The Effects of Student Aid - Evidence from Germany

DRAFT - Master's Thesis
in Economics (Science Track)

by

Fynn Lohre
(Student number h12232560)

Supervisor:	Univ. Prof. Dr. Martin Halla
Submission date:	31.07.2024

For the newest version check
https://github.com/VARFynn/University_Contributions/tree/main/01_Master/01_Masterthesis

GitHub

Abstract

LIPSUM

Acknowledgement

Contents

List of Tables

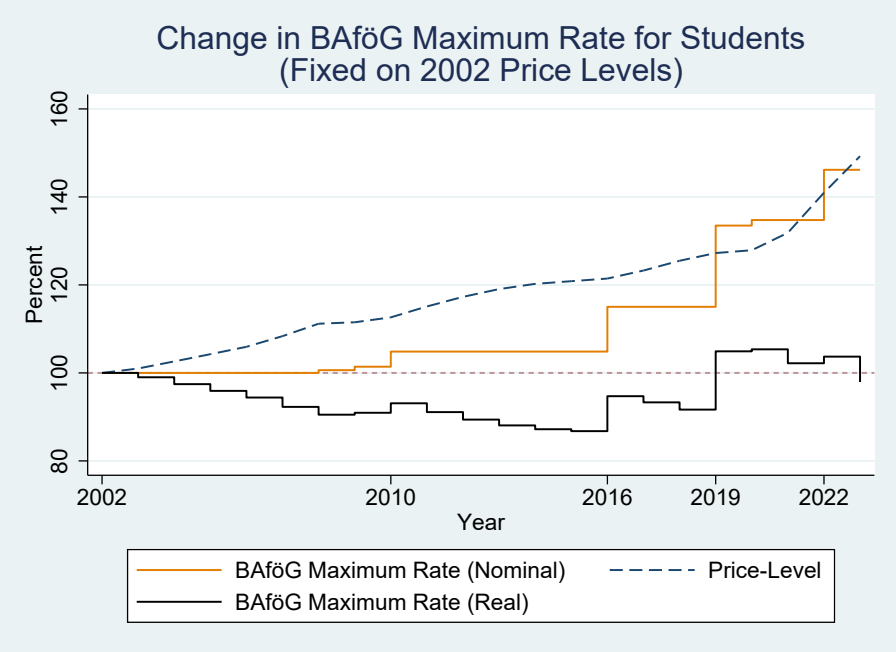
List of Figures

1 Introduction

2 Theoretical Framework

2.1 BAfoeG in Germany

- **Means-Based Testing**: Explaining the "Calculation Algorithm".
- **Algorithm Overview:** Brief explanation highlighting the essential parameters. (Create Table of Parameters in Appendix)
- **Parameter Modifications & Policy Reforms:** Real vs. nominal changes.



Change also holds for other parameters

2.2 The Student's Decisions

1. Decision to enter the state: Study vs. Work
2. Deicision to leave state: (i) Ability to finish program &

3 Data and Descriptive Statistics

- SOEP ⇒
- Data Cleaning
  - Starting with 2002, because prior too many "filler students". Year y $\in [2002, 2019]$ ⇒ pre Covid.
  - Imputations (e.g. Heckman correction for missing wages in specific waves) ⇒ Optimal Behavior e.g. "Steuerklassen"
  - Discussion: Left- & Right-censored students & Students without Parents in Sample

Table 1: Summary Statistics Students

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
Individual Characteristics:					
Age	14937	24.9105	6.4423	17	84
Male	14937	.4877	.4999	0	1
Migration Background	14937	.2225	.4159	0	1
First Gen	14937	.3852	.4867	0	1
BAfoeG Shares:					
Received Student Grants (actual)	14937	.2035	.4026	0	1
BAfoeG (simulated)	14937	.2956	.4563	0	1
Eligible	14937	.8296	.376	0	1

Note: This includes every individual who studied for at least one semester in the respective year. Consequently, individuals appearing in j study years influence the mean with a weighting of j/n. Student Grants include state funding (BAfoeG) as well as other forms of stipends. BAfoeG amounts are calculated under the assumption of optimal behavior and always assume an application is made if the amount is greater than zero. Therefore, these figures may be higher than the actual amounts received.

