“Intergenerational Class Mobility in Comparative Perspective.”

A replication and extension after 25 years

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GLT, 1989

- Ganzeboom, Harry BG, Ruud Luijkx, and Donald J Treiman. 1989. "Intergenerational Class Mobility in Comparative Perspective." *Research in Social Stratification and Mobility* 8: 3–84.
- 151 intergenerational (father – son) occupational class mobility tables (father – son) from 35 countries; 18 countries with repeated data.
- EGP6, coded from ISCO-68 and self-employment (yes/no) and supervision (none / few (1-10) / many (11+)
- Goodman-Hauser loglinear model with equally scaled row and columns, and three different treatments of diagonal (immobility). Model D is preferred and has two between-table parameters: IMM (general immobility, on-diagonal), U (scaled uniform association, off-diagonal).
- Meta-analysis of IMM and U by Country and Year:
  - Strong between-country variation (40%-50%)
  - Overall downward trend in U parameter estimated at -0.017 – which amounted to a 1% decline per year (additive): ***intergenerational association will disappear in 100 years***.
- Two fold rebuttal of the FJP hypothesis of Constant Social Fluidity.

The world since 1989

- In hindsight, 1989 was a very interesting and well-chosen year to take stock of any social trend.
- 1989-1990: Demise of communism in Eastern Europe.

Aims

- Extend the GLT1989 analysis with more and better data:
  - More countries
  - More replicated countries
  - Add data after 1990
  - Expand measurement of occupational classes: EGP6 → ISEC [International Socio-Economic Classes) (== EGP14)
  - Expand the analysis with women / mothers.

Results and Conclusions

- Database expanded:
  - 56 countries with replicated tables
  - Men and women, fathers and mother
  - EGP6 → EGP13
- Overall trend in parameter:

  U = 0.567 – 0.497*Year(1950-2050)
- However, trend show significant slow-down and even reversal in (post) communist societies.
- Results for men and women strongly similar

ISMF: International Stratification and Mobility File

- ISMF brings together unit level data on intergenerational mobility from secondary sources.
- Basic inclusion criterion: a measure of father's and respondent's occupation (and education); general adult population sample.
- Other variables included: mother, spouses and first occupation, parental and spouses education, personal and household income.
- Occupation are harmonized using ISCO-68 and ISCO-88 (ISCO-08 to come)

Mobility data since 1989

- The most significant change in mobility data sources has come from large scale international projects:
  - ESS (European Social Survey) collects intergenerational mobility since 2002 (some 25-30 EUR countries, every two years.
  - EU-SILC has assembled mob-data in 2005 and 2011 for 35 EU countries.
  - ISSP has collected mob-data in 1992, 1999, 2009 (will again in 2019).
  - EVS has collected mob-data in 2008 for 40 EU countries.
- Other major expansions of ISMF: many more studies from NL, IT.

ISMF, current (2018) situation

- 234 separate data sources (many of these contain multiple studies for one country, multiple countries, or a combination).
- 71 countries, 56 with repeat studies (different years).
- 747 studies, i.e. an independent sample on a single country, usually from a single year. This is our basic unit of analysis.
- Total N (age 21-64, weighted): 1.9 million. After selection on valid occupations: 1.39 million, 56% men, 44% women.

EGP

- The EGP occupational class typology was developed as a 10-category schema by Erikson, Goldthorpe & Portocarero (1979), building upon a British (H-G) class schema.
- EGP were slow to document the classification fully and when the documentation appeared (1992), it did not provide a standard algorithm to recreate the classes in new data.
- However, such a standard algorithm was created by GLT1989, building upon earlier work for the Netherlands (Ganzeboom et al. 1987).
- The algorithm was refreshed for the ISCO-88 classification by Ganzeboom & Treiman (1996) . See also Ganzeboom & Treiman (2003) for a most systematic overview.

EGP algorithm

- Step 1: assign occupations classified by ISCO to initial classes.
- Step 2: create small self-employed categories (IV-a, IV-b, IV-c) and manual supervisors (V) by taking into account self-employment and supervising status (as expressed in separate variables).
- Step 3: all workers with many subordinates become Higher Controllers.

