

**STUDYING FINANCIAL MARKETS:  
ISSUES OF METHODOLOGY  
AND  
DISCIPLINARY BOUNDARIES**

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# **Studying Financial Markets: Issues of Methodology and Disciplinary Boundaries**

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## **ABSTRACT**

Financial markets have become a central aspect of our daily lives due to deregulation and liberalization in national economies and financial and technological innovation in the last few decades. The amounts traded in financial markets daily, monthly, annually, are sometimes at par and sometimes much bigger than the GDPs of the five biggest economies in the world. The immense growth in financial markets affects our daily lives not only during times of crises but also on a daily basis because of their ups and downs. A phenomenon so pervasive in daily life has brought great interest from different fields of social sciences. This paper looks at how the social sciences study financial markets by making a very short survey of Financial Economics, Behavioural Finance, Sociology and International Political Economy in an attempt to comment on disciplinary boundaries.

**KEY WORDS:** Behavioural Finance, Disciplinary Boundaries, Financial Economics, Financial Markets International Political Economy, Methodology, Sociology, Social Studies of Finance.

## **INTRODUCTION**

The first definition given of finance in the *American Heritage Dictionary* (2000) is ‘the science of the management of money and other assets.’ The second definition is similar to the first but with the omission of ‘science’ and hence referring to ‘the real thing’ in social life. This paper looks at the study of ‘the real thing’ by various fields in the social sciences. The aim is to focus on the methodologies employed by recent studies on financial markets and the paper will survey financial economics, behavioural finance, sociology and international political economy to understand how disciplinary boundaries are delineated in different accounts

concerning the same phenomenon. Finally the paper comments on issues arising from this survey and the possibility of interdisciplinary research in studies of financial markets.

## **FINANCIAL ECONOMICS: THE ESSENTIAL ASSUMPTIONS**

The study of financial markets has been dominated by financial economics in the last three decades. The research produced has been so widespread geographically that in 1994 a member of a round table discussion about finance methodologies remarked the following about the literature in finance journals:

We think we know now that the Ugandan financial markets are very efficient that the Hungarian stock market trades three and a half securities and is very efficient that the Greek stock market is very efficient. So, we have world champions all over the planet. I would like to see the nature, the scope and the techniques of financial theorizing be diverted to some other problems-perhaps, more significant problems. (Philippatos: 1994, 181)

The interest in the efficiency of financial markets did not start with Fama's (1970) famous article on the Efficient Market Hypothesis, which states that an efficient market reflects all the available information in security prices. In fact the term was coined by Harry Roberts in 1967. Fama's article was one of three review articles about the theory and empirical work on 'efficient markets' published then, and his work popularized the concept and provided one of the two important benchmarks for research on financial markets in this field so far (Shleifer, 2000:7). Interestingly, Fama's previous research (1965) dwelled on the other benchmark, the Random Walk

Hypothesis, which states that security prices cannot be predicted as they follow random walks.

The Efficient Market Hypothesis or EMH posits that at any given time security prices will reflect all the available information in an efficient market. Fama states that despite this statement being ‘an extreme null hypothesis’ and hence shouldn’t be taken literally; the empirical studies he surveys about weak and semi-strong efficiency do not pose an important challenge to the hypothesis (Fama, 1970:388). In the weak form of efficiency, it is argued that past prices and returns have no use in making superior risk-adjusted returns. In the semi-strong version, it is impossible to make superior returns using any publicly available information since once it is public then the information is reflected in prices. In the strong version of EHM, it is posited that even insider information does not guarantee abnormal returns (Shleifer, 2000: 6). The EMH depends on the rationality of market actors. This rationality implies that investors value each security according to its fundamental value: ‘the net present value of its future cash flows, discounted using risks characteristics’ (Shleifer, 2000: 2). The second benchmark of the financial economics literature, the Random Walk Hypothesis or RWH, is closely related to the EMH because the reason behind its major premise, ‘security prices and values follow random walks’ (ibid, 3) concerns rational investors’ reaction to news released or anticipated and instantaneous reflection of this in prices (Fama, 1965: 56-7).

