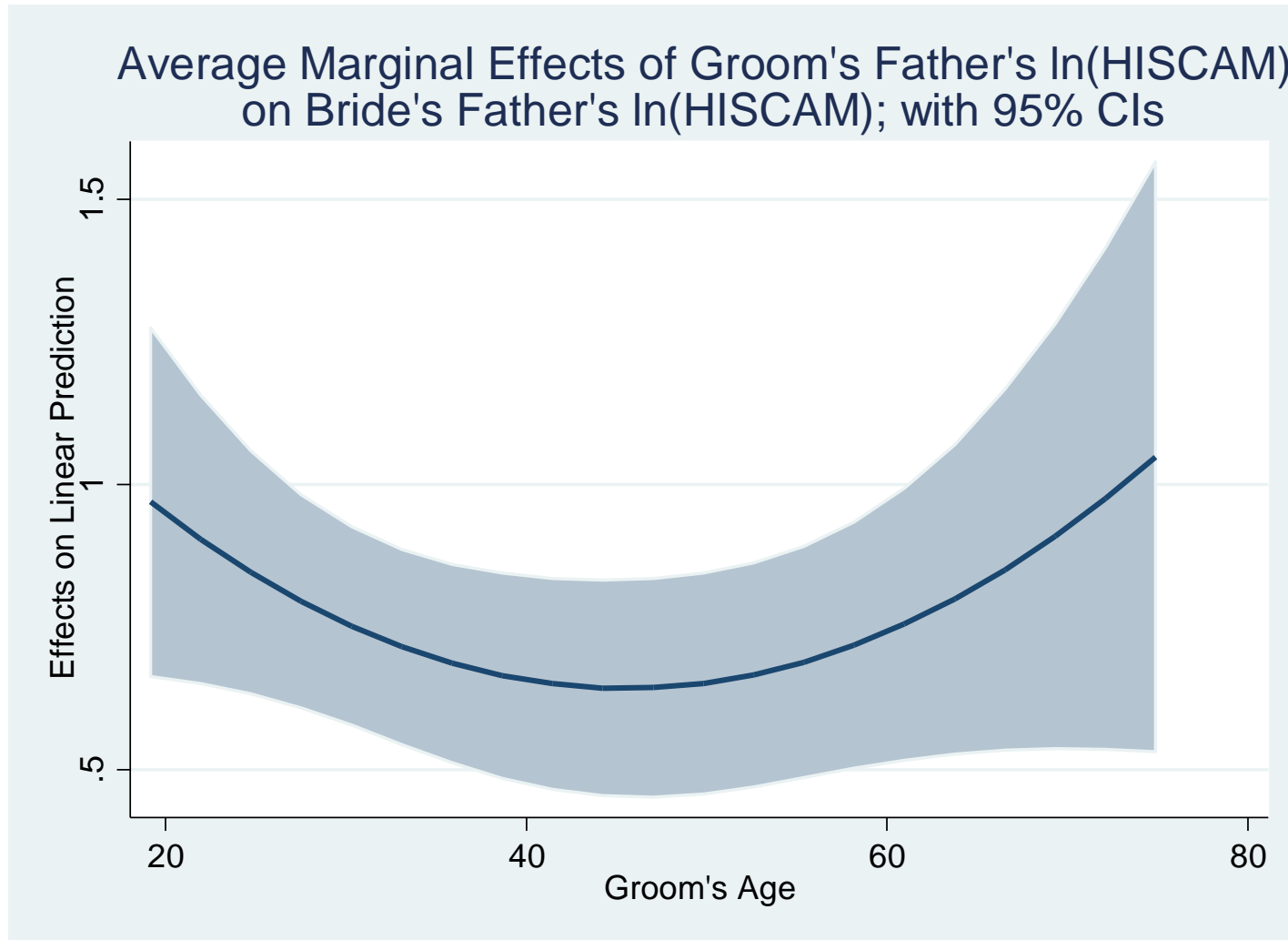
Note: Spikes represent 90% (thick line) and 95% (thin line) confidence intervals.

