Class-origin wealth gaps in comparative perspective.

Evidence from EU-SILC data.

Davide Gritti & Filippo Gioachin, University of Trento

8th European User Conference for EU-Microdata - Session Inequality/Saving
Introduction
Gatsby curve (Corak, 2013) is about income, yet the Great Gatsby is about wealth, or better people who do not need labour income because of the wealth associated to their class of origin.
### Table 1: The Great Gatsby characters as if in PSID 1922

<table>
<thead>
<tr>
<th>ID</th>
<th>HID</th>
<th>Surname</th>
<th>Name</th>
<th>Wealth</th>
<th>Income</th>
<th>Education</th>
<th>Social class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Carraway</td>
<td>Nick</td>
<td>Rich</td>
<td>High</td>
<td>Ivy league</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Gatsby</td>
<td>Jay</td>
<td>Rich</td>
<td>Unknown</td>
<td>Dropout</td>
<td>Low</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Fay Buchanan</td>
<td>Daisy</td>
<td>Super rich</td>
<td>None</td>
<td>None</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>Buchanan</td>
<td>Tom</td>
<td>Super rich</td>
<td>None</td>
<td>Ivy league</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Baker</td>
<td>Jordan</td>
<td>Rich</td>
<td>High</td>
<td>None</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>Wilson</td>
<td>George</td>
<td>Poor</td>
<td>Poor</td>
<td>None</td>
<td>Low</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>Wilson</td>
<td>Myrtle</td>
<td>Poor</td>
<td>None</td>
<td>None</td>
<td>Low</td>
</tr>
</tbody>
</table>
Aim and contribution

Aim of the paper

Investigate cross-country stratification of wealth by class of origin

- We theorize wealth attainment within standard socioeconomic attainment model to *isolate the different channels* (income, education, transfers) that may differently operate across countries.
- We provide an empirical analysis for the European context, while current research is confined to single country studies (Hansen and Wiborg, 2019).
Reference literatures

1. **Intergenerational inequality/social mobility**
   - Persisting origin effects (=social class) on socioeconomic attainment
   - Cross-country differences are explained by income inequality or educational/welfare regimes (Hertel and Groh-Samberg, 2019)

2. **Wealth inequality**
   - Countries have different levels and distributions (Semyonov and Lewin-Epstein, 2013)
   - Recent works point to the influence of different wealth components, esp. real estate (Pfeffer and Waitkus, 2021)

→ Wealth gaps = wealth distances associated to social class of origin
An augmented socioeconomic model for wealth attainment

(a) Class of origin - Wealth attainment
(b) Class of origin - Educational attainment (i.e. better schools)
(c) Class of origin - Income attainment (i.e. better jobs)
(d) Class of origin - Wealth transfers (i.e. larger bequests)
Wealth attainment: different functions, different measures

When considering wealth accumulation, we must consider that wealth can also begets income, or the income-generating function: having returns from properties, investments, insurances.

We focus on this dimension of wealth measuring property income

- In line with the Weberian definition of property classes: those who live on income that is not earned through the labour market
- The ability to make wealth=income can be also stratified by origin

Birkelund, Karlson and Yaish (2022): larger direct effects of origin (edu) on property income compared to other income sources, taken as ability to capture direct transmissions of wealth from parents to children.
Data & Methods
Data and Sample

EU-SILC 2005, 2011, 2019 cross-sectional data

- Module intergenerational transmission of disadvantage (social class of origin) + individual/household income + other relevant variables
- Cross-sectional: large N for many countries
- Some countries are not always present

→ Sample selection: individuals aged 30-55 (life-cycle accumulation)
→ Missing imputation: chained equations, predictive mean matching

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2011</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countries</td>
<td>26</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>Avg obs by country</td>
<td>7500</td>
<td>7000</td>
<td>6700</td>
</tr>
<tr>
<td>Total obs.</td>
<td>195k</td>
<td>214k</td>
<td>195k</td>
</tr>
</tbody>
</table>
Social Origin: Parental occupational class

(Dominant) parental occupational class (ESeC, Rose and Harrison 2005)

- Managers (1), Professionals (2) → TOP (21%)
- Intermediate Employees (3, 6), Small Entrepreneurs (4, 5) → MIDDLE (31%)
- Lower Grade W/B collars (7, 8), Routine occupations (9) → BOTTOM (46%)

- No parental income/wealth available
- Parental education available
Wealth: property income

**Property income** [2019 methodological guidelines]

- Rental income for properties or land (hy040)
- Interests, dividends, profit from capital investment (hy090)
- Pensions from individual private plans (py080)
- Imputed rent for primary residence if owned (hy030)