While the RWH and EHM rest on ‘rational risk-neutral’ investors, mathematical models created to study financial markets have incorporated risk-averse investors and other possibilities by researchers. These models are informed by what Schumpeter (1908) called methodological individualism. Essentially, this approach takes the individual as the basic unit of analysis. Its roots can be traced back to Adam

Smith's *The Wealth of Nations* (1775). The dominance of methodological individualism, however, came of age in the second half of the 20<sup>th</sup> century (Lindenbergh, 2006:550). While the fundamental assumption of mainstream economics about economic man, *Homo Economicus*, posits that actions are constrained by the scarcity of resources (including technology) and tastes (Smelser and Swedberg,2005:5), financial economics has created its economic man by assuming that people are capable of valuing each security according to its fundamental values and of distinguishing information from 'noise'. The relationship between information and decision-making in this model is that, when investors learn something new about the fundamental value, they react in accordance with the nature of the news 'good or bad' and bid up or down the prices almost immediately – hence prices reflect all the available information (Schleifer, 2000). 'Noise', according to EMH, means any information/signal that is either not related to the fundamentals or else already reflected in prices. Noise can be created by technical analysis (interpretation of charts and extrapolating future price movements from them), stockbrokers, economic consultants, and it can be picked up by irrational investors (De Long, et. al, 1990: 706). Although EMH implies interpretative activities whilst coming up with decisions such as differentiating good and bad news, these activities are done within a certain rational path, namely calculation of a security's fundamental value and then maximization of profit.

## **MODELS, EQUATIONS, TIME-SERIES DATA AND STATISTICAL PACKAGES**

While these assumptions inform the research agenda of financial economics, the conduct of this research is heavily dependent on mathematical equations.

Statistical packages are used to test the hypotheses created. Data is usually drawn from stock market indices, bond market returns, or data from other financial markets. An example of this type of study is provided by Fifield et.al (2005), which looks at 11 different stock markets in Europe between 1991 and 2000 to find out whether two trading rules based on technical analysis (the utility of which is ruled out by weak form of efficiency) can deliver superior returns compared to the basic buy-hold strategy. Their conclusion is that the less developed markets in the sample demonstrated some informational inefficiency and hence superior returns (also lack of random walks) via technical trading rules, whereas developed markets did not allow any superior returns based on technical trading rules. This study obtained relevant data from Datastream (a financial statistical database provided by Thomson Financial) and used various mathematical formula and statistical tools to calculate the returns with and without technical trading rules. Some studies, on the other hand, engage purely in model creation about investor behaviour and structure of the market under various conditions.

Merton (1987) argues that the perfect-market model (rational investors plus complete and free information) does not reflect the realities and complexities of financial markets, stating that recognition of institutional structures and informational costs would explain the otherwise market anomalies as labelled by the perfect-market model (486-7). Nevertheless, he adds that this model may provide the best description of the financial markets in the long run. It can be argued that Merton wanted to point to technological advances in information dissemination and processing that would bring about the frictionless markets as modelled in the theory. The remainder of Merton's article is devoted to a model of capital market equilibrium with incomplete information, using thirty seven equations to model investor and firm

behaviour as well as stock returns. Merton concludes by reiterating his point that one has to take into consideration the institutional and informational realities in financial markets to make sense of anomalies in a market populated by 'rational investors'. He adds that these variables might influence the way and duration in which these anomalies are phased out of the market. He also proposes that his model would provide intermediate insight into the behaviour of security prices.

## **BEHAVIOURAL FINANCE AND EXPERIMENTS**

In the introduction to his *Economics* textbook, the Nobel Laureate Paul Samuelson (1980:7) argues that the complexity of the economic world can be oversimplified by economic theories, but that what a good theory omits is 'outweighed by the beam of light and understanding thrown over the diverse facts'. In a way, Samuelson justifies what Merton observes about the deficiency of perfect-market theory. Merton, like many others, tries to remedy the imperfections of the perfect-market theory by offering a model that incorporates some of the realities in financial markets. While Merton does not fundamentally challenge the three basic assumptions, behavioural finance now poses a challenge to these assumptions of financial economics. According to Shleifer (2000), it does this in two different ways. The first is to demonstrate the limits to arbitrage put forward by financial economics as the foremost remedy to volatility and inefficiency created by 'irrational investors'. The second is to make 'the rational investor' more sophisticated by creating a theory of investor sentiment, i.e. 'how real-world investors actually form their beliefs and valuations, and more generally their demands for securities' (Shleifer, 2000: 24).