6 Results: Explaining Factors (the other Way)

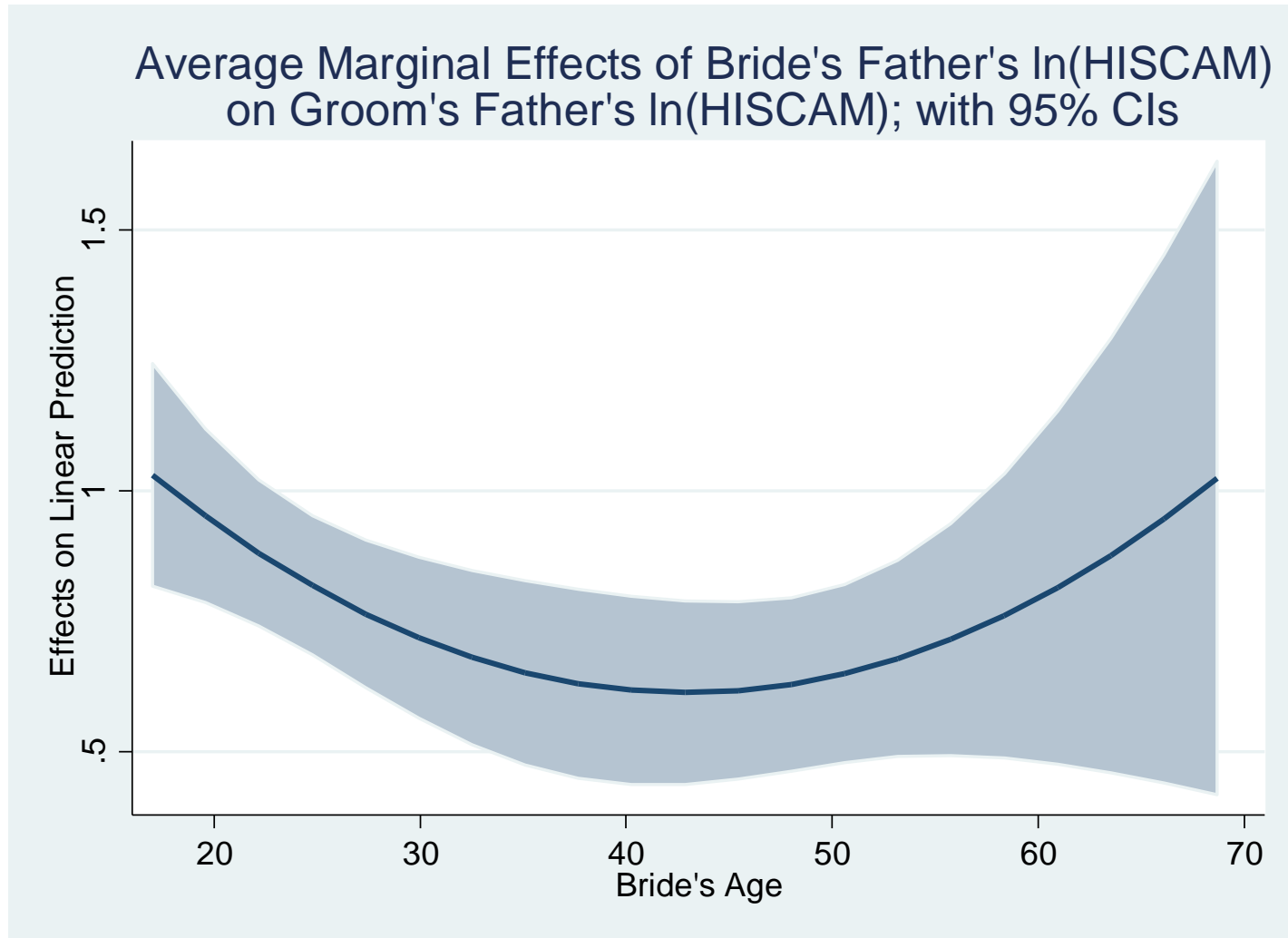


Note: Spikes represent 90% (thick line) and 95% (thin line) confidence intervals.

6 Results: Explaining Factors (Groom's Age)



6 Results: Explaining Factors (Bride's Age)



6 Results: Summary

| Clusters | Aspects | Variables | Hypotheses | Result | |
|---------------------------------|-------------------------|--|------------|---------|-----|
| Meet someone from another class | Modern labor market | “Some industry” area | - | (+)→(=) | ✗ |
| | | City of Luzern | - | = → (+) | ✗ |
| Marriage horizons | Means of transportation | Nearby train station | - | 0 | ✗ |
| | Migration | Locally rooted: Bride | + | + | ✓ |
| | | Locally rooted: Groom | + | (+) | (✓) |
| Social pressure | Parental control | 1 st sector: Bride’s father | + | + | ✓ |
| | | 1 st sector: Bride’s father | + | + | ✓ |
| Personal autonomy | Economic independence | Age of bride | - | - ? | ? |
| | | Age of groom | - | (-) ? | ? |

7 Conclusion: Summery

- > Change and area:
 - No decline of social homogamy; increase in the city of Luzern
 - Convergence: No industry / some industry (not robust)
 - Divergence: City of Luzern / other areas (not robust)

- > Explaining factors:
 - In line with hypotheses (except railway stations); age effects not robust
 - Explains some of the difference between city and countryside

7 Conclusion: Outlook & Open Questions

- > Relationship between bride's father's and groom's own status
- > More context variables (especially on education)
- > Method:
How to deal with the symmetric nature of parental homogamy?

