

Bequest Division in Europe:  
The Roles of Parental Motives and Children's  
Gender Composition

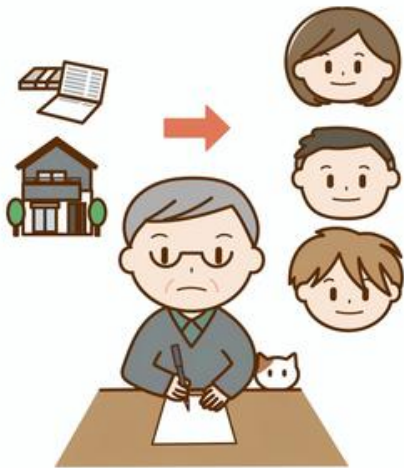
**Javier Olivera**

(National Bank of Belgium, LISER)

with Warn N. Lekfuangfu (Carlos III Madrid),  
Philippe Van Kerm (University of Luxembourg)

August 25-28, 2025

EEA Congress, Bordeaux



# Motivations

- ▶ Bequests tend to be divided equally between children, but they are still unequally distributed to some extent (e.g. 10.3% in our EU sample, 18.2% Germany, 8% Spain)
- ▶ Literature shows that **bequest motives** (exchange, altruism) drive unequal division due to relative **deservingness** among children
- ▶ Less is known about how **children's gender composition** interacts with these motives
- ▶ Interaction between gender norms and bequest motives may affect gender inequality (+/-)

# In this paper

- ▶ For a **deserving child** (caring; poorer; work hard), do parents give **more bequests to a daughter or a son**?
- ▶ Does **gender of other children** matter – as parents may re-balance initial inequality?
- ▶ We explore these questions with 2 approaches:
  1. **Actual** bequest decisions of deceased parents in SHARE (18 EU countries)
  2. **Hypothetical** bequest decisions with a vignette experiment (BE, DE, FR sample)

## Some literature

- ▶ Inheritance practices significantly influence wealth distribution across generations, impacting economic inequality and social mobility (Piketty 2011, Adermon et al. 2018, Black et al. 2020)
- ▶ Equal division of estates among descendants is a common practice (McGarry 1999, Light & McGarry 2004, Cox 2003). However, unequal bequests are not that rare (Francesconi et al. 2023)
- ▶ Bequest motives: exchange (care duties), altruism (economic situations), meritocratic (effort) (De Nardi et al. 2016, Barczyk & Kredler 2018, 2022, Alesina et al 2018, Lekfuangfu et al 2023)
- ▶ Perceptions of distributive justice principles may be gendered (Major 1993, Tisch and Gutfleisch 2023)
- ▶ Daughters provide more care for elderly parents (Bittman et al. 2003, Grigoryeva 2017)

# Key hypotheses on likelihood of unequal bequest

Let  $p(\cdot)$ : the probability of unequal bequest among children

## By bequest motive

- ▶ Exchange:  $p^{unequal-care} > p^{equal-care}$
- ▶ Altruism:  $p^{unequal-income} > p^{equal-income}$
- ▶ Meritocracy:  $p^{unequal-effort} > p^{equal-effort}$

## By gender composition

(without children's relative deservingness):

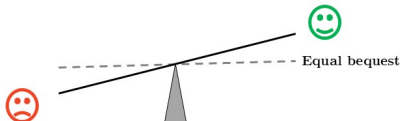
- ▶  $p^{mixed-sex} > p^{same-sex}$

# Gender and Perceived Relative Deservingness

Parent's bequest decisions can be moderated by the gender of the **deserving** child & of the **less-deserving** sibling, in 3 steps:

## I. Bequest Motive

Parents follow their bequest motive.  
Unequal bequest is due to unequal deservingness.



# Gender and Perceived Relative Deservingness

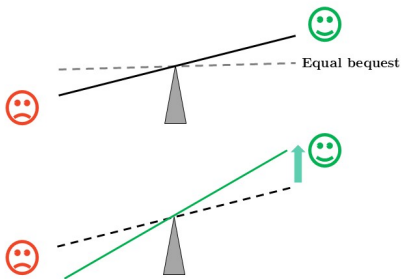
Parent's bequest decisions can be moderated by the gender of the **deserving** child & of the **less-deserving** sibling, in 3 steps:

## I. Bequest Motive

Parents follow their bequest motive.  
Unequal bequest is due to unequal deservingness.

## II. Gendered Deservingness

Parents who hold a gendered view may allocate extra bequest to **the deserving child** 😊, based on their gender

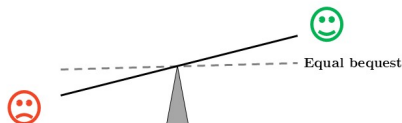


# Gender and Perceived Relative Deservingness

Parent's bequest decisions can be moderated by the gender of the **deserving** child & of the **less-deserving** sibling, in 3 steps:

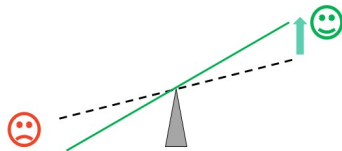
## I. Bequest Motive

Parents follow their bequest motive. Unequal bequest is due to unequal deservingness.



