

## **2020, Economics, Christ's College**

As a Hungarian who lived for extended periods of time in Germany and the UK, it struck me that my mother and father can each earn more in Western Europe than their combined salaries in Hungary. Why is it that while the price level of consumer goods is roughly the same throughout Europe, living standards differ so significantly? Searching for answers to such questions led me to economics. I want to study economics to combine my interest in social sciences, business and mathematics in one distinct field of study that allows for both theoretical approaches and pragmatic applications.

Although economics is not part of my high school curriculum, I started acquiring the skills necessary for studying it at a leading UK university early on. Attending the special mathematics class at one of Hungary's top high schools, I developed an aptitude for numerical reasoning and logic. In 2018, I finished 10th in a nationwide mathematics competition and in 2019 won a special prize at the International Hungarian Mathematics Competition. I spent my Year 10 at Chesterton Community College in Cambridge, where I competed in the Intermediate Mathematical Olympiad. Based on my result, the UK Mathematics Trust invited me to a summer school in Leeds, where we explored topics in algebra and geometry. I also had the opportunity to delve into financial mathematics, including derivative pricing, at a science camp organised by ELTE University in Budapest. In Year 11, I enrolled at Milestone Institute, which prepares talented students for universities abroad. There, I took courses in Welfare Economics, Game Theory, and Mathematics for Economics based, among others, on Varian's and Mankiw's works and chapters from the CORE Economics textbook. In Game Theory, I learnt about games with transferable utility and possible solutions to them, such as the Shapley value.

My newly acquired knowledge enabled me to gain insight into the role of mathematics in social sciences in general and in economics in particular. The opportunity to apply mathematics to social issues motivated me to join a research project at the Hungarian Academy of Sciences that deals with the interrelated dynamics of social networks, cooperation and competition in various social contexts. The aim of the project, which builds on Evolutionary Game Theory by Nowak and Ohtsuki, is to establish the effect of dishonest communication on cooperation in the indirect reciprocity model. Jointly writing an article with an experienced scholar gave me an insight into academia and an opportunity to utilise my knowledge of modelling, game theory and graph theory. At Milestone, I also conducted an independent research project about microfinance. Based on Poor Economics by Banerjee and Duflo and Portfolios of the Poor by Collins et al., I argued that microfinance does not alleviate poverty but benefits the underprivileged by consumption smoothing – that is, by contributing to predictability and stability of income. To gain further practical experience, I joined the internship programme of the Corruption Research Centre Budapest where I examined openly accessible data on public procurement in different countries. At CRCB, I have also gained new knowledge about corruption risks and price distortion in Hungary.

In my free time, I have developed my debating skills as an active member of the Model United Nations club at my school. In 2018, I represented my high school at the MUN2 conference in Berlin. Outside of school, I enjoy rowing and recently won 3rd place in the Junior National Championships of Hungary.

While living in Germany and the UK, I realised the significance of excellent research facilities and a top-quality education. By studying at a British university, I hope to join a thriving international community and an intellectually challenging, inspiring, and supportive environment that will enable me to become a well-trained economist who can effectively contribute to theoretical issues as well as to society.