> **Thank you!**

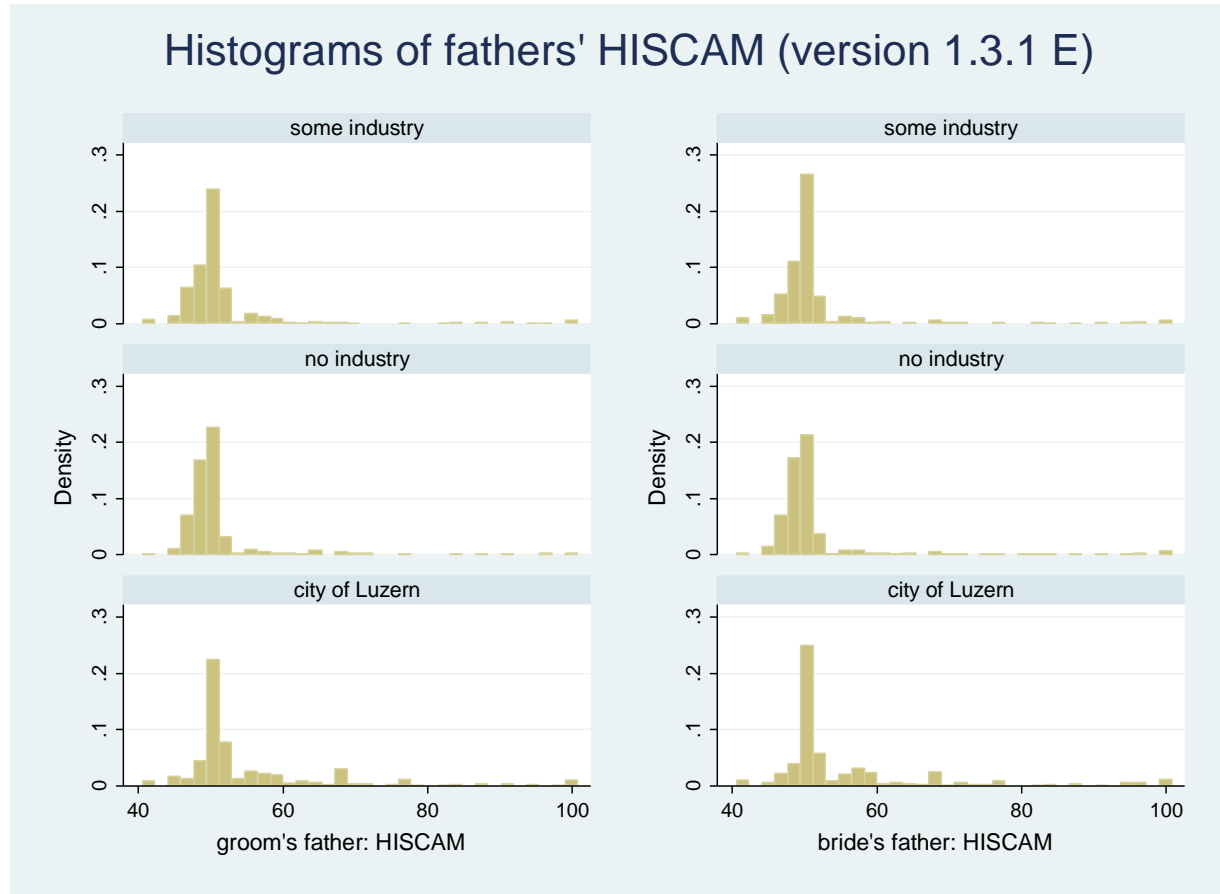
References (I)

