

# The Contribution of Social Norms to the Global Financial Crisis: A Systemic Actor Focused Model and Proposal for Regulatory Change

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## ABSTRACT

**Manuscript Type:** Conceptual

**Research Question/Issue:** Conventional regulatory reforms of the financial system focus on standard economic assumptions of self-interested, rational actors. The Global Financial Crisis (GFC) and similar financial failures highlight that there are limits to this approach. Instead we use a norm-based (or soft law) perspective to examine how the systemic problems underlying the GFC lay not so much in neo-classical economic assumptions of self-interest, but in unchecked financial innovation exploited by norms of buyer beware and ratings agency reliance among market participants. Fueled by sector-wide remuneration practices, these norms created information asymmetries that fundamentally undermined the integrity of the market.

**Research Findings/Insights:** We present a model that highlights how investment banks, as professional service firms, have superior information to their clients. This presents an information asymmetry problem whereby they can exploit the market norm of *caveat emptor* (buyer beware) when developing innovative financial transactions. We propose a model highlighting how flawed financial innovation can lead to widespread, systemic problems of assessing and pricing risk because market participants can actively develop and promote flawed transactions. This problem is exacerbated where there is an over-reliance on credit ratings agencies (due to the high information and search costs facing buyers) and a reduced emphasis on director fiduciary duties in financial Special Purpose Entities.

**Theoretical/Academic Implications:** Social norms that underpin financial markets