

Post-crisis securities market supervision policies – standard finance versus behavioural finance

Phuong Duong*, Jinghui Liu and Ian Eddie

Abstract— the objective of this paper is to analyze the imprints of standard finance and behavioral finance on Securities Market Supervision (SMS) policies before the 2008 Global Financial Crisis (GFC) and to discuss the question why the SMS policies should adopt behavioral finance as a response to issues identified from the crisis. Standard finance has been the most influential theoretical underpinning for securities market supervision before the 2008 GFC. The philosophy of securities market supervision has for long time relied on the notions of Efficient Market Hypothesis (EMH) and Capital Asset Pricing Model (CAPM). Relying on standard finance, securities regulators believed that market is efficient and investors are rational. Therefore securities markets were let to regulate themselves. Emerging behavioral finance provided a different insight, which argues that market is not efficient and investors are bias due to their cognitive errors. The debate between two economic theories seemed endless. However, the 2008 GFC made securities regulators and economists rethink their conceptual framework of market supervision. A supervisory philosophy based more on behavioral finance may be an option for the development of policies for market regulation and supervision in post-crisis economic and political environment.

Keywords— behavioural finance, standard finance, securities market, securities market supervision, global financial crisis (GFC), IOSCO, EMH

I. Introduction

The 2008 GFC has raised fundamental questions about the conceptual foundations of SMS. Before the GFC, the debate of standard finance versus behaviour finance was an endless battle around the terms of market efficiency and rational investors. Securities regulators preferred standard finance as the philosophy for their supervisory policies. Nevertheless, after the crisis the standard finance has not reserved its dominant role in SMS any longer. The crisis made securities regulators reassess the EMH and consider a new supervisory conceptual framework that achieves ‘the right balance between efficiency and investor protection’ (D’Aloisio, 2009). Structured into four sections, this paper discusses the influence of standard finance and behavioural finance to the SMS philosophy before the GFC in section 2; constructs the insight of why post-crisis SMS policies should be based more on behavioural finance in section 3, and comes up with conclusion in Section 4.

Duong Thi Phuong (corresponding author), Jinghui Liu and Ian Eddie
Business School, Southern Cross University
Australia

II. Imprints of Standard Finance versus Behavioural Finance in SMS before the 2008 GFC

Standard finance, developed through over fifty years of research, has four foundation blocks, including (i) investors are rational; (ii) stock markets are efficient; (iii) investment portfolios should be designed in accordance with the rules of mean-variance portfolio theory; and (iv) expected returns are a function of risk alone (Statman, 2008). Efficient Market Hypothesis (EMH) and Capital Market Asset Pricing Model (CAPM) are two basic theories of standard finance. EMH is based on the supposition of an ideal capital market in which prices provide accurate signals for resource allocation and both firms and investors can make investment decisions under the assumption that securities prices at any time fully reflect all available information (Fama, 1970). The EMH claimed that stock markets are efficient, prices are always right and investors are rational. Different versions of CAPM are all set up to measure the relationship between risk and equilibrium expected returns in the stock market or sensitivity of an asset to non-systemic risks, which are supposedly not diversifiable.

Believing in rationality of investors and efficiency of markets, regulators use ‘full-disclosure’ mechanism to protect investors. Stock market prices were supposed to reflect all the stock related information and hence full disclosure is adequate for rational investors to make rational investment decisions and to protect themselves. Markets were also believed to be efficient enough to correct themselves. Market institutions and market intermediaries were expected to be self-regulated. Deregulation was encouraged to avoid government failures in interventions into the markets.

In behavioural finance, investors are ‘normal’, not rational. Markets are not efficient, even if they are difficult to beat. Investors design portfolios according to the rules of behavioural portfolio, not mean-variance portfolio theory. And expected returns follow behavioural asset pricing theory, in which risk is not measured by beta and expected returns are determined by more than risk (Statman, 2008). Normal investors are animated by aspirations, not attitudes toward risk. Investors divide their money into many mental account layers with attitudes toward risk vary across different layers (Shefrin and Statman, 1997). Behavioural capital asset pricing model (BCAPM) was developed with expected return of a stock as a function of market factor, book-to-market factor, market cap

factor, momentum, affect factor, social responsibility factor, status factor and more (Statman, 2008).

Though not as influential as standard finance, some ideas of behavioural finance have been realized in SMS, namely suitability regulations and merit regulations (Statman, 1995). ‘Know your client’ principle claims that brokers should ascertain that the securities recommended by them to their clients are suitable for the client’s needs and financial conditions. Suitability regulations are important for the behavioural investors as they are the tools that help investors control the effects of their cognitive errors and self-control problems.

Merit regulations- predefined standards used by securities regulators as criteria to judge the conduct of market participants, are designed to protect investors from themselves. Its rationale is that people are susceptible to their cognitive errors and they will overpay for securities if they are left to their own decisions. However, merit regulations have been replaced by disclosure-based regulations, which were strongly recommended after the Asian Financial Crisis in 1997 by standard financial economists. Circuit breaker is another rule that is based on the ideas of behavioural finance to prevent market crashes due to the ‘herd philosophy’ of investors. All the stock exchanges are required to install the device in trading systems that automatically stop securities transactions in case there is a severe price turbulence.