- > **References**
- > Balthasar, A. (1988). Luzern: vom Städtchen zur Stadt. Die langfristige Bevölkerungsentwicklung 1700-1930 unter Anwendung der "Generalized Inverse Projection". *Schweizerische Zeitschrift für Geschichte*, **38**, 1–29.
- > Bossard-Borner, H. ([22.09.2010] 2010). Luzern (Kanton). Kap. 4.1 Politische Geschichte und Verassungsgeschichte. *Historisches Lexikon der Schweiz (HLS)*.
- > Dubler, A.-M. (1983). *Geschichte der Luzerner Wirtschaft. Volk, Staat und Wirtschaft im Wandel der Jahrhunderte*. Luzern, Stuttgart: Rex-Verl.
- > Dufour, G.-H. (1855). Topographische Karte der Schweiz. <https://s.geo.admin.ch/6ad0a6d0a5>.
- > Head-König, A.-L. (1993). Forced marriages and forbidden marriages in Switzerland: state control of the formation of marriage in catholic and protestant cantons in the eighteenth and nineteenth centuries. *Continuity and Change*, **8**, 441–465.
- > Head-König, A.-L. (1999). Les apports d'une immigration féminine traditionnelle à la croissance des villes de la Suisse. Le personnel de maison féminin (XVIIIe-début du XXe siècle). *Schweizerische Zeitschrift für Geschichte*, **49**, 47–63.
- > HISCAM (2013). *HIS-CAM scale version 1.3.1*.

References (I)

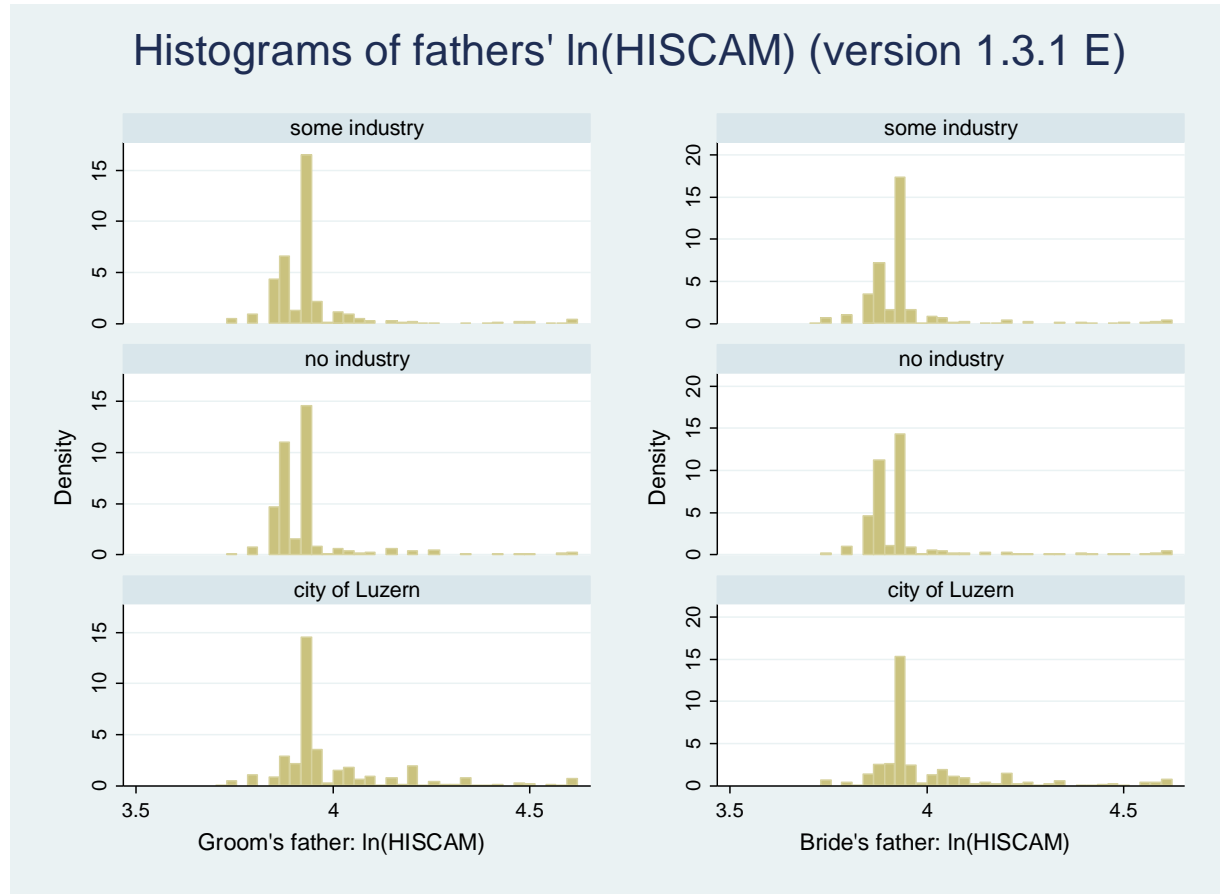
- > Jann, B. (2007). Überlegungen zum Berner Stichprobenplan. *Schweizerische Zeitschrift für Soziologie*, **Vol. 33**, 307–325.
- > Jann, B. (2014). Plotting regression coefficients and other estimates. *Stata Journal*, **14**, 708–737.
- > Lambert, P. S., Zijdeman, R. L., van Leeuwen, Marco H. D., Maas, I. and Prandy, K. (2013). The Construction of HISCAM. A Stratification Scale Based on Social Interactions for Historical Comparative Research. *Historical Methods: A Journal of Quantitative and Interdisciplinary History*, **46**, 77–89.
- > Schnider, P. (1996). *Fabrikindustrie zwischen Landwirtschaft und Tourismus. Industrialisierung der Agglomeration Luzern zwischen 1850 und 1930*. Luzern [etc.]: Rex Verlag.
- > van Leeuwen, M. H. and Maas, I. (2005). Endogamy and Social Class in History: An Overview. *International Review of Social History*, **50**, 1–23.
- > van Leeuwen, M. H. and Maas, I. (2011). *HISCLASS: A historical international social class scheme*. Leuven: Leuven University Press.
- > van Leeuwen, M. H., Maas, I. and Miles, A. (2002). *HISCO: Historical international standard classification of occupations*. Leuven: Leuven University Press.
- > Wägli, H. G. and Jacobi, S. (2010). *Schienennetz Schweiz. Strecken, Brücken, Tunnels / ein technisch-historischer Atlas / atlas technique et historique / toutes les lignes, les ponts, les tunnels*. Zürich: AS Verlag & Buchkonzept.

