The Financial Situation of Students During the COVID-19 Pandemic

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Motivation

Impact of COVID-19 pandemic and policy protections on students' lives, in terms of their:

- mental and physical health (Aucejo et al., 2020; Rodríguez-Planas, 2020)

- study progress and learning outcomes (Aucejo et al., 2020; Belghith et al., 2020; Rodríguez-Planas, 2021)

- employment and their financial situation (Aristovnik et al., 2020; Aucejo et al., 2020; Belghith et al., 2020)

(Financial) Inequalities in higher education in Germany (although tuition-free-system)

- educational inequalities with regard to parental educational background (Hauschildt et al., 2021)

- no comprehensive financial support system; family funding and self-earned income account for the majority of student funding (Middendorff et al., 2017)

Impact of the changed financial situation

- may directly affect study progress and study success (Chen and DesJardins, 2010; Glocker, 2011)

- expectation: heterogeneous impact of the pandemic in terms of socio-economic background (Doolan et al., 2021; Farnell et al., 2021; Jaeger et al., 2021)

- ➤ widening of existing social inequalities

This Paper

Aims

➢ quantify the effects of the pandemic on the financial situation of students

➢ understand the implications on social inequalities

Contributions

- no central register data on employment and financial situation of students in Germany → primary data collection in June 2021 (LUH Student Survey 2021)

- compared to related surveys (e.g. Becker and Lörz, 2020), focus on different phases (of economic restrictions) of the pandemic

- identify students' (changing) adaptation strategies to income and employment shocks
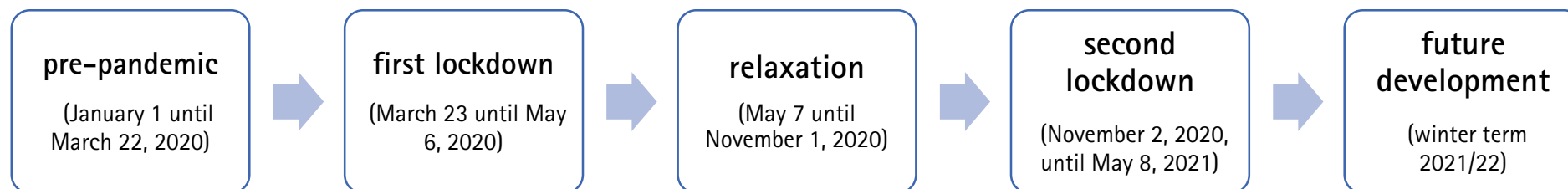
Data

Leibniz University Hannover (LUH) Student Survey (2021)

- conducted online in June 2021
- final sample: 612 complete responses of students (gross response rate: 11%)
- representativity: compared to LUH and the population in Germany, more women and master students

Information collected

- information on the financial situation (*income* and expenses), employment, and housing situation of students during different phases of the pandemic
- relevant socio-demographic (gender, age, nationality, education background, vocational training) and student characteristics (semester, field of study, targeted degree)

Phases of the Pandemic

| pre-pandemic (January 1 until March 22, 2020) | → | first lockdown (March 23 until May 6, 2020) | → | relaxation (May 7 until November 1, 2020) | → | second lockdown (November 2, 2020, until May 8, 2021) | → | future development (winter term 2021/22) |

Empirical Strategy

1) **Main Effects:** fixed effects panel regression model over the five phases

$$\ln(y_{it}) = \alpha + \beta Phase_t + \delta_i + \varepsilon_{it}$$

Separate model for the total income and each of the sources:

I.   allowances from parents

II.   job income

III.   loan financing

2)   **Socio-Economic Heterogeneity:** heterogeneity analyses by parental educational background