ESEC

- In 2003 Eurostat commissioned David Rose and colleagues to create an European Socio-Economic Class scheme.
- The result (ESEC) look suspiciously much like the EGP-typology and the EGP-algorithm created by GLT. This is so, because the ESEC group started working from the ISCO-EU classification.
- The ESEC algorithm differs from the GLT algorithm, because it gives precedence to the self-employment and supervising status variables, and regard the occupational titles as secondary.

Refining EGP10 into EGP14

- → EGP11: by separating
  - III-a Routine Clerical Workers
  - III-b Routine Sales & Personal Care Workers
- → EGP13: by separating
  - I-a and II-a: Higher and Lower Professionals
  - I-b and II-b: Higher and Lower Managers
- → EGP14: by separating:
  - VII-a1: Semi-skilled Manual Workers
  - VII-a2: Unskilled Manual and Service Workers

The trouble with the EGP algorithm

- Initially generated from ISCO-68, later from ISCO-88 (now ISCO-08). These classifications are different in many ways, but in particular with respect to acknowledging self-employment and supervising status as part of the occupation code.
- Notice that while ever more data come with ISCO codes, there are still data that use national classifications (such as the US), and ISCO have been created by conversion (cross-walk). This is the mode of operation in ISMF, but may also have happened in the source data.
- Combining measures on occupations, self-employment and supervising status, each of which may have different sources and a variery of incompleteness, may be too demanding.

Quality / study design controls

- GLT sought to overcome the problems of different data quality by using control variables:
  - Controlling the effect of data quality in the meta-analysis (main finding: more detailed occupation codes lower the association U).
  - Robustness checks by deleting suspect tables.
- In fact, it did not make much difference to the conclusions…

Design of the current study

- Data are from ISMF (2018).
- Parental Occ: father's class, supplemented by mother's class (if available and father's class missing).
- Only replicated countries (N=56, 722 studies).
- Occupations measured by (new) EGP13.
- Micro-analysis: run models study by study.
- Macro-analysis: meta-analyses of estimated parameters, weighted by inverse variance (1/SE**2).

Micro-analysis

- Goodman-Hauser Loglinear model
- Ui = Uj = scaling parameters. Rescaled to Z-values
- Ui – Uj are estimated (in LEM) on pooled data and reintroduced as fixed values in subsequent LOGLIN analysis.
- U = scaled uniform association, similar to an overall correlation, corrected for diagonal densities.
- DIA and DIAk: parameters to control excess density on the diagonal.

Meta-analysis: what is good about it?

- Can be applied to any micro model (loglinear, correlation regression)
- Avoids the burden of multi-level analysis.
- Easy diagnostics at the macro-level.
- Can avoid distributional (normality) assumptions – important in small macro-N studies – bootstrapped SE.
- Can also apply panel regression (XTGLS)

Results – ANOVA – men + women

	Sum of Squares	Adj R2
Total	18590	
Country	9835	48.9%
Country + Year	7906+4949	77.8%
+ Country*Year	2190+5806	81.2%

Results – Average trend (100 years)

U = 0.567 – 0.497*Year(1950-2050)

T-value Trend: 29.4

SD intercept: 0.087

SD Trend: 0.911

No country has significant positive trend

28 countries have significant negative trend.

Results – Average trend (100 years)

AUT	-.847	-8.8	**DEN**	-.435	-3.5	**HUN**	-.306	-3.8
IRE	-.766	-5.3	**SPA**	-.434	-2.7	**ENG**	-.298	-3.4
SAF	-.742	-1.9	**FIN**	-.431	-2.6	**NOR**	-.295	-2.5
NIR	-.720	-3.7	**SLN**	-.431	-3.5	**USA**	-.263	-4.0
PHI	-.713	-3.3	**FRA**	-.419	-4.3	**TAI**	-.236	-1.7
SCO	-.679	-3.0	**AUS**	-.413	-3.1	**BEF**	-.234	-1.3
BRA	-.646	-2.3	**SWE**	-.360	-3.9	**GER**	-.217	-2.8
POL	-.642	-8.9	**BEW**	-.358	-2.3	**NZE**	-.154	-1.0
ITA	-.585	-7.2	**NET**	-.327	-4.6			
JAP	-.535	-4.3	**CAN**	-.309	-2.6			

Figure 1a (men): Development op Association parameter U in never-communist and (post-)communist societies