4 Data and Variables: Occupations (HISCAM)



> HISCAM, 2013; Lambert, Zijdemann, van Leeuwen, Marco H. D., Maas, & Prandy, 2013

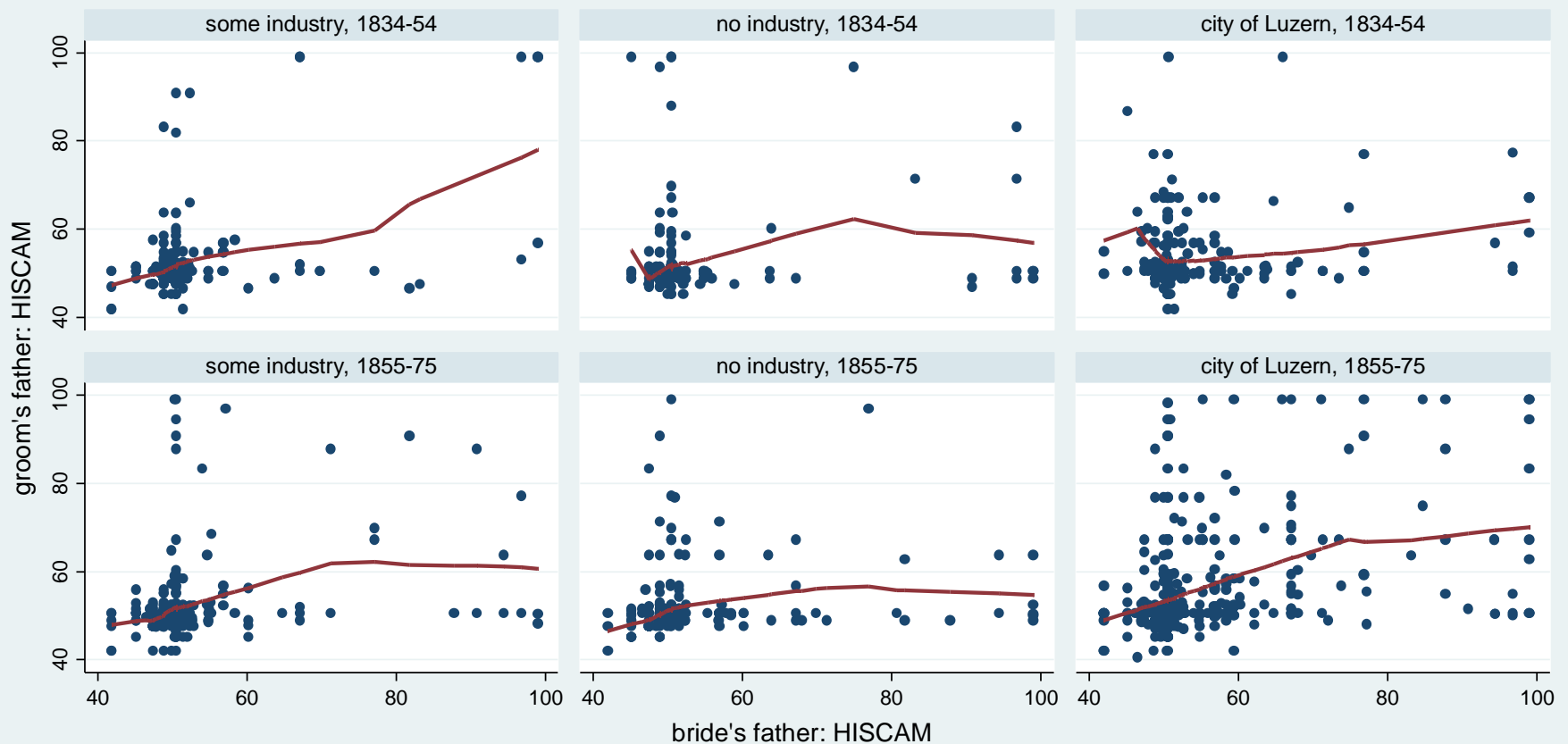
4 Data and Variables: Occupations (HISCAM)