Students' average monthly income and funding composition (pre-pandemic)
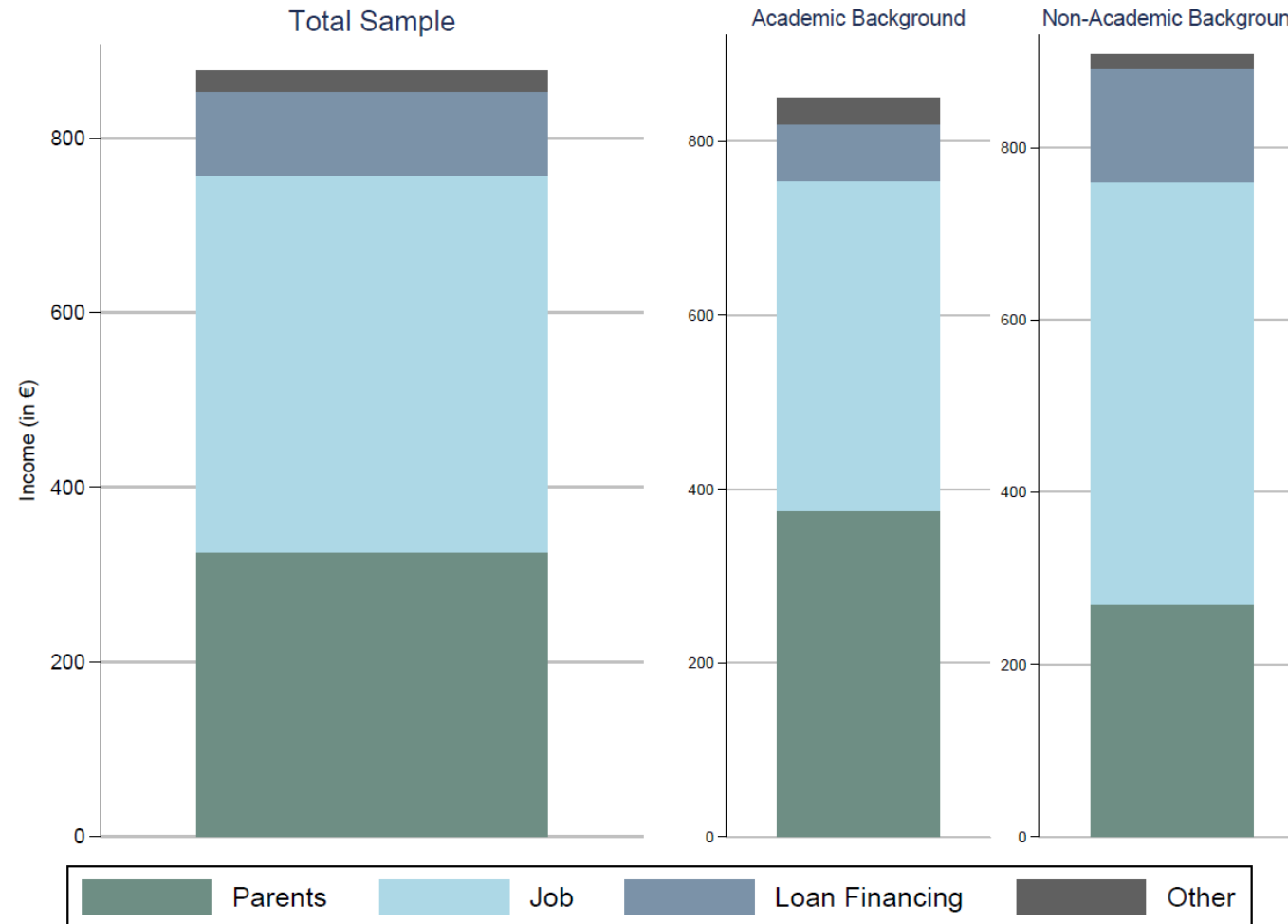
Notes: The left panel refers to the total sample (N=612), the right panel differentiates the total sample by parental educational background of the students into an academic (326) and a non-academic (286) background group. The academic background group includes students with at least one parent with a tertiary degree. Own calculations with data from Leibniz University Hannover student survey, 2021.