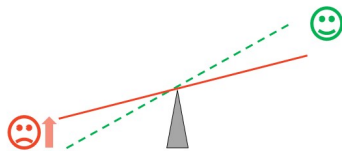
## II. Gendered Deservingness

Parents who hold a gendered view may allocate extra bequest to **the deserving child** 😊, based on their gender



## III. Gendered Compensation

Gender-biased parents may compensate **the less-deserving child** 😞, based on their gender. More compensation = less unequal bequest



# Hypotheses with gendered frameworks

	(1) Reinforce	(2) <b>Protective</b>	(3) Progressive	(4) Pro-Male
A:	Reward F*	<b>Reward F*</b>	Reward M*	Reward M*
i.	F* M > M* M	<b>F* M &gt; M* M</b>	F* M < M* M	F* M < M* M
ii.	F* M > M* F	<b>F* M &gt; M* F</b>	F* M < M* F	F* M < M* F
iii.	F* F > M* M	<b>F* F &gt; M* M</b>	F* F < M* M	F* F < M* M
iv.	F* F > M* F	<b>F* F &gt; M* F</b>	F* F < M* F	F* F < M* F
B:	Compensate M	<b>Compensate F</b>	Compensate F	Compensate M
v.	F* M < F* F	<b>F* M &gt; F* F</b>	F* M > F* F	F* M < F* F
vi.	M* M < M* F	<b>M* M &gt; M* F</b>	M* M > M* F	M* M < M* F

Notes:  $(.,.)$  is the probability of unequal bequest division for a given pair of sex-specific children;  $M^*$  and  $F^*$  denote deserving son or daughter;  $M$  and  $F$  denote less deserving brother or sister, respectively.

“Protective paternalism”:  $F^*M > F^*F > M^*M > M^*F$

## Empirical Designs

1. **Actual** bequest decisions of deceased parents in SHARE data (18 EU countries)
2. **Hypothetical** bequest decisions with a vignette experiment (BE, DE, FR sample)

# Approach (I): Actual bequests in SHARE data

## Survey of Ageing, Health, and Retirement in Europe (SHARE)

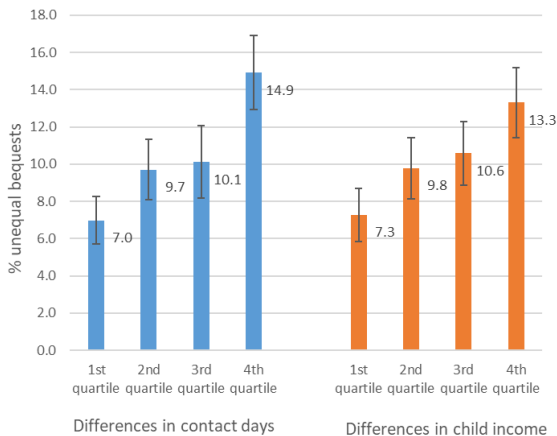
- ▶ End-of-Life module: on deceased participants, waves 2-9
- ▶ Sample: 3,539 individuals who left inheritance and had 2+ children, 18 countries
- ▶ Among those who left bequest:
  - ▶ “Whether total estate divided equally among the children?”  
(responded by a surviving member)
- ▶ Proxies for bequest motives:
  - ▶ Exchange motive: Difference in child's parental contact<sup>1</sup>
  - ▶ Altruistic motive: Difference in child's income<sup>2</sup>

---

<sup>1</sup>In the past 12 months, how often did you have contact with your child (...)?

<sup>2</sup>Income is imputed for each child based on regressions implemented on EU-SILC data for corresponding countries and years.

# SHARE: Unequal bequest, parent-child contact, children's income difference



*Notes:* The figure shows the prevalence (%) of unequal bequest splitting across the distribution of the differences in (i) child-parent contact days between siblings and (ii) child incomes between siblings, calculated as the ratio between their corresponding min & max values observed between siblings. The CI. shows 90% significance level.