> HISCAM, 2013; Lambert, Zijdemann, van Leeuwen, Marco H. D., Maas, & Prandy, 2013

Appendix: Lowess Smoother

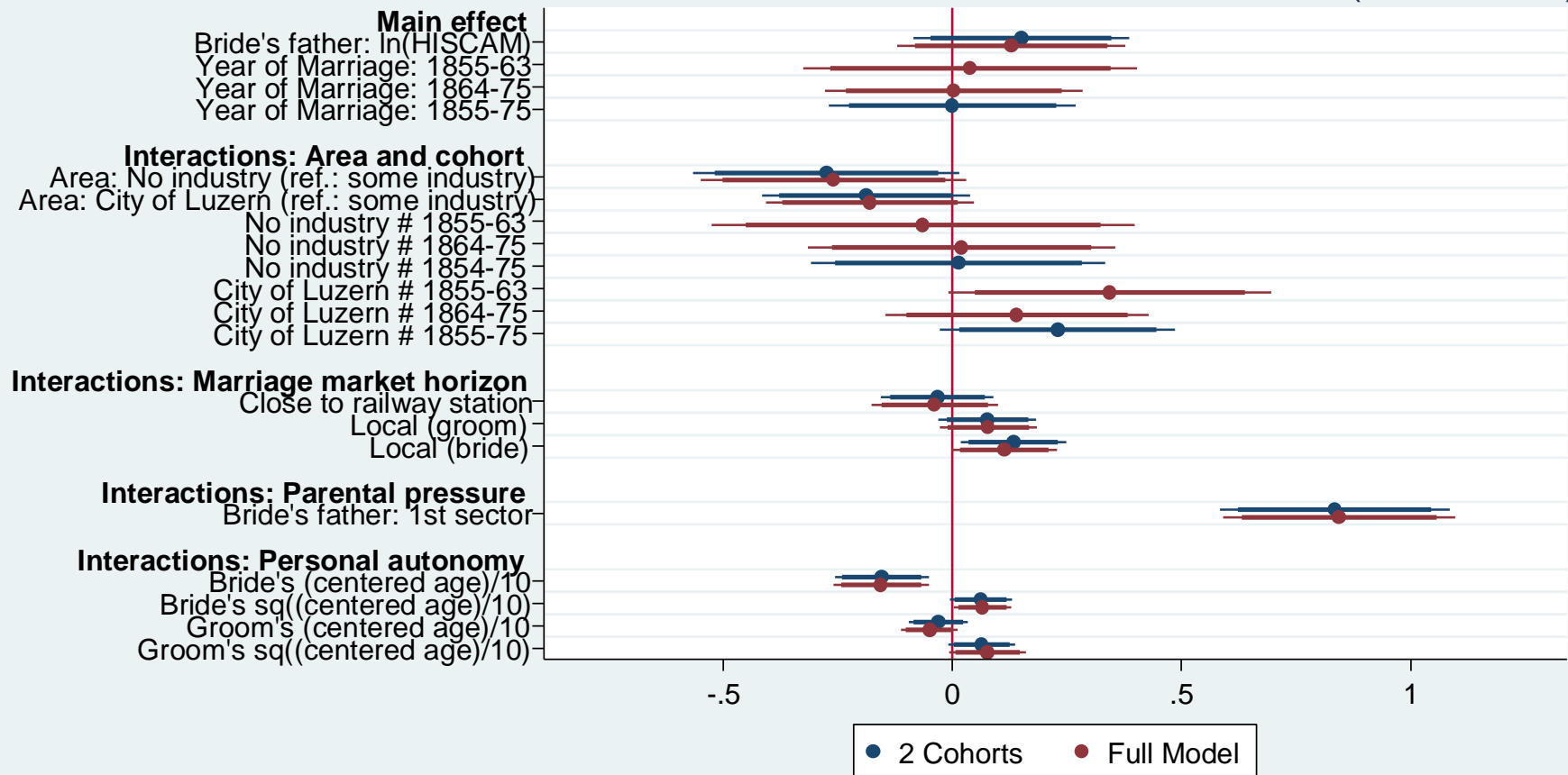
Status of bride's father and groom's father:
Lowess smoother



