Academic Finance: Relevant or Redundant

Tushar Sharma Vivek Srivastava

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Financial Engineering, IFMR

"The roots of education are bitter, but the fruit is sweet"

\- **Aristotle**

Introduction:

Academic Finance shares a close but complicated relationship with the real world. The term "Academic Finance" is bandied about very loosely and often maligned as too theoretical and distant from the real world. Before discussing the relevance of academic finance and whether it is redundant or not, we would be better off by discussing what exactly comes under the proximities of academic finance and understanding the nature of relationship between Academic Finance and the "Real World" finance.

How Streamlined Is Our Academia with industry?

It is of considerable importance to discern the relevance and applicability of financial theory in financial institutions. The foundation of Academic Research is based on research, ethics and conceptual understanding. It speaks the language of pure logic cold and has difficulty in comprehending the vagaries of randomness unless they can be mathematically modeled. It is this steadfast adherence to logic and some would say even ethics, which has soured the relationship between the fields of finance practiced in Institutions and academic finance. The hunger for success and profits in the form of bonuses and incentives which typically characterize the field of finance in the industry are typically mismatching with the hunger of learning and a passion for breakthrough discoveries in academia.

The variances in this fractured relationship are felt all the time by the academicians. They are continually proposing exciting new ideas for integrating research, education, and community life across the disciplines. Then they are confronted with the reality of budget constraints and skepticism. This is also an example of how the two fields often overlap, thus creating a source of friction.

Well known Academician and former Goldman Sachs Quantitative strategies group head, Dr. Emmanuel Derman throws light on these fault lines by describing the three ways to describe the world:

- **Theories**: These are the attempts to describe the world absolutely, not relatively. That is, they attempt to discover the principles that drive the world, and they need confirmation.
- **Models**: These are analogies that compare something you do understand with something that you would like to understand. These are relatively based.
- **Intuitions**: And finally, we have intuitions, which are the deepest form of knowledge. These come only after much hard work in which the “understander” merges with the “understood”.

Academic Finance – is it relevant? Let’s go through few real world situations -

It is crucial to understand that the driving force behind the millions of MBA aspirants is to enter the financial industry with an aim of six figure annual packages. The inability of the academia to understand this basic factor has led to formulation of syllabus which is obsessed with advanced mathematics filled with partial differential equations and multivariable calculus. But the reality is different in the industry. The academia should stay clear of myths which can confuse and lead the student down to a false career path. An MBA should be seen as part of a wider sub context in that finance is a subdomain under economics. An MBA or a Ph.D. in Finance needs knowledge of various undergraduate level economic courses such as the fundamentals of Microeconomics, Macroeconomics and Statistics. The outcome of a formal degree can be enjoyed only if a drive to understand the market equilibrium conditions in existence and when a candidate is equipped with fundamentals of finance. The various undergraduate level courses like econometrics & applied statistics are meant to provide merely the basic foundations to analyze various financial statements, market reports, and model building. Going for a Ph.D. or an MBA in Finance requires substantial degree of soft skills. It needs a perfect matching of domain knowledge and marketing skills. Candidates also need to read a significant amount of finance papers. They need extensive real world exposure. They need heightened analytical skills. These requirements are often glossed over by the academia. Until the realization occurs that the stress on finance from the theoretical perspective alone is not enough to prepare the students, the fissures will remain.

For the mismatch between the academia and industry to reduce, there has to be appropriate give and take between the two warring parties. We will try to discuss few incidents which have occurred in the financial world which are enough to show the efforts of academicians which have or which could have changed the behavior and strategy of financial institutions.

Recollecting the 2005's Jackson Hole conference, where all central bankers and leading economists collected, this incident will help us in understanding the complicated relationship between the two warring groups. Former Chief Economist of IMF - Raghu ram Rajan (now the chief economic advisor of finance minister of India), had presented a paper which was at odds to the theme of conference. His paper, titled "**Has Financial Development Made the World Riskier?**" was highly criticized by many as an "**anti-market Luddite, wistful for old days of regulation**". Mr. Rajan had dared to answer in affirmative to the question raised by the topic of his paper. Similarly, various other reputed economists like Nouriel Roubini and Kenneth Rogoff also warned about the impending crisis but the Industry preferred to ignore these warnings. The significance of these warnings were understood only when the collapse of the financial system occurred.

The key learning point here is that Academic research in Finance and Economics should not be seen in singularity. The main objective of Academic research is to help in understanding the state of economy by providing efficient micro and macroeconomic models using the statistics and past studies of economic fluctuations. The timings and reasons of business cycle fluctuations are difficult to predict. Having high quality academic research in finance helps in understanding and predicting risks, which will ultimately help in preventing the industry from being blind-sided.

Algorithmic trading (automated trading) – which has acquired the status of a cult in exchanges world-over, requires mathematical models and sophisticated algorithms which are difficult to develop. The fundamentals involved in these models contain various theoretical concepts of finance. It is in the development of such algorithms that the value of academic finance is felt. We believe that there is a bit of shift , finance domain has experienced from pure economic theories to a technical side which probably involves high speed CPU's , computer science and advanced mathematics .Manual interfere of humans has been overtaken by algorithms which are capable of making hundreds of thousands of trades in few seconds. This requirement cannot be fulfilled just by industry practices unless a huge amount of investment in academics has been done, as many wall personnel are joining the wall street with the prior backgrounds of physics ,computer science and MBA's .Academic institutions cultivate basic accounting , analytical, communication and mathematical skills in the individuals while they pursue MBA,MS or some specialized programs like financial engineering or master in finance .So it would be an injustice to completely ignore the significance of academic finance and contributions made by various economists who underwent rigorous courses of finance and meanwhile developed and improved theories of finance.