# SHARE: Regression results (parent-level)

$$Unequal_k = \beta_0 + \beta_1 Samesex_k + \beta_2 Dcontact_k + \beta_3 Dincome_k + \epsilon_k$$

	(1)	(2)	(3)	(4)	Mixed-sex (5)	Same-sex (5)
Same sex	-0.028** (0.012)			-0.018 (0.012)		
Unequal contact		0.037*** (0.011)		0.035*** (0.011)	0.043*** (0.017)	0.023 (0.014)
Unequal income			0.052*** (0.014)	0.041*** (0.014)	0.050 (0.031)	0.049*** (0.019)
Observations	3539	3539	3539	3539	2389	1150
Adj R2	0.071	0.072	0.072	0.075	0.078	0.100
Both contact and income are unequal ( $\beta_2 + \beta_3$ )					0.093** (0.035)	0.072** (0.027)

Notes: Additional controls are gender, marital status, age, income, no. children, no. grandchildren, have a will.

## Sub-samples of deceased parents

	Dad (1)	Mum (2)	Have spouse (3)	No spouse (4)	Have a will (5)	No will (6)
Same sex	-0.015 (0.014)	-0.018 (0.018)	-0.040* (0.020)	-0.005 (0.014)	-0.015 (0.022)	-0.021 (0.014)
Unequal contact	0.03 (0.021)	0.042*** (0.009)	0.027 (0.018)	0.036** (0.014)	0.066*** (0.022)	0.020* (0.010)
Unequal income	0.015 (0.026)	0.060*** (0.022)	0 (0.026)	0.064*** (0.019)	0.107*** (0.026)	0.013 (0.013)
Obs	1611	1268	1321	2196	1004	2513
Adj-R2	0.082	0.081	0.077	0.082	0.105	0.047

## SHARE Results: Summary

- ▶ Parent's bequest decisions are strongly related to bequest motives (exchange & altruistic)
- ▶ Sons and daughters from different family types undertake care duties differently.
  - ▶ Daughters do more than sons
  - ▶ Son with a brother does more care duties than son with a sister
  - ▶ Suggestive conjecture that daughters may get higher bequests – based on the exchange motive
- ▶ Effect of bequest motives differ among each type of children's gender composition.
- ▶ Advantages: SHARE provides *actual* bequest decisions & gender of children
- ▶ Drawbacks: Division of bequest & exact recipients are unobserved; endogenous decisions

## Approach (II): Hypothetical bequests in a vignette survey

- ▶ Participants in Luxembourg's Household, Finance, and Consumption Survey 2018
- ▶ 2,035 cross-border workers: BE (654), DE (477), FR (904)
- ▶ **Spectator-style experiment**: how a parent would divide a bequest among two children
- ▶ Within-person: An elder father divides financial bequest along vignettes of **child's deservingness**
  - ▶ **Exchange**: More caring
  - ▶ **Altruism**: Economically worse-off
  - ▶ **Meritocracy**: Works harder
- ▶ Across-person randomisation of sex composition of children:  
F\*M, F\*F, M\*M, M\*F.

## Experimental Details

Q: What percentage of the bequest should Dad give to X and Y?  
Recall that both percentages should sum to 100.

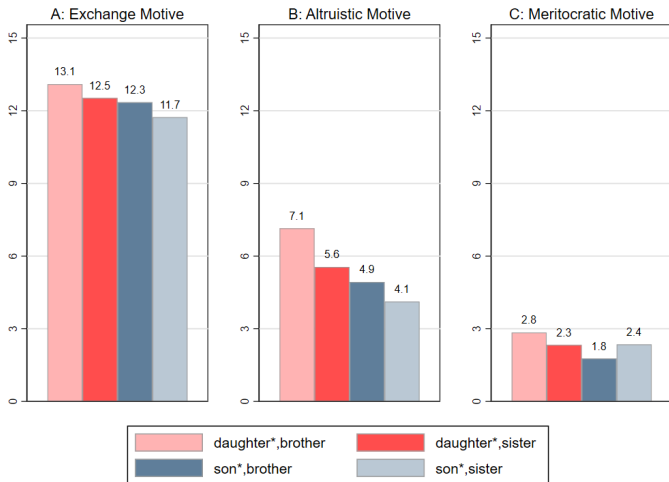
**Situation A.** X and Y have a pretty similar economic position. But X has taken more care of the father, spent much more time helping with some chores, taking him to the doctor, spending together many evenings and some holidays.

**Situation B.** Y has a very good economic position and can afford a very good standard of living. In contrast, X lives on a very tight budget, just enough to make ends meet.

**Situation C.** Both X & Y have received exactly the same opportunities from their family, the same quality of education and financial support during their childhood & youth. X has always worked very hard, made the most out of the opportunities received, and been successful in achieving a very good standard of life. In contrast, Y lives on a very tight budget due to having been irresponsible and wasted all the opportunities received.