The financial economics literature assumes that there can be irrational investors who cannot distinguish noise from information and their behaviours might lead to volatility and deviations from fundamental values. Nevertheless, it also assumes that, since the trades of irrational investors are uncoordinated, they cancel out each other. If their trades are coordinated, then arbitrageurs come into the picture and correct the price anomalies in the market and therefore arbitrage is the key to ensuring efficiency in financial markets (Shleifer, 2000; Mackenzie, 2005). Behavioural finance literature has tackled this perfect-markets version of arbitrage with various studies on real-world arbitrage. Shleifer and Vishny (1997) take on the textbook definition and explanation of arbitrage and demonstrate that in real-life arbitrage is not risk free and requires capital. They discuss a hypothetical trader in Germany and London trading two similar bonds with price differentials according to textbook and real-life experiences. After demonstrating the difficulties of arbitrages in real-life because of the risks involved and the capital needed in making profits, they offer a model of real-life arbitrage as an alternative to textbook arbitrage explanations. In this particular type of arbitrage, professional fund managers are allocated funds in accordance with their past returns. They need more capital if the mis-pricing they bet against become worse and fear of this makes them more cautious when they attempt to sell. Shleifer and Vishny argue that, due to these factors, the effectiveness of arbitrage in bringing back market efficiency is limited. Although this article and other studies (for instance Montier, 2002) undermine the efficiency and rationality arguments of financial economics, the methodology they employ is not dramatically different than that of the former. In the case of Shleifer and Vishny, the method is about creating models that explain the mechanics of arbitrage under different circumstances, with these models then discussed in light of their empirical

implications for risk arbitrage, which according to them is more close to real-market situations.

Shleifer (2000) states that the two-tier agenda of behavioural finance is to create a theory that is able to predict stock returns and behaviour of security prices in inefficient markets. The second tier of the research agenda, a theory of investor sentiment, incorporates psychological theories about belief formation into their models of investor behaviour. These theories attest to cognitive biases of human-beings in decision-making such as heuristics, overconfidence, framing (anchoring), representativeness, and so forth (Ritter, 2003). Their corporation into models of financial behaviour thereby directly undermines the essential assumption of the rational unitary actor of financial economics. Shleifer (2000: 112-53), for instance, attempts to create a formal model of investor sentiment by drawing on representativeness and conservatism as put forward by Tversky and Kahneman (1974) and Edwards (1986) respectively. Representativeness refers to the phenomenon of seeing patterns in truly random sequences and conservatism is the slow updating of models in the face of new evidence (Shleifer, 2000:113). Shleifer creates a formal model of over-reaction and under-reaction to news announcements in light of the two psychological phenomena. He then demonstrates how his model can predict the empirical evidence of both anomalies using stock return evidence in the US, running simulation experiments with his model to evaluate it.

While Shleifer's experiment is just a simulation of a model with artificial data sets, experiments with human-subjects have become an established methodology in behavioural finance (see for instance De Bont, 1993). One example is the study by Brandouy et.al. (2003), which looks at price formation under asymmetric information and imitative behaviour in a simulated stock market. Twelve subjects were chosen

among MSc students of Finance at Arizona University. The study was conducted over four sessions, each of which tested the effect of a variable on price formation and efficiency of the market. The focus was on dissemination of misinformation and rumours, and whether subjects were able to distinguish noise from information, and how they reacted to dissemination of noise under different circumstances. Other experiments have used student and expert subjects, as in Muradoglu (2002) or students only as in Cason (2000). Experimental research in behavioural finance is a fast growing methodology and some universities run research laboratories for such experiments, as in the case of Arizona and Purdue where Cason and his colleagues have made more than thirty experiments, not only on financial markets but also other markets and institutions. <sup>1</sup>

## **SOCIOLOGY'S APPROACH TO FINANCIAL MARKETS: ACTORS IN INTERACTION AND IN SOCIETY**

In reviewing the above work from financial economics and behavioural finance, there was nothing about what a financial market or traders look like in flesh, how they buy and sell securities, what kind of norms and values are prevalent among market community and so forth. Smelser and Swedbergh (2005:6) argue that economists are critical of descriptions and more concerned with theory building via models and with prediction. On the other hand, according to them, sociologists are more interested in descriptions in their own right or as a step forward in explaining phenomena. This underlies why sociologists look at financial markets by focussing