Despite behavioural finance becoming more and more influential, it has played a minor role in SMS policy making. While the ideas of standard finance have been used as the underlying philosophy for SMS for long time, the ideas of behavioural finance are just present in some regulations and code of conducts. Financial economists just ignore them because they think the regulations are not important or just because they are difficult to fit into the theory of standard finance (Statman, 1995). The fact was commenced by Kattan (2006):

“Regulators always make assumption of market participants behaviours when elaborating policy, just like judges and lawyers do when appraising actions of these participants. One might therefore presume that behavioural finance would play a significant role in the regulation of securities markets because it that very behaviour that needs to be facilitated, curtailed, or eliminated entirely. Unfortunately this entire body of research is completely absent from legislation as well as judicial decision” (Kattan, 2006)

However, the 2008 GFC has changed the mindset of financial regulators and behavioral insights became popular as a theoretical framework of market supervision.

III. Post-crisis SMS policy –moving toward an adoption of more Behavioural Finance

After the crisis many academic and practitioners (Erskine, 2010b, Krugman, 2009, Thaler, 2009, Shiller, 2010, Erta *et al.*,

2013) came up with the idea that the standard finance and EMH, has to answer for the 2008 GFC. The standard finance ceased to be an intellectual rationale for self-interested minimal regulation. The theoretical belief in unregulated markets which relies on EMH was a failure (Rudd, 2009). Regulators now think that the ‘light touch’ regulation, which allows markets to operate with disclosure and minimum intervention, needs to be retested (D’Aloisio, 2009). Disclosure and fairness regulations were proved insufficient to discipline risk taking, prevent conflicts of interest and other conflicts, and hence risks were not adequately recognized or diversified (Erskine, 2010a).

In this paper, we argue that the SMS after the 2008 GFC should adopt more behavioural finance for three reasons:

First, securities investors are not rational, they are human with their behaviour problems. The assumption that everyone is rational and markets work perfectly efficient needs to be discarded. The significance of irrational and unpredictable behavior of securities investors should be recognized by regulators and economists to deal with market imperfections (Krugman, 2009). Regulators should understand why and how investors should be protected. Investors must be protected by more than ‘full disclosure’ requirements as they are not so rational as supposed by standard finance. The term ‘sophisticated investors’ should be redefined for a better supervisory purpose. The term used to be referred to investment funds, which were subject to less supervision as securities regulators thought that they were well self-regulated enough to ensure that retail investors who bought investment units were fully protected. However, in fact the agency problems always make the protection not secure. A new conceptual framework of securities regulation, which include ‘insights of behavioral finance and agency theory’ (Erskine, 2010b) need to be set up to deal with behavioral problems such as conflicts of interest and agency costs.

Second, the securities markets are not efficient. Markets can be wrong and the price is not always right (Thaler, 2009). Markets should not be left to totally regulate themselves. Markets are efficient if they are well regulated and supervised to ensure that market failures do not harm the efficient allocation of resources by markets. Self-regulation has been proved to be not efficient in the recent GFC. Credit rating agencies, public companies, investment managers, stock exchanges and other self-regulatory organizations (SROs) always weighed their self-interests more than those of public investors. Therefore, there should be relevant supervisory arrangements that keep them on track and make them fulfill their responsibilities to market stakeholders. If stock prices are always right, then there would be no bubbles in markets. As the prices are not always a fair indicator of a public company’s health, securities regulators need to develop a well-functioning forecast system, which can give right and in-time alerts to investors. Knowing that prices can be wrong, regulators could usefully adopt automatic stabilizing activity, such as linking

the down-payment for mortgages to a measure of real estate frothiness or ensuring that bank reserve requirements are set dynamically according to market conditions (Thaler, 2009).

Third, the securities markets are easily distorted by herd philosophy. Market crashes and market booming are always caused by herd philosophy of investors rather than changes in the fundamental values of the stocks. The standard theory dominant in pre-crisis time was deficient (Shiller, 2010) and had disregarded the importance of economy conduct and the 'role of animal spirits'. The GFC is evidence for the economists and regulators to rethink the role of investors' behavior in driving markets to turbulence and contagion. Circuit breakers seem not enough to prevent markets from turbulence. The securities regulators need to have ready in their hands the crisis-preventive policies for better responding to the signs of crisis

iv. Conclusion

Though the theories of standard finance have been the most influential ideas to underpin the SMS philosophy for decades, the current GFC made the securities regulators think of adopting policies derived from behavioral finance. Having more SMS policies derived from behavioral finance does not mean that regulators should suppose that they know better than markets or intervene more in the market operations. The securities regulators need to adopt insights of behavioral finance to understand their normal investors and their not-always-efficient markets in developing and implementing realistic supervisory policies, which are not based on theoretical hypotheses but are based on the knowledge of the real behavior of markets and market participants.

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About author:



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(Duong Thi Phuong)