

# Portrait of Sandrine Lunven

CEO of TAC Economics

By Léa Dispa



## Can you describe your career trajectory since your time at AMSE?

I joined TAC Economics in 2007, shortly after completing a Master's degree in Economic and Financial Engineering at the University of Rennes. TAC Economics is a company specializing in applied research on country risk, serving corporations, banks, and asset managers that need international risk analysis. I was hired as a Quantitative Economist, responsible for developing econometric and machine-learning models applied to macroeconomic analysis.

In 2010, I decided to go part-time and start a PhD, a project I had been considering for several years. I wanted to conduct an academic research project focused on a single topic over three or four years. I joined AMSE, under the supervision of Eric Girardin. In 2015, I defended my thesis, entitled "Determinants and Transmission of Monetary Policy in China."

I chose to work on China because its economic model differs significantly from those of Western economies, and its complex monetary policy remains relatively understudied in France. My research focused on deciphering the mechanisms of Chinese monetary policy by building monitoring indicators based on the analysis of official speeches.

From 2011 onward, alongside my PhD, I further developed business-cycle analysis models at

TAC, in a context shaped by the 2008 financial crisis. Our clients were expressing a new need: to monitor not only emerging economies, but also developed economies, which had themselves become sources of risk. This required quantitative research and the development of economic models covering both country risk and global economic risks. I subsequently became Head of Developed Economies.

From 2018, I supervised strategic analysis and data-science projects for clients seeking to internalize their own analytical tools. In 2023, I was appointed Chief Executive Officer of TAC Economics, leading a team of 12 people based in Rennes.

### **What are you working on currently?**

At TAC Economics, our activities cover several areas: country-risk monitoring, geopolitical risk analysis, cyclical analysis, and the production of quantitative analyses, publications, and presentations. My PhD equipped me to handle both fundamental and quantitative economics, which means I can contribute to model development and also explain the results clearly to our clients. These fall mainly into three types: strategy departments, risk management departments, and finance departments of large organizations with strong international exposure.

TAC has long been convinced of the value of artificial intelligence for country-risk analysis. We have been using AI-based methods for over 35 years, even before the term “AI” became common. These tools allow us to develop rating-based models that identify economic, financial, and political risks, as well as early warning signals of crises. When it comes to detecting financial crises, for example, we are dealing with complex, non-linear dynamics involving numerous macroeconomic factors—an area where AI tools are particularly effective.

That said, AI alone is not sufficient. Results must always be interpreted. Our goal is not only to shed light on what may happen, but also to explain why. This requires a combination of skills in fundamental econometrics and AI—being comfortable with data processing and analysis, while also relying on theoretical frameworks to make sense of the results.

### **How do you feel about your time at AMSE ?**

I completed my PhD remotely, traveling once a month to work with Éric Girardin for one or two days. Those exchanges were invaluable. What I take away from AMSE is its scientific excellence, as well as the quality of the discussions with researchers. Doing a PhD certainly allows you to deepen your knowledge and strengthen your expertise. But I see it, above all, as a human experience. It is an opportunity to meet excellent researchers, to take the time to attend conferences, present your work, listen to others’ research—and ultimately to build intellectually enriching relationships.

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