
Honorary Doctor of Letters

Professor Myron S. SCHOLES

Citation written and delivered by Professor YAN Houmin

Pro-Chancellor:

Professor Myron S. Scholes, who shared the Nobel Prize in Economic Sciences in 1997 with Professor Robert Merton, has had an illustrious career as an educator and a finance theorist. His ground-breaking work in financial economics provides indispensable tools in the analysis of many of today's economic problems.

Professor Scholes was always ranked the top of his class but by the age of 16, he developed scar tissues on each of his corneas, making it difficult for him to read for extended periods of time. Years later, Professor Scholes would look upon this turn of events as a blessing in disguise, for his impaired eyesight developed in him the ability, as he recalls, "to think abstractly and to conceptualise solutions to problems".

Professor Scholes finished his first degree at McMaster University where he was initiated into the works of George Stigler and Milton Friedman, two economists who were to be awarded the Nobel prize in their own time. Thus inspired, Professor Scholes continued to focus on the study of economics as a graduate student at the University of Chicago where he befriended many people who were to become close professional associates later in life. For the next two decades, Professor Scholes found himself teaching and researching in the best universities in the US, including the Sloan School of Management at MIT, the Graduate School of Business at the University of Chicago, and the Business School and the Law School at Stanford University.

Professor Scholes has left an indelible imprint on the study of economics. He focused on financial economics in his graduate studies where he completed a PhD dissertation on the shape of the demand curve for traded securities. Since then, he has branched out to other subfields, including on the one hand various pricing models such as asset pricing, derivative pricing, contingent-claims pricing, capital asset pricing, and option pricing technology; and on the other, taxation and related issues such as the interaction of incentives and taxes in executive compensation, capital structure issues

with taxation, effects of taxes on the optimal liquidation of assets, and the theory of tax planning under uncertainty and information asymmetry.

Perhaps the best known of Professor Scholes' contributions is the so-called Black-Scholes options pricing model, which he developed with the late Fischer Black. This model was singled out by the Royal Swedish Academy of Sciences for commendation during the Nobel Prize Award Ceremony in 1997. It has come to supersede all previous attempts to value derivatives by taking an innovative approach to developing a replicating technology to value derivatives. Black and Scholes' solution is elegant in its simplicity: because of the replicating technology there is no need to consider the risk premium in the valuation of options because it is already included in the pricing of a stock. Determining a risk premium is difficult because it depends on an investor's attitude towards risk.

The Black-Scholes formula has changed permanently many financial practices and the way financial problems are conceptualised. It is now used daily by thousands of agents on markets all over the world, and accounts for the proliferation of new financial products and markets over the past 10 to 15 years. Practically all financial decisions that involve a determination of value now depend on it: debts, deposit insurances, exploration leases, contracts whose worth depends on the uncertain future value of an asset, contingent claims, value of stock, preferred shares, loans, other debt instruments, guarantees, and so on. It is hard to imagine financial practice without the tools provided by this formula. In the words of one commentator, the efforts of Scholes, Black and Merton make it possible to construct "a unified theory of the valuation of corporate liabilities".

Professor Scholes's study in option and contract pricing has been influential, too. In spite of its potential importance, option trading remained rather limited despite its history dating back to Classical Greece. Up until the end of the 1960s, in fact, a fully acceptable method of evaluating and pricing option contracts did not really exist.

However, Professor Scholes' work has filtered through to other disciplines of business/management research, for example, in my area of research, supply chain management, contract analysis and pricing. Application of the technology has been a fruitful research subject over the last 10 to 15 years.

Professor Scholes applied his expertise in financial technology when he was Managing Director of fixed-income-derivative sales and trading at Salomon Brothers. In 1994, he co-founded Long-Term Capital Management. He was Chairman of Platinum Grove Asset Management through 2009, and is now Chairman of the Board of Economic Advisers at Stamos Capital Partners. He has served on the board of various financial institutions. He is a past President of the American Finance Association and a Fellow of the American Academy of Arts and Sciences.

In the meantime, Professor Scholes' research continues. Recent years have seen him lecturing in various places all over the world. He has spent considerable time in China, sharing his expertise with young economists and inspiring them to higher excellence. He also took the opportunity to investigate the financial markets in China, studying in particular changes in the level of the discounts in the A-B share markets. One of interesting findings of their study is that differences in liquidity do not explain the observed discount of the B shares relative to their A share counterparts.

Mr Pro-Chancellor, it is no exaggeration to say that Professor Myron S. Scholes has changed the world. In recognition of his pioneering work in the economic sciences and the tireless way he has educated the young and aspiring, may I present him for the award of Honorary Doctor of Letters.