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<sup>1</sup>Details of the Research Centre and Cason's research can be seen at <http://www.krannert.purdue.edu/faculty/cason/abstracts.asp>.

on role structure, gender, belief systems, norms and values, the role of technology and theories, institutions, behaviours, etc, all of which are either ignored by financial economics or studied for a specific purpose as in the case of behavioural finance. While financial economics is more or less dominated by the three essential assumptions, and behavioural finance tries to demonstrate the short-comings of those assumptions, sociological studies on financial markets so far have not produced a monolithic theoretical approach to financial markets. Despite this, there are some recurring themes. For instance, the assumption of rational unitary actor with certain attributes devoid of other actors and circumstances surrounding them does not inform sociological studies. The idea of embeddedness put forward by Granovetter (1985) has highlighted the circumstances that surround economic action in terms of 'concrete, ongoing systems of social relations' (487). Although a certain type of rationality can be attributed to actors in sociological studies, this is usually as a variable rather than a fixed assumption (see for instance Weber's (1922) three types of rationality, cited in Smelser and Swedbergh, 2005).

The ideas of embeddedness and markets as networks of social relationships alongside systems of exchange (White, 1981) have paved the way to studies of financial markets within structural sociology. For instance, Baker (1984 cited in Preda, 2007a: 509) has looked at how networks of relationships affected price volatility at a stock options exchange, finding out that the market was not composed of autonomous, atomized individuals, but small and large networks in processing uncertainties on the floor. Baker's study demonstrated that the size of networks affects volatility in the market: smaller networks decreased it while larger networks led to the opposite result. The bounded rationality of actors, and the inability to assimilate or transmit all the information available, was one of the underlying reasons

behind the formation of differentiated networks. The other was the fact that some actors behave opportunistically, which was not envisaged in the ideal model of financial economics (Abolafia, 2006:278-9). Baker's methodology involved creating an empirical model (contrasting with the ideal model from the financial economics) on the basis of his exploratory fieldwork in the exchange. After that, he interviewed participants in the networks involved to find out their perceptions and explanations of his findings (1984:789). Baker also tested some hypotheses about trading activity by analyzing the data he collected using statistical methods. Calculations of volatility were also made by statistical methods and drew on a model from financial economics. Although model-making and hypothesis-testing do not sound unfamiliar to financial economics, sociology's different theoretical framework (markets as networks of relationships) involved has not only brought a very different methodology into finance studies, such as observation and interviews, but also challenged the essential assumptions of financial economics.

The structural approach to markets has been criticized by sociologists on the grounds that it limits the embeddedness argument just to networks of relationships (Smelser and Swedberg, 2005:15). A new approach to financial markets as social and political institutions has emerged from this particular criticism, because embeddedness cannot be confined to networks of relationship since cultural, political and social circumstances also mould actors' behaviour in financial markets. For instance, the work by Abolafia (1996a) is interesting in two respects with regard to this broader embeddedness. Firstly, Abolafia has examined the reasons behind the 'rational behaviour' of maximizing profits. Apart from the first thing that comes to mind, 'increasing personal wealth', the bond traders in his Wall Street ethnography used their trading activities to secure a place in the pecking order of bond traders. So

maximization of utility was at times a goal but at times a tool to attain another goal concerning traders' perceptions of their peers. Secondly, Abolafia (1996a) provided a detailed account of actors and institutions in an open outcry futures market which revealed the regulatory mechanisms at not only institutional but also peer level, which ensured trustworthiness, efficiency, and liquidity in transactions. Abolafia's work is based on fieldwork on three trading floors (one electronic, two open outcry) and interviews with market actors over a period of thirteen years. His methodology is different from Baker's or the social structural approach in general. There is no attempt to create formal models in a deductive or inductive manner nor are any statistical tools used to test hypotheses. Nevertheless, Abolafia's study shares a common characteristic with Baker, that of demonstrating the empirical reality in financial markets in contrast to the essential assumptions or models of financial economics.<sup>2</sup>

The bond market in Abolafia's study was an electronic market where face-to-face interaction did not exist among buyers and sellers. One of his arguments is that restraint on opportunistic behaviour was harder to establish by peers, unlike in the other two markets, where face-to-face interaction among others helped it flourish. The increasing automation of financial markets in the last two decades has transformed sociological observations of spatial, institutional, cultural, and network-based features of financial markets. The closure of trading floors, the introduction of trading screens into classical open outcry markets, the diversification of investment portfolios across the world thanks to advances in communication technologies, sophistication of trading strategies via software and scientific models, have all brought about a new environment to which market actors have had to adapt. This transformation has also

