How I write economics research papers[1]

Hi, thank you for having me. My name is Sungmin, and I'm an assistant professor here at the NTU Department of Economics. I work on microeconomic theory, particularly behavioral game theory and economics of information.

Today, I want to share how I write economics research papers. If I become your advisor, this is how I will suggest you write your papers. I follow three steps: (1) choose a question I genuinely care about, (2) find the best method to answer it, and (3) produce a minimal viable draft as quickly as possible.

Let me start with the first step: I choose a question I genuinely care about.

Sometimes, it comes from personal experience. Sometimes, it's from books, news outlets, or other mass media. Sometimes it's an intellectual question I've been curious about for a long time. Often, it's a combination of all three.

One example is my paper about the role of investment banks. I started attending college in the United States in the Fall of 2008. Does anyone know what happened later that year? A global financial crisis. It started with the meltdown of Lehman Brothers, a prominent US investment bank at the time. I was a first-year college student sitting in the school cafeteria, looking at the front page of the New York Times, thinking, "Man, the economy is going down!" It was actually quite amusing at first and didn't affect me personally until—*boom,* my home country's currency was quickly losing value against the US dollar. My parents were paying way more than before for my tuition. That was the moment I thought, "Okay, I cannot continue studying here, I'm going to go home, start my mandatory military service in my home country right away, so that by the time I come back, the economy will hopefully have recovered." So you see, that definitely affected me personally.

Later, I noticed that people speak of the "greed" of investment banks as the cause of the financial crisis. That seemed like a strange explanation, because well, everyone is self-interested, right? I also saw movies like "Wall Street" and "The Wolf of Wall Street." I devoured books about investment bankers—many of them were highly entertaining, but also too simple: they caricatured bankers as smooth-talking salesmen.

As I read the academic literature on investment banks, I learned that investment bankers were modeled, roughly speaking, as reputable experts—giving honest and valuable advice—which was the opposite of the common narrative told by mass media! And that was when I realized I had a serious intellectual question at hand with the potential to contribute to the literature. By the time I started my economics PhD program, I had been thinking about the question for several years, and I knew I wanted to answer it.

Here is the second step: I look for the best method to answer the question.

The best method for answering a question could be purely theoretical, using mathematical tools of economic modeling, or purely empirical, using data to estimate the parameters of interest. It's usually somewhere on the spectrum between the two: an optimal mix for the question at hand.

From the outset, I knew that my question about investment banks was neither purely theoretical nor purely empirical. It was an observed phenomenon, so there's definitely some empirical component to it, but the available data were anecdotal at best. So the method had to be primarily theoretical. And that was okay. Careful empirical work shows whether a story is *probably* true, but careful theoretical work shows whether a story is *possibly* true. The gap in the literature was that we haven't even established whether a self-serving investment bank—without expertise or reputation—could possibly communicate valuable information in the first place. So I needed a theoretical model.

It wasn't until my second-year theory field courses during my PhD that I found the right method. From Dr. Yaron Azrieli who later became my advisor, I learned two modeling tools: rational inattention and cheap talk. Rational inattention models agents that optimally acquire information subject to costs, while cheap talk models communication that is costless, non-binding, and non-verifiable. Not long after reading these papers, I was lying in bed after a shower, pondering again about investment banks—as I frequently did for a long time—when it suddenly occurred to me that I could model bankers as rationally inattentive agents who communicate with buyers through cheap talk, yet still make it work well enough to get deals done and earn high fees. That's when I realized I had found the right approach to my question.

There's one broader lesson here that, to recognize the right method, I needed some above-superficial-level understanding of different approaches in economics. Of course, I didn't master everything, but I had enough familiarity across different subfields from reading broadly during my PhD coursework.

Lastly, here is the third step: I write a minimal viable draft as quickly as possible.

I call it an MVP—a Minimum Viable Paper. The original terminology is Minimum Viable *Product* from Silicon Valley startup culture, where people say that, in order to make a great product, you need to start with the simplest finished product, a prototype that you can actually start selling and get immediate feedback from users.

So here's a definition of MVP adapted for economists: "A Minimum Viable Paper is a complete draft with just enough content to be readable and discussable." "Complete draft" means it includes all the parts: a title, an abstract, an introduction, body sections, and a conclusion. "Just enough content" means a clear question, a method, a main result, and a contribution. "Readable and discussable" means concise, grammatically immaculate, top-down style writing with clear topic sentences.

All of that might sound like a lot, but it's not complicated in practice. Working to finish an MVP gives me a clear early milestone, and forces me to think about every part of the paper early on. I basically write in the order of what appears on the paper. Writing the title forces me to think about the main question and gives me a roadmap for writing the abstract. Writing the abstract forces me to organize the question, method, and results as concisely as possible and gives me a roadmap for writing the introduction. Writing the introduction forces me to think carefully about everything, especially the motivation and contribution, and gives me the roadmap for the entire paper.

More importantly, writing an MVP makes the paper shareable. Once I have an MVP, I can proudly upload it on the internet, ask colleagues to take a look, give talks at brown bag seminars, start submitting it to conferences, and even share it with the authors of closely related papers. Because the draft is done—the simplest complete product from start to finish—people can focus on the substance rather than being distracted by the presentation. I often get a lot of crucial suggestions precisely at this stage: different assumptions, more results, extensions, or even a different focus. With an MVP, I am more open to this kind of major feedback and can revise the paper more flexibly. So here's what an MVP does: it creates this virtuous cycle of early feedback, early adaptation, and a better paper.

All in all, these three steps—(1) finding a question I care about, (2) finding the best method, and (3) writing the MVP as quickly as possible—are how I write papers. Thank you.