Income

Table 1: Change in total income by phase (percentage changes)

	Total Sample	By Parental Educational Background	
		Academic	Non- Academic
	(1)	(2)	(3)
	Income	Income	Income
Mean (in €) in Phase 1	877.17	850.10	908.02
Phase 2 (First Lockdown)	-18.94***	-16.89***	-21.26***
Phase 3 (Relaxation)	-3.54	0.40	-7.96
Phase 4 (Second Lockdown)	-1.88	-1.98	-1.69
Phase 5 (Expectation)	11.29***	14.22***	8.00
Observations	3,060	1,630	1,430
R^2	0.025	0.038	0.019

Notes: Shown are the β coefficients converted by $100*(e^{\beta} - 1)$ % and the γ coefficients converted by $100*(e^{\gamma} - 1)$ %. Coefficients given as percentage change in income. The unconverted coefficients and standard errors are given in Appendix. The constants α respectively ν are not shown. The coefficients refer to the mean value of income in phase 1 (pre-pandemic). Mean (in €): Mean income in phase 1. Own calculations with data from Leibniz University Hannover student survey, 2021. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Income Composition (by Educational Background)

Table 2: Change in the composition of students' funding by parental educational background (percentage changes)

	Academic Background			Non-Academic Background		
	(1) Parents	(2) Job	(3) Loan Financing	(4) Parents	(5) Job	(6) Loan Financing
Mean (in €)	375.56	379.12	64.98	269.62	490.24	132.06
Phase 2 (First Lockdown)	1.82	-62.43***	3.05	8.98	-68.93***	6.93
Phase 3 (Relaxation)	10.85	-17.88	17.00**	0.50	-28.89*	22.14**
Phase 4 (Second Lockdown)	19.24*	-22.89	21.90**	3.46	-44.68***	80.76***
Phase 5 (Expectation)	41.62***	49.93**	15.60	-0.70	11.74	53.88***
Observations	1,630	1,630	1,630	1,430	1,430	1,430
R^2	0.014	0.055	0.007	0.001	0.056	0.025

Notes: Shown are the γ coefficients converted by $100*(e^{\gamma} - 1)$ %. Coefficients given as percentage change in income. The unconverted coefficients and standard errors are given in Appendix. The constant v is not shown. The coefficients refer to the mean value of income in phase 1 (pre-pandemic). Mean (in €): Income in phase 1. Own calculations with data from Leibniz University Hannover student survey, 2021. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Potential Impact on Studies

Table 3: Intention to drop out of or extend studies due to financial concerns (percent)

	Total Sample	
	(1)	(2)
	Drop Out	Extend
Phase 2 (First Lockdown)	0.03***	0.17***
	(0.01)	(0.01)
Phase 3 (Relaxation)	0.03***	0.08***
	(0.01)	(0.01)
Phase 4 (Second Lockdown)	0.12***	0.26***
	(0.01)	(0.02)
Observations	2,612	2,612
R^2	0.061	0.098

Notes: Coefficients given as change in intention to drop out of or extend studies due to financial concerns. Reference is phase 1 (pre-pandemic). Robust standard errors (clustered by individuals) in parentheses. We used a different sample for the analysis of compensation effects. Here, we consider all students with complete answers from the questionnaire regarding the relevant questions. Own calculations with data from Leibniz University Hannover student survey, 2021. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Conclusions

Key findings

- **Impact on students' financial situation**

    - strong decline in students' job income during the first lockdown

    - students from non-academic backgrounds suffered particularly

    - students with an academic educational background compensated by higher parental support, students from non-academic backgrounds by higher loan financing

    - ➢ widening of existing financial inequalities

- **Potential impact on studies**

    - increasing intentions to drop out or to extend studies due to financial concerns, as the pandemic progresses

- ➢ expectation: higher loan financing, higher expected expenses and extension of studies worsen the financial situation of (affected) students in the future

THANK YOU FOR YOUR ATTENTION!
QUESTIONS AND COMMENTS?