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<sup>2</sup> Abolafia in another study (1996b) takes on the game theoretical model of rational behaviour in financial markets by drawing on ethnography he conducted in Wall Street bond market.

brought a new sociological approach to financial markets, namely Social Studies of Finance (SSF).<sup>3</sup> According to Preda (2007a), SSF has two different research agendas. First is financial information and price as epistemic themes, which has problematized the notion of price as signals information in financial economics and the social-structural approach in sociology. Research within this strand has pointed to human activities and artefacts (technology and theory) in the creation, observation and processing of information, and hence treats information and price data as the by-product of social activities informed/assisted by technical and theoretical artefacts. For instance, Cetina and Brugger (2002) look at the interactions among foreign currency traders of international banks. These interactions happen on computer screens, which rules out face-to-face interaction and the necessity of spatial coordination. One of the conclusions the authors come to is that global electronic markets are disembedded, in the sense that local settings, rules and norms are not benchmarks to which traders orient themselves. It is rather the norms, rules and information created by 'the community in time' which traders observe and adhere to (Cetina, 2005). Methodologically, Cetina and Brugger drew on participant and non-participant observation and interviews with informants in three global banks involved in currency trading. They also looked at conversation records among traders to analyse the interaction order in a face-to-screen environment where a screen becomes a mirror of the virtual market as well the market itself for the completion of transactions. They comment that being in the field has 'yielded richer materials and permitted a more refined analysis than would have been possible by use of standardized interview tools' (Cetina and Brugger, 2002: 916).

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<sup>3</sup> Science and Technology Studies (STS) precedes the emergence of SSF. The initial interest about these themes in financial markets came from STS scholars. See Preda (2007a) for a detailed explanation of STS and SSF.

The second strand of research in SSF is related to the issue of agency in financial markets. An approach that is specifically interested in technology and theory, SSF's treatment of agency is not confined to human-beings. As already seen above, the role of technology is factored into the analysis. The other theme, theoretical agency, has been introduced into SSF around ideas about performativity. Preda (2007a: 911) defines performativity as a combination of academics developing normative models and practitioners observing, adopting and modifying them in ways that suit their interests and situations. One famous empirical study of performativity was made by MacKenzie and Millo (2003) about Black-Scholes-Merton option pricing theory and how it was adopted and adapted by traders in the Chicago Board Options Exchange and then imposed on others. MacKenzie and Millo used interviews with informants from the Exchange to reconstruct the history of adoption and adaptation of the theory. Another article by MacKenzie (2003) on the same theme also employs interviews among other sources to reconstruct the history of the emergence and modification of the pricing formula by its creators and adopters.

As Preda (2007b) summarizes, the methodologies used by SSF researchers usually revolve around participant or non-participant observation supported by interviews with informants in market settings if the research is about issues of financial cognition. Studies about performativity rely more on interviews with market actors as well as documentary analysis in an attempt to reconstruct the history. Like the two other sociological approaches to financial markets, both strands of research in SSF challenge the essential assumptions of financial economics in different ways. Nevertheless, the challenge each approach poses is not directed solely towards financial economics. Theoretically there exist differences among these approaches, which inform respective methodologies. These differences might lead to

irreconcilable gaps between approaches in terms of conceptualizing essential concepts such as information in the case of SSF and the social-structural approach (for details of the differences, see Preda, 2007b) or strong criticism of research produced in one approach by another on the grounds that it lacks a rigorous theory or model, as in the case of White's (1998) critique of Abolafia's research (1996a).