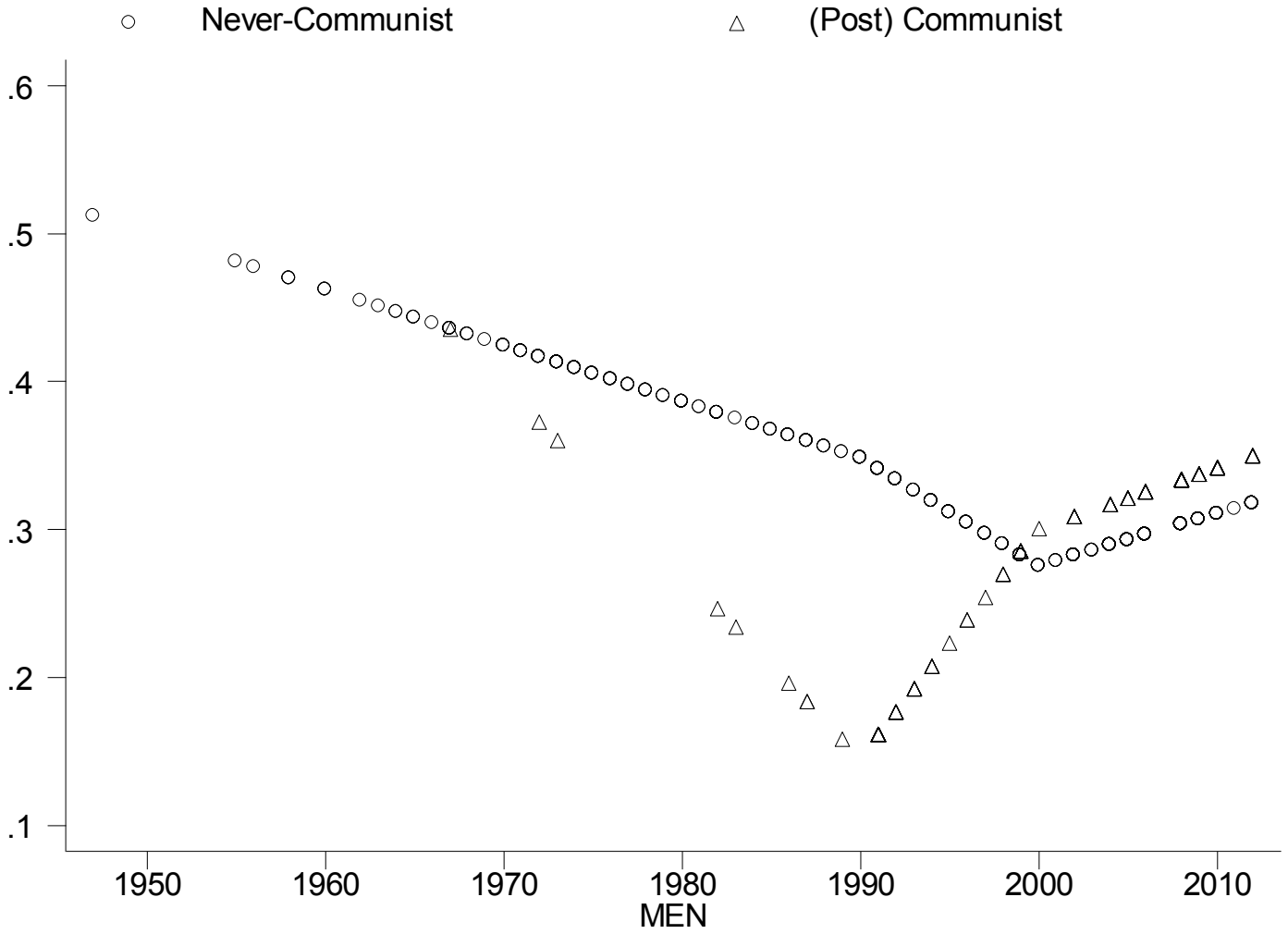
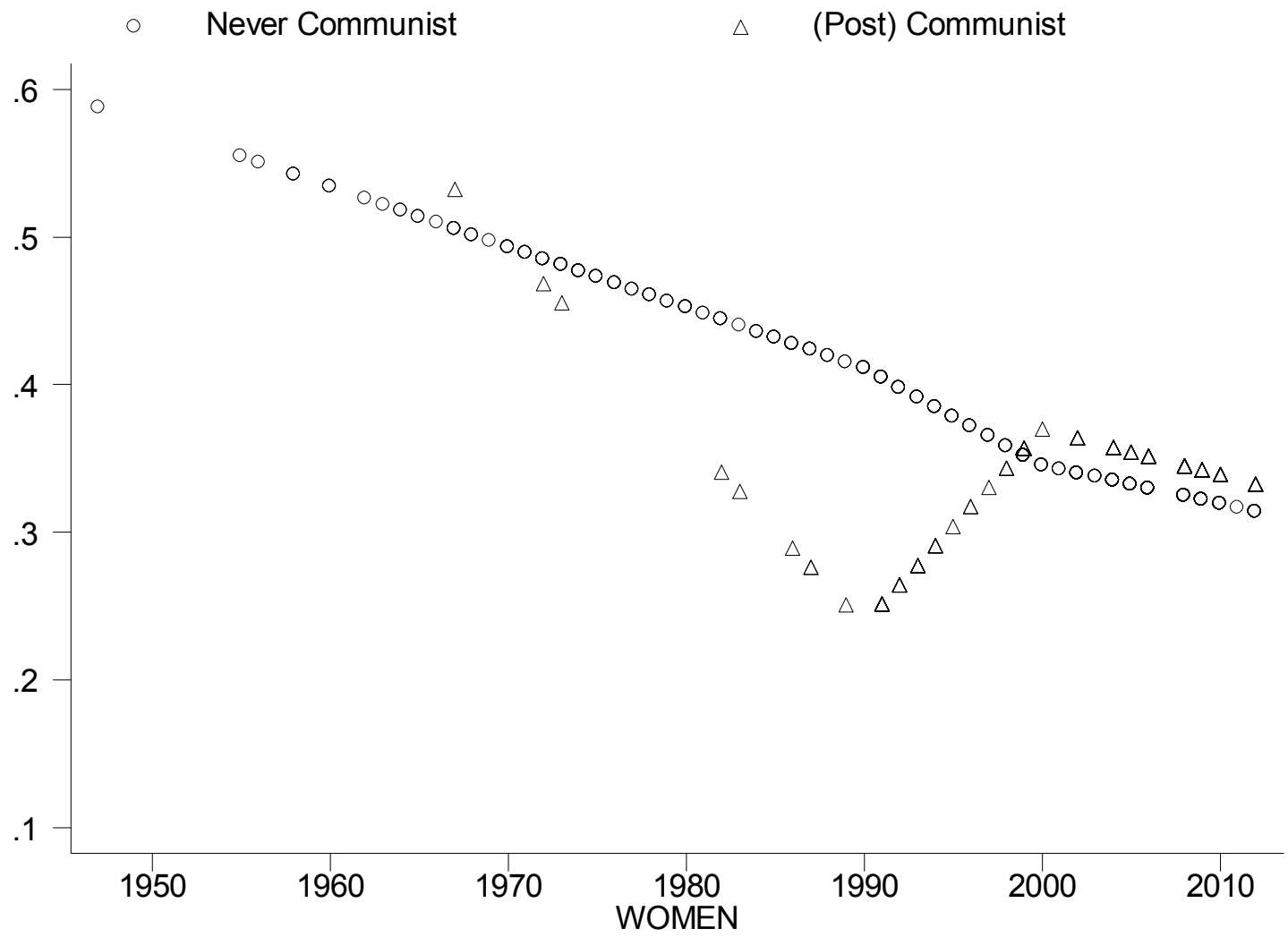


Figure 1b (women): Development op Association parameter U in never-communist and (post-)communist societies



Conclusions (1)

- There is a significant world-wide trend towards more social fluidity (smaller U). The trend is most pronounced for off-diagonal association U and is hardly noticeable on the diagonal of the intergenerational mobility tables.
- The trend was more pronounced before 1990 than after 1990. In (post) communist societies we see a sharp reversal of the trend toward more fluidity after 1990.

Conclusions (2)

- Refining the class schema used (from 6 to 13 classes) indicates that more refinement shifts association from on-diagonal to off-diagonal, but hardly affects the twofold rebuttal of the Constant Social Fluidity.
- Quality controls (=study effects) hardly affect the results.