The Indian Context : Gaps in theory and practice -

In India the problem of mismatch is a lot more profound when compared globally. This is because of primitive financial systems and even more primitive academic system – thus forming a vicious cycle of sorts.

In a study conducted by a reputed testing and assessment agency, over 2,000 students were tested for verbal ability, quantitative ability and reasoning by using internationally standardized tests on behalf of recruiting companies. The study found that while the number of MBA seats in India has grown almost four fold — from 94,704 in 2006-07 to 352,571 in 2011-12, their employability rates have fallen. The Index of Employability, at a shocking 21 per cent mark, leaves scope for improvement considering that organizations hire from this talent pool for strategic roles.* [digital learning]

The Perspective of Industry:

The general perception of the Industry is that academic finance is becoming redundant. This is indicated by the greater number of students belonging to varied backgrounds like mathematics, statistics, computer science etc. ending up in the sector and doing jobs expected from students of finance. This is direct fallout of what the corporates see as “exam oriented training” offered to the students, which leaves them unprepared to handle the real-world rigors.

The MBA is not an end in itself, but a means to an end. From the Industry perspective, aside from a powerful life experience, the MBA degree should supply three main value propositions:

- Skills
- Networks
- Brand

But funnily (and of course, tragically), in the Industry the MBAs often confuse themselves as Masters of Universe. MBAs are generally seen as hollow bloated degrees.

The Perspective of Academia:

The Academia cannot be blamed entirely for the quagmire that has been created. It has to be understood that preparing completely industry prepared candidates is a really tall order when seen in context of the fast changing environment and the diversity of the industry per se. Another major difficulty faced by the academia when preparing the candidates is the sheer unpredictability of the industry. There are many sub-fields in finance like investment banking, corporate finance, risk management, trading etc. The demand – supply volatility seen in these seen every year prevents the academic institutions from providing the candidates with the necessary sub-industry specific specialization. Another variability which acts as a dampener to the academic institutions' plans is the lopsided priorities of the students themselves. The aspiring students often lack knowledge of the Industry. Many of the students join the courses with the sole aim of getting the "coveted" 6-figure salary packages. For example, the academic institutions could prepare candidates as bankers, quants, analysts or even consultants etc. They could have a course curriculum designed specifically for these specialized domains with enough industry level exposure thrown in for good measure. Now the manifold troubles with such an approach are:

- There is simply no guarantee that the Industry will absorb the students. There could be a downturn in the industry.

- The students could develop second thoughts about the area of their specialization.
- There could be an unexpected boom in some other subfield which could then suddenly appear very attractive.
- The students who might not be absorbed by the Industry could find themselves ill-equipped to work with or handle other specializations.

Note that this list is not exhaustive.

Is ethical behavior part of financial knowledge ?:

Another grouse revolves around the word “ethics”. The financial Industry is often riled for its greed, money and lack of ethical behavior. The skills and knowledge which the Industry often asks for, if blended with greed and when used in real world scenarios may lead to a catastrophe. History is replete with many examples of this occurring. Considering the regularity with which they occur, these incidents cannot be brushed under the carpet as random incidents. They point towards a loose moral fiber of the industry. Courses often discreetly criticized as redundant or “theoretical” by the corporates such as Organization Behavior and Behavioral Economics can help in strengthening the moral fiber of the industry and help in a much better understanding of the biggest and most variable in all of finance – human behavior.

The Compromise:

One way to improve this unseemly relationship is to change the perspective of education. The corporates have to understand that learning is a never ending process. The candidates freshly out of the college should not be expected to be industry ready right from the outset. They should be seen instead as an enthusiastic bunch of employees who are willing to learn and who can be molded by the Industry in a suitable manner. Training programs for employees in co-ordination with the Universities and other training institutes should be seen as the way. The mantle of training the candidates further should be taken up by the corporates. Truth might be bitter, but fact is – It is the corporates and subsequently the whole country who will ultimately benefit from any value addition that they do to the candidates.

The Industry can also play a much greater role by involving themselves with the academic Institutions by providing avenues for interaction, training, site – visits, internships, guest lectures etc. Presently these roles are seen as a burden by the corporates. They can also be more communicative with the managements of the college and help in drafting curriculum. Helping in dispelling the myriad myths associated with the field of finance will go a lot way in strengthening the quality of output from the colleges.

The Academia can also contribute to building this relationship by meeting the corporates halfway. They should be more receptive to the needs of the Industry and their suggestions should be seen constructively.

Some ways which can help the academia in gaining further relevancy and strengthen the bond with Industry are:

- Adopting a shift in pedagogy from traditional text book learning method to case study based method of learning.
- Encouraging the students to work on real life projects in each course.
- One common grouse of the Industry that is shared by the Academia is lack of skilled talent pool. B-Schools should ensure that their training helps in broadening the outlook of the students and makes them more aware and receptive.
- The students should be trained so that they have strong soft skills and are confident of themselves and their abilities. Having a pleasant personality and being presentable are seen as necessary pre-requisites in a corporate setting.
- Developing a course structure with a mix of research and industry requirements will help in strengthening the core structure of financial system. For example, there are various

dedicated courses on quantitative finance like CQF, Master of Financial Engineering (MFE) etc., but even top A-tier B-Schools do not provide dedicated courses which can cater to the specialized and advanced requirements of financial industry.

As Prof. Glen Hubbard, the Dean of Columbia University has accepted:

> "***I think People may want to get an MBA in a slightly different way*** "

- The Industry should assist in providing and the academia should be hungry for the latest technology and innovative solutions which are in use in the real world of Finance. The course contents and course structures should be constantly revised to keep track of the updating Industry.

We can see easily that pedagogy adopted by B-schools is not redundant but not even fully relevant and given the opportunities where the blending of industry and academic research on finance could be made possible, we can achieve a win –win situation.

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