## **GLOBALIZATION, STATES, FINANCIAL CRISES AND GOVERNANCE: INTERNATIONAL POLITICAL ECONOMY LITERATURE**

The International Political Economy literature has been concerned with the phenomenon of financial globalization since the late 1970s. This concern has moulded IPE in a distinct subfield in IR. IPE's main concerns are how globalization started, what consequences the globalization of trade and finance have had on state economies and politics, how global finance can be governed by states and International Organizations, and non-state actors. Of course there are different schools of thought on each issue, different ontological and epistemological stances. One observation worth mentioning here is that the rational actor theory of neo-classical economics which informed financial economics has also informed mainstream IR and IPE literature, in the sense that states have been treated as rational unitary actors aiming to maximise their power vis-à-vis other states. This school of thought is not without its critics, with other schools of thought developing as critiques of critiques (for a detailed analysis of theoretical debates in IPE, see Stubbs and Underhill, 2002). The benefit of the IPE literature for the study of finance is that it provides a historical analysis of how global finance as we know it today has emerged from the collapse of the Bretton Woods system. So it is helpful in putting today's financial system in historical context. It also deals with state and non-state actors and relations among

them in global finance. However, the major concerns are the state, its economic and political authority, the power of non-state actors, how to govern finance, how to prevent crisis, etc. Thus this literature broadly deals with finance but does not speak of it. By ‘speaking of it’, I mean not treating financial markets as a black box devoid of actors, social norms and rules, and physical space (for a critique of IPE scholarship in this vein see Hudson, 2005).

Marieke De Goede (2001) has provided a critique of the global financial system and the scientific discourse embedded in it with regard to its effects on state authority and control over financial markets. Her focus is on derivatives market and failure of the Long Term Capital Management (LTCM), which was founded by the three distinguished economists behind the Black-Scholes model. This theory has not only dominated derivatives trading since 1970s but has also legitimized it as something different than gambling in the eyes of regulators. In providing a historical review of derivatives and then LTCM, De Goede tries to support the argument that nothing in global financial markets is ahistorical, devoid of ideas, discursive practices, contingencies and interests and to undermine the conventional rather positivistic approach to IPE.

IPE scholarship engages mostly with secondary literature. For instance, De Goede’s article is based on a literature survey from different fields and other sources such as the BBC, Congressional sources and business broadsheets. However, interviews may be conducted in groundbreaking research in IPE. For instance on Credit Rating Agencies (CRAs), Timothy Sinclair’s research (2005) has used interviews with officials from CRAs and governments as well as publications such as CRAs reports, newspapers, TV broadcasts, IMF and WB sources. The critical and constructivist approaches in IPE work to show the embeddedness of global financial

markets in social and cultural practices and interests. However, the concerns with governance and government, formal authority and regulation still shape the IPE literature about finance to a great extent.<sup>4</sup>

## **A CONCLUDING NOTE ON DISCIPLINARY BOUNDARIES**

The work surveyed here do not constitute a representative sample of theories and methodologies in each discipline covered. However, they do give an approximate idea of what each discipline is concerned with. The essential assumptions about human behaviour and markets in financial economics continue to attract a vast interest not only from the field itself but also from other social science disciplines. In a way, this attests to the dominance of financial economics in research about financial markets. Also the distinctive methodology, modelling via mathematical equations, and the language used in this field, attributes a sort of ‘scientific’ value to it (or rather a surface similarity to hard sciences) vis-à-vis less quantitative research in other fields. This ‘scientific attribute’ also stems from the fact that many students of financial markets cannot read this type of research due to their innumeracy in financial mathematics or advanced statistical methods. Consequently, challenging financial economics has come via its essential assumptions rather than through its research design or the model itself. However, the merit and analytical value of engaging with theoretical foundations of a discipline or approach in its own right should be acknowledged because such attempts provide the first steps of interdisciplinary dialogue.

Disciplinary boundaries do not stem from the different methodologies used. It is rather the different theoretical approaches or even different ontological and

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<sup>4</sup> See Baker et al (2005) which provides an exception to ignorance of financial markets as a level of governance

epistemological stances which inform those theoretical approaches that create the boundaries. Shared methodologies among different disciplines which have contrasting assumptions about human-behaviour can be observed as in the case of financial economics and the social-structural approach from sociology. Boundary issues can also be discerned within disciplines. Among the fields surveyed in this paper, this has been most evident within IPE in terms of state and non-state actors, especially within the global governance debate. Since non-state actors do not possess any formal regulatory authority, unlike states, they have been excluded from analysis in several influential accounts (for a critique of one such account, see Strange, 1994; for a general critique, see Hudson, 2005).

Inter-disciplinary or intra-disciplinary dialogue in the study of financial markets has been happening for some time. In this vein, SSF is not only a sociological approach but also the name given to network of academics coming from different fields both in the UK and elsewhere in the world. In the coming years, SSF is poised to become an influential multidisciplinary approach to financial markets.

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