- BAfoeG Simulated vs. Actual
  - See for Share actual vs. simulated details per year
  - Discussion where difference might stem from
  - Discussion Approach

4 Empirical Framework

The Game-Plan:

1. Plain Cost Estimation
   (a) Estimate the costs of BAfoeG per Year ⇒ suppose an Income-Tax-Change to finance this costs ⇒ take ε from the Literature ⇒ End up with Monetary + Lapor Supply Costs
2. Benefit Side:
   (a) Decision to start study
      - General
      - Only Students which qualify for BAfoeG (Probit/OLS - LPM)
      - Share First Generation Students
   (b) Decision to end study

4.1 Costs

4.2 Benefits

5 Results

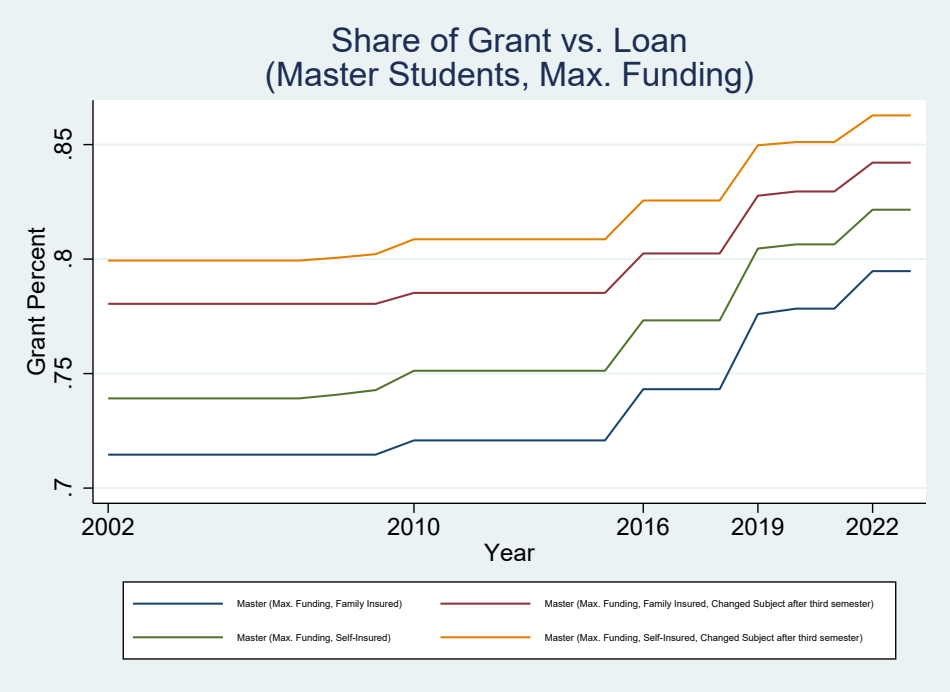
5.1 Costs

5.2 Benefits

6 Discussion and Limitations

Collection of Limitations

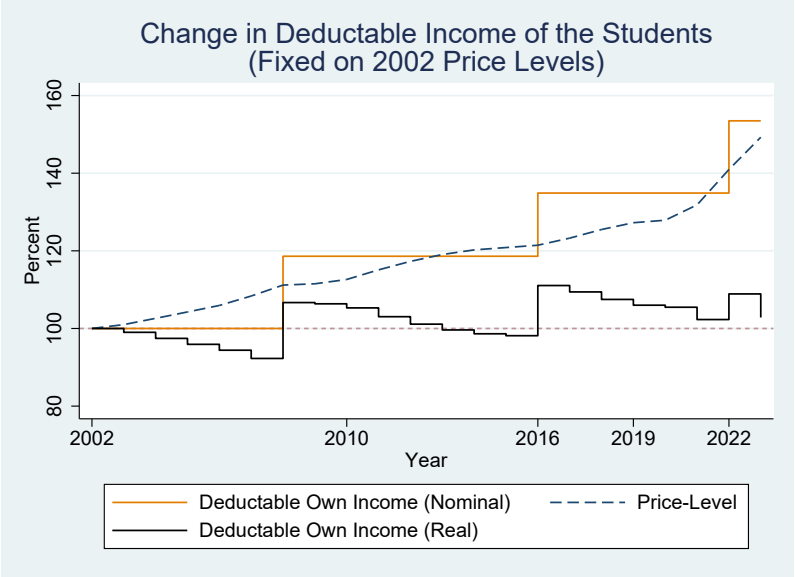
- The forgotten parameter: The "Pay-Back-Cap"

