

Macro Financial Engineering

On August 21, 2014, CFAA hosted Professor Ye Yonggang from Wuhan University for a speech on macro financial engineering and its practice in China. Vice President of CFAA Hong Cheng made the opening statement introducing the speaker and his team.



Immediately after the introduction, Professor Ye started by characterizing himself as a farmer, a teacher, and a writer and in that order. Born and raised in the rural area of Hubei Province, Professor Ye has a lot of knowledge and keen interest in the field of agriculture. He is deeply passionate about helping the rural China join the rapidly growing Chinese economy and improve their living standards.

Professor Ye explained his special relationship with the US academic community, especially in the field of Financial Engineering. This is his sixth visit to the US. He spent considerable amount of time studying financial engineering theories and practices from lead faculties in the US. He also played instrumental role in developing the teaching and research institutes specialized in financial engineering in Chinese higher education system. Professor Ye compared Wuhan, the capital city of Hubei Province with Chicago and explained Wuhan's desire to build the city as the "Chicago of China" in the future.



Professor Ye continued to speak about Macro Financial Engineering as a concept that bridges microeconomic practices and macro, or governmental economic management, i.e. how to run local or regional economies in the same manner as a for-profit corporation. He explained the three pillars of macro financial engineering with one being macro balance sheet, which gives an overall snapshot for a local economy. It can be used as a risk management tool to control over-leverage for the economy as a whole.

Establishing key sectors of a local economy is the second pillar according to Professor Ye. Such sectors act like locomotives that can lead and jumpstart other upstream or downstream sectors. He considered capital market activities such as share issuance, commodity price hedging, leverage finance, as well as governmental assistance to be essential in the early stage of developing such sectors. Professor Ye gave a vivid example of consulting for a rural town on how to utilize their date resources to develop a whole chain of manufacturing capabilities. Another example he gave was on how to utilize financial engineering principals to develop sustainable wind-power driven animal husbandry practices on the inner-Mongolia prairie.

The third pillar Professor Ye considered was the regional financial engineering. He and his team personally conducted various successful projects in the poorest rural areas in Hubei province. He helped the local entrepreneurs obtain the initial debt financing from local banks using the equity shares as collateral. He also discussed his experience in helping a local county in Guangxi Autonomous Zone build a whole chain of sugarcane-related industries by first addressing the irrigation issue using financial leverage and equipment leasing.

Professor Ye concluded his remarks by stating that a vigorous financial system would be the source of the next round of prosperity for the Chinese economy. He also encouraged the event participants on working with him in both academic and practical topics in the future.