bandwidth = .8

Appendix: Additional cohort after 1850

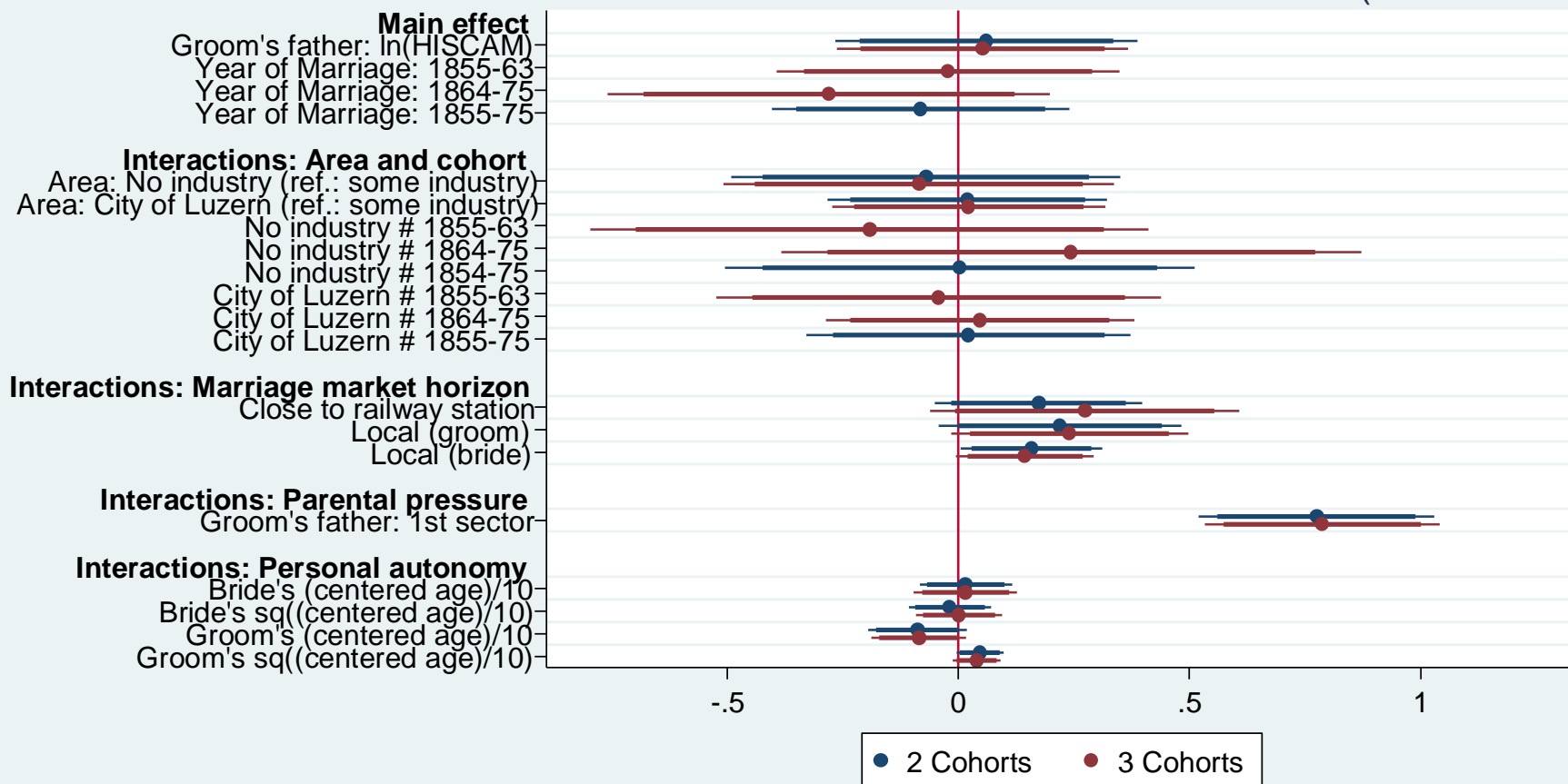
Effects on "Bride's Father->Groom's Father" (add. cohort)



Note: Spikes represent 90% (thick line) and 95% (thin line) confidence intervals.