To the original measure, we apply the following operations:

1. Equivalise using OECD modified scale and adjust for inflation
2. Trim p1/p99
3. Take percentile rank (excl. zeros) in country-year distribution
4. Imputation for missing values

⇒ Final measure: relative position in property income distribution

Advantage: account (partly) for differences in measurement
Two-step two-level analysis

- **Class-origin wealth gaps** [TOTAL OW]
  [cv: sex, citizenship, age, parental education, 2nd class, number of siblings]
  - Top-middle gap & Top-bottom gap

- **Intergenerational rigidity** for each channel of influence
  [cv: sex, citizenship, age, parental education, 2nd class, number of siblings]
  - Educational rigidity [O-E]
  - Income rigidity [O-I | E]
  - Wealth direct rigidity [O-W | E, I]

1. Estimates of gaps and rigidities from country-year OLS (MACRO)
2. Bivariate analysis (weighted for inverse of variance)
Results
<table>
<thead>
<tr>
<th>Class</th>
<th>Class gaps</th>
<th>+ education</th>
<th>+ employment income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle class</td>
<td>-1.902***</td>
<td>-0.925*</td>
<td>-0.855*</td>
</tr>
<tr>
<td>Bottom class</td>
<td>-4.717***</td>
<td>-2.985**</td>
<td>-2.842**</td>
</tr>
<tr>
<td>Top class</td>
<td>53.298</td>
<td>46.825</td>
<td>47.944</td>
</tr>
<tr>
<td>Country FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Year FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>N</td>
<td>580,045</td>
<td>580,045</td>
<td>580,045</td>
</tr>
</tbody>
</table>

- Advantages of top class
- Partial mediation by own education and income
Class-origin wealth gaps distribution by country clusters

1. **Top-Middle percentile gap in property income**

2. **Top-Bottom percentile gap in property income**
Class-origin wealth gaps: relation with educational rigidity

Notes: square = 2005; triangle = 2011; circle = 2019;
Source: EU-SILC cross sectional, 5 multiple imputations
Class-origin wealth gaps: relation with income rigidity

Notes: square = 2005; triangle = 2011; circle = 2019;
Source: EU-SILC cross sectional, 5 multiple imputations
Class-origin wealth gaps: relation with wealth rigidity

Notes: square = 2005; triangle = 2011; circle = 2019;
Source: EU-SILC cross sectional, 5 multiple imputations
Class-origin wealth gaps: bivariate across clusters

**TOP-MIDDLE GAP**
- Continental
- Nordic
- Southern
- Liberal
- Eastern

**TOP-BOTTOM GAP**
- Continental
- Nordic
- Southern
- Liberal
- Eastern

**EDUCATIONAL RIGIDITY**

**INCOME RIGIDITY**

**WEALTH RIGIDITY**
Summary of results

• Evidence of stratification of wealth attainment by class of origin
  • Top-middle gaps: close to 0 in Nordic and Liberal countries, larger in Southern and Eastern countries
  • Top-Bottom gaps: more similarity across countries
  • (not shown) Increase over time (2005-2019)

• Macro relation between wealth stratification and social rigidity
  • Education: positive, linear
  • Income: curvilinear (and flat for top-middle)
  • Wealth: strongly positive, linear
  ! Consistency within country clusters (and years, not shown)

• Associations with institutional characteristics were explored (in Appendix): strong role of LM and edu policies
Conclusion: back to Gatsby curves

Cross-country differences in class-origin wealth stratification is due to different dimensions of fluidity: education, income and wealth transfers

Do not worry only about Gatsby, worry also about Daisy!
THANK YOU FOR THE ATTENTION!

Summary of the project

TOPIC  Intergenerational inequalities in wealth attainment
DATA  EU-SILC 2005, 2011, 2019 Module on intergenerational inequalities
SAMPLE  Individuals aged 30-55 in all countries
  X  Parental class of origin using EsEC scheme
  Y  Property income (rank measure)
METHOD  Two-step two-level analysis

Limitations

- Cross-sectional data
- Proxy, self-built measure of wealth attainment
Main references


Institutions’ effects (I)
Institutions’ effects (II)

Institutions and Class-Origin gap

- Top-middle gap
- Top-bottom gap

Variables: Union density, Weeks in parental leave, Rep-rate unempl benefits, Loans to GDP, % tax wages, %GDP active policies, Minimum wage, %GDP passive policies, Union bargaining coverate, EPL open-ended contract, EPL fixed-term contract, Property tax

β Standardised institutional measure

Values range from -2 to 2.
Institutions scatter (I)
Institutions scatter (II)