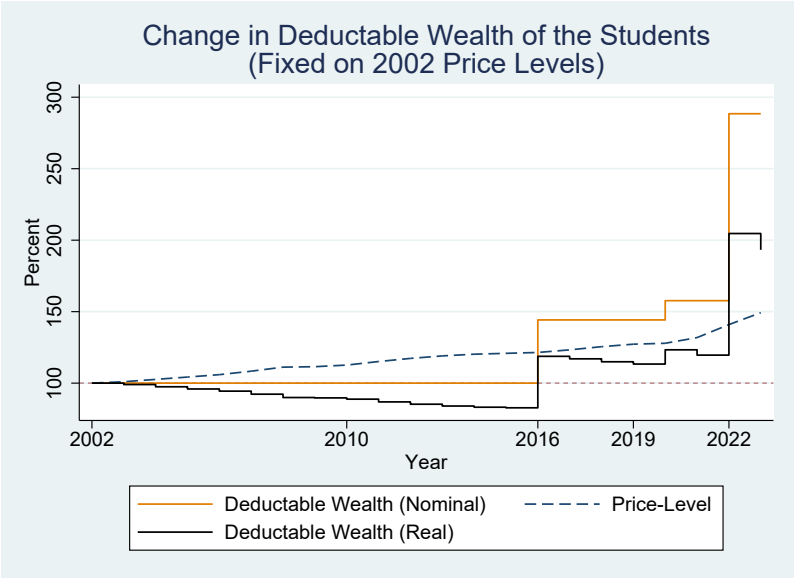


- Benefit Side cannot measure: (i) Skill (ii) Buraucrtcy costs & (iii) Effects of Uncertainty/Certainty on students
- Search & Matching in this thesis excluded.
- Causal Diagram to highlight the imposed orthogonality assumptions.

7 Summary and Concluding Remarks

A Further Figures





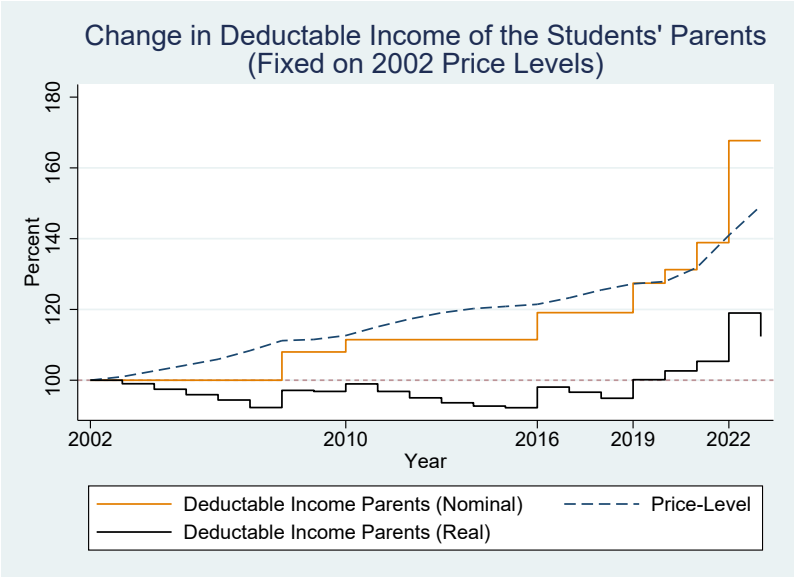

Change in Deductable Income of the Students' Parents
(Fixed on 2002 Price Levels)
Percent
100
120
140
160
180
2002
2010
2016
2019
2022
Year
Deductable Income Parents (Nominal)
Price-Level
Deductable Income Parents (Real)

Table 2: Share of BAfoeG Recipients per Year - Actual vs. Simulated

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
Received Student Grants (actual)	14937	.2035	.4026	0	1
- 2002	745	.1973	.3982	0	1
- 2003	743	.2234	.4168	0	1
- 2004	767	.2216	.4156	0	1
- 2005	735	.2054	.4043	0	1
- 2006	741	.2159	.4117	0	1
- 2007	713	.1907	.3932	0	1
- 2008	684	.2076	.4059	0	1
- 2009	699	.2217	.4157	0	1
- 2010	700	.23	.4211	0	1
- 2011	747	.241	.428	0	1
- 2012	752	.2394	.427	0	1
- 2013	825	.2509	.4338	0	1
- 2014	892	.2119	.4089	0	1
- 2015	945	.1926	.3945	0	1
- 2016	920	.1989	.3994	0	1
- 2017	1165	.1614	.368	0	1
- 2018	1123	.1576	.3645	0	1
- 2019	1041	.1585	.3654	0	1
BAfoeG (simulated)	14937	.2956	.4563	0	1
- 2002	745	.3141	.4645	0	1
- 2003	743	.3096	.4626	0	1
- 2004	767	.2529	.435	0	1
- 2005	735	.2177	.413	0	1
- 2006	741	.2362	.425	0	1
- 2007	713	.223	.4166	0	1
- 2008	684	.2412	.4281	0	1
- 2009	699	.2675	.443	0	1
- 2010	700	.3029	.4598	0	1
- 2011	747	.3025	.4597	0	1
- 2012	752	.3205	.467	0	1
- 2013	825	.3515	.4777	0	1
- 2014	892	.3419	.4746	0	1
- 2015	945	.3058	.461	0	1
- 2016	920	.3304	.4706	0	1
- 2017	1165	.3107	.463	0	1
- 2018	1123	.3072	.4615	0	1
- 2019	1041	.3237	.4681	0	1

Note: Student Grants include state funding (BAfoeG) as well as other forms of stipends. BAfoeG amounts are calculated under the assumption of optimal behavior and always assume an application is made if the amount is greater than zero. Therefore, these figures may be higher than the actual amounts received.