

Economics, Pembroke College, 2016

For me economics is a subtly adaptive and constantly changing system that surrounds us everywhere, but remains an elusive enigma until we learn how to decipher its code. Every model we develop, every relation we discover or idea we form adds a new digit that brings us closer to cracking it. I want to study economics in order to unravel the nature of connections that bind together individuals, companies and countries around the globe.

I came to economics by way of maths, since I was always interested in translating complex systems into a clear framework and applying this method to real world phenomena. Beyond specializing in maths at school, I took various courses at the Milestone Institute, a talent programme which prepares students for studying abroad. A microeconomics seminar based on Varian's textbook and additional excerpts I read from Samuelson and Nordhaus got me interested in the invisible hand principle, the free rider problem and the tragedy of the commons, as they facilitate a deeper understanding of everyday issues. Investigating free riding via the example of a donations-based public park, I analyzed Cobb-Douglas preference curves as well as marginal costs and benefits to calculate the level of government intervention needed to solve the public good paradox. Later, through Resnik's 'Choices' I discovered game theory, which became my favourite field. Intrigued by its applications in economics I wrote a paper on how the prisoner's dilemma affects the competition between Coke and Pepsi using Brousseau's *New Institutional Economics: A Guidebook*. Although there is a powerful incentive for both companies to cut prices to beat their competitor, the game changes once it repeats and trust and cooperation enter the equation. My analysis thus showed that the invisible hand principle and game theory seem to contradict each other in this instance, as the dominant strategy leads to a suboptimal outcome for consumers. To deepen my knowledge in this field, I volunteered at the 25th International Subjective Probability, Utility and Decision Making Conference at Corvinus University, attending lectures on consumer choice and financial decision making. Moreover, during a macroeconomics course, we had heated debates about the Fed's monetary policy and studied the structural imbalances between the US and China. Currently, I am taking a course based on Church and Ware's *Industrial Organization* where we discuss firms' interactions in imperfectly competitive markets characterised by cartel formation, predatory pricing and the impact of government policies on competition. A separate calculus course proved useful for solving economics tasks such as profit maximization problems, and for analyzing aggregate demand functions and surpluses.

Last spring, I reached 3rd place with my team at the National Case Study Tournament where we had to present a financial plan for the Hungarian National Railways. During an internship at Generali Asset Management this summer I studied how economic events affect stock market prices, helped calculate optimal fund distribution of unit-linked portfolios and practiced my English while translating contracts. As the Event Manager of a debating society I led our team to this year's Argo Open Tournament in Romania, where we confronted the pros and cons of the peer-to-peer economy. Being part of a Finance Club introduced me to the basics of investments through mock

trading, while in school I am active on the Student Council. In my free time, I have been horseback riding for 10 years, which taught me focus and perseverance. I am keen on learning languages, reaching B2 level in German at age 14 and currently studying French alongside higher-level English.

Studying in the UK attracts me because of the combination of personal tutoring and independent study. Through economics I aim to apply my mathematical knowledge to solve real-life problems, to put together the pieces and get a step closer to cracking the code.