# Bequest division: motive x gender composition

Outcome:  $BequestShare_{deserving} - BequestShare_{sibling}$



# Vignette: Estimation Results

$$DBequest_i^{vig} = \beta_0 + \beta_1 son_i + \beta_2 samesex_i + \beta_3 son_i samesex_i + \epsilon_i$$

	A. Exchange <i>Caring care</i> (1)	B. Altruistic <i>Poorer child</i> (2)	C. Meritocratic <i>High effort</i> (3)
Son=deserving	-1.700*** (0.456)	-3.321*** (0.259)	-0.533 (0.440)
Samesex	-1.215*** (0.289)	-2.333*** (0.392)	-0.338 (0.519)
Samesex x Son=deserving	1.825*** (0.465)	4.053*** (0.470)	-0.235 (0.593)
Male respondent	-0.093 (0.601)	1.608** (0.537)	-0.64 (0.359)
Constant	20.598* (9.899)	6.532 (6.176)	1.451 (12.029)
Observations	2035	2035	2035
Adj R-squared	0.071	0.018	0.006

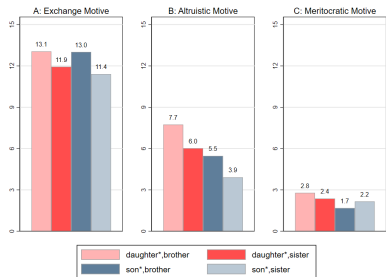
# Types of Parents: Testing the Hypotheses

Hypothesis: Under **protective paternalism**, unequal bequests are ranked as:  $F^*M > F^*F > M^*M > M^*F$

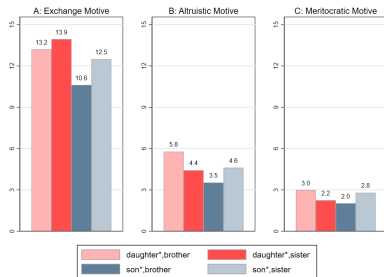
Hypotheses	Test	Motives		
		Exchange	Altruism	Merit
<b>Deserving: Tests if <math>F^* &gt; M^*</math></b>				
1. $F^*M > M^*M$	$0 > \beta_1 + \beta_2 + \beta_3$	-1.091** (0.411)	-1.600*** (0.287)	-1.106** (0.488)
2. $F^*M > M^*F$	$0 > \beta_1$	-1.700*** (0.456)	-3.321*** (0.259)	-0.533 (0.44)
3. $F^*F > M^*M$	$0 > \beta_1 + \beta_3$	0.124 (0.228)	0.73 (0.38)	-0.768* (0.412)
4. $F^*F > M^*F$	$0 > \beta_1 - \beta_2$	-0.486 (0.361)	-0.988** (0.357)	-0.194 (0.388)
<b>Compensating: Tests if <math>F &gt; M</math></b>				
5. $F^*M > F^*F$	$0 > \beta_2$	-1.215*** (0.289)	-2.333*** (0.392)	-0.338 (0.518)
6. $M^*M > M^*F$	$0 > -\beta_2 - \beta_3$	-0.610* (0.414)	-1.720*** (0.254)	0.574 (0.329)

Notes: One-sided strict inequality tests of estimated coefficients in the specification using the extra bequest share as the dependent variable.

# Between Male and Female Respondents

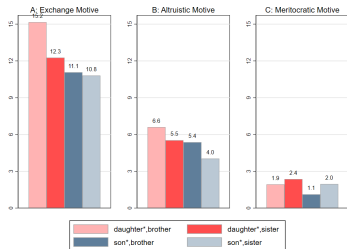


Male

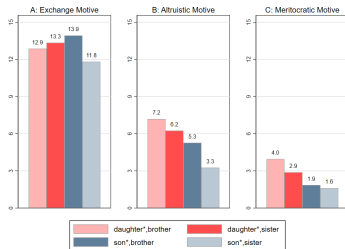


Female

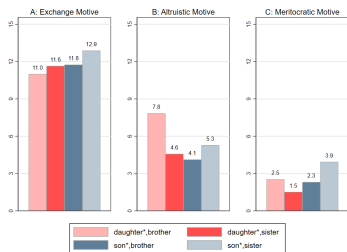
# Age Groups of Respondents



Under 40



40-50



Over 50

## Discussion & Conclusions

- ▶ Incidence of unequal bequests is not that rare.
- ▶ SHARE:
  - ▶ Likelihood of unequal bequests is driven by mixed-sex, unequal care (exchange), unequal income (altruism) among children
  - ▶ Exchange motive is stronger for mixed-sex families → gender norms in expectation of care duties?
- ▶ Vignette:
  - ▶ Exchange motive is the main driver, then altruism
  - ▶ No response to effort.
  - ▶ Protective paternalism: favour deserving daughter, yet compensate undeserving daughter.
- ▶ Bequest divisions reinforce traditional gender norms: daughter's care duties & less economic success.

Thank you!



*“As the executor for your mother’s estate, let me say that she loved each of you, but she also loved Las Vegas.”*

Javier Olivera  
[javier.olivera@nbb.be](mailto:javier.olivera@nbb.be)