

Statement of Academic Purpose

As a first-generation college student born and raised in a small town of a developing country, but having the capital to get educated in the U.S., I fully acknowledge my privilege while constantly aware of my sin and responsibility. Being placed between majority and minority as a beneficiary of inequality also gives me a unique and sober perspective on society, making me naturally interested in social science, and establishing my ultimate goal of solving poverty and inequality. Then the question is: How? At Principles of Microeconomics, I met the concept - Pareto Optimal. The answer then becomes romantic and crazy: becoming a researcher focused on the intersection of finance, technology, and development, especially on topics of financial inclusion and economic growth, trying to move the world one step closer to a better place through mechanism design and public policy analysis.

While pursuing a Ph.D. degree in Economics or Finance can help me obtain such a skillset and achieve my long-term goal, I understand there are still some steps away from being admitted to the best Ph.D. programs. Therefore, I choose the IDE program at Yale University, which perfectly matches my research interests with its first-class education and research in development economics, as well as chances to get involved in Yale Economic Growth Center, which will be the best way to make this leap.

Though I have confidence in my academic talent, there is a gap between my undergraduate institution and the best colleges in terms of academic recognition and competitiveness. So, with its renowned faculty, flexible courses, and research opportunities over one year, this program will better reflect my academic ability and convince the admissions committee that I can compete at

the highest level. Especially, I wish to complement the lack of econometrics and mathematics methods training from this platform. When I was a freshman, I was not too fond of mathematics used in economics classes. However, while taking Ph.D.-level microeconomics sequence, I was amazed by Arrow and Debreu's brilliant proof of general equilibrium using the fixed-point theorem and realized that mathematics is particularly well suited as a tool of abstract thinking to reveal the essential relationships from complex economic phenomena.

In another dimension, this program can help me explore my potential for economic research. After deciding on the goal of applying for Ph.D. programs, I have tried to increase my exposure to research as much as possible in the choice set available to me, with the cost of giving up some internship opportunities in famous companies for this reason. Those experience as an RA for several professors at different institutions has been very enlightening in deepening my understanding of how to conduct research from scratch and helped me master many techniques commonly used in economics research, such as running machine learning models, data management, and data analysis with Stata, data visualization with Tableau, among others. However, I am still aware that my current exposure is not sufficient to prove my potential fully. This program's close relationship with the Tobin Center of Economic Policy and Economic Growth Center gives me more chances to do research in my interested areas. For example, I am highly interested in the research areas of Prof. Michael Peters and Prof. Fabrizio Zilibotti.

Supported by UMN, I started my independent research project about financial development and economic growth, and empirically proved the positive relationship between financial cycles and economic growth, the dampening effect of financial volatility on economic growth. I also

demonstrated a nonlinear U-shaped relationship between financial development and economic growth. This research problem has a severe reverse causality, which is addressed by applying System GMM, a method that generally exceeds undergraduate studies. I also encountered difficulties in choosing indicators to measure financial development, especially since I wanted to study the heterogeneity between financial trends and volatility, which had no direct method that I could learn from previous literature. Through brainstorming, discussions, and modeling with Prof. Thakor, we finally settled on using gross domestic private credit / GDP to represent financial development and using HP filter to decompose trends and volatility, thus avoiding endogeneity. As commented by my supervisor Prof. Thakor, it's more than satisfying the highest graduation requirement. But as a researcher, I think there is still a lot to be done. Therefore, I would very much hope to have the opportunity to collaborate with experts of economic growth at Yale, to carry out and polish my current research plan and ongoing projects. The research guidance provided by this program can bring me closer to the frontier of economics research, which allows me to further prove my research potential.

The experience of research assistantship and independent research has reinforced my initial choice of this path. Most people do not want to spend their lives doing research, nor does the old me. Nevertheless, what drove me to realize that this might be my most significant way of creating value and systematically solving inequality and poverty issues. It is also rewarding for me to produce some original results and to have done something that no one has done before.

In addition to academic training and mentors, I also learned that Yale has an excellent Ph.D. program, and if possible, I would like to continue my studies at Yale after the master's program

since my research interests are very similar to Yale's strengths. It is also a very classical springboard to top Ph.D. programs through past placements, so by induction, I would be able to gain access to a prestigious network of people with similar goals, which generate positive externality in achieving my goal, with the possibility of becoming collaborators on academic research in the future. Because I have such a detailed and practical plan to take advantage of this program and my suitability for the program, I am therefore committed to joining this challenging and renowned program and becoming a volume-adding member of this dynamic and diverse academic community.