



Economics 6.0 for Bankers



Andrina Niederberger

Andrina Niederberger, Alumna of MiQEF 2016 and Treasury Asset Liability Manager at Credit Suisse, applies economics to banking. She tells the secrets of her price winning 6.0 Master thesis and explains why MiQEF was such a good idea.

In your Master thesis, graded 6.0 and rewarded with the best thesis price of all HSG economics institutes, you applied machine learning to analyze labor markets. Can you explain the key ideas and insights of your thesis?

My Master thesis asked how individuals might (re)act to public sector policies (or more generally to any kind of external forces). Going beyond studies of mean effects allows economists to deepen their understanding of complex economic relationships and therefore improve their (policy) advice. I found that the effects of active labor market policies (ALMP) show strong heterogeneity amongst a large set of characteristics such as education and treatment background, income and personal factors like religious affiliation and life satisfaction.

What is the purpose of using machine learning to analyze big data? How can economists gain from this method?

Machine learning is a tool that is able to cope with vast amount of data and thereby allows us to gain deeper insights and develop tailor-made strategies, be it in the area of user-specific marketing or - as in my thesis - personalized job search advice. While today many machine learning applications focus on problems of prediction, I see it having great potential for studies of causality. The benefits for economists depend on their willingness and ability to link it to well-founded economic theories and to combine it with already established econometric techniques (e.g. propensity score based data transformations).

How did you get your job at Credit Suisse? What exactly is a treasury asset liability manager doing? What are your current responsibilities?

I first started as an intern in the Economic Research department. During my Master studies, also due to the good reputation of the economics programs at HSG, I got the opportunity to transfer internally to the Treasury department, where I first worked as a



“Student on Call” before accepting a full-time position after graduation. The Treasury department is responsible for the bank’s funding and internal pricing. It manages all balance sheet risks (e.g. Liquidity, FX, Interest Rate, Capital) and ensures compliance with regulations. Asset and liability managers are responsible for the bank’s Interest Rate positioning and risk management, focusing mainly on banking book products (loans & deposits), short and long term debt as well as on non-interest bearing asset and liabilities (e.g. equity).

In hindsight, what was most useful and what did you miss in MiQEF? What would you have done differently in your studies?

I experienced MiQEF as a comprehensive, challenging and very interesting program. In my opinion the most intriguing about MiQEF is its unique combination of (i) allowing students to obtain a deep understanding of economic and financial theories and providing them with the tools required to approach any complex problem and (ii) preparing them to handle stressful situations and coping with competing priorities. Personally, I have experienced two main advantages of being a MiQEF graduate. Firstly, the program is well recognized among attractive public and private sector employers and hence gave me the opportunity to choose between many interesting career paths. Secondly, it gave me the required skill- and mind-set to succeed in a challenging and interesting work environment. I really did not miss anything in MiQEF, but if I could choose again, I would probably take advantage of the new integrated master and Ph.D. program (MPEF).

Don’t you miss university life? What are your plans for the future?

I would be lying if I said that I never miss university life and the flexibility it offers. Currently, I am however very much enjoying the new challenge at Credit Suisse, which allows me to gain a deep understanding of economics in banking and the wider financial system. I do not plan far ahead, but I am always looking out for interesting opportunities and I believe I can find them in many places, be it within a further Treasury career, as part of a Ph. D program or in a public sector assignment.