Appendix: Additional cohort after 1850 (the other Way)

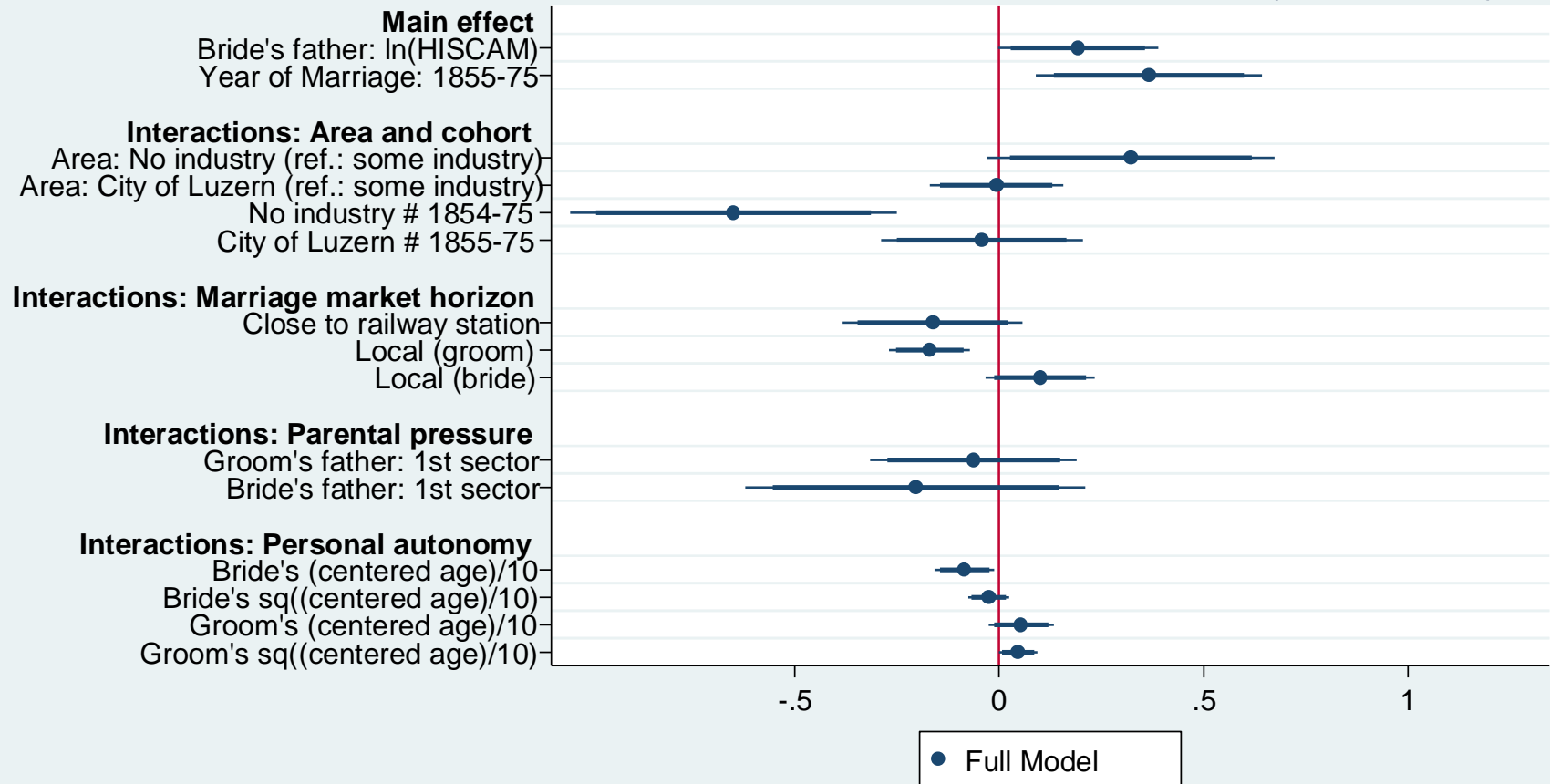
Effects on "Groom's Father->Bride's Father" (add. cohort)



Note: Spikes represent 90% (thick line) and 95% (thin line) confidence intervals.

Appendix: Outlook: Bride's Father -> Groom

Effects on "Bride's Father->Groom" (add. cohort)



Note: Spikes represent 90% (thick line) and 95% (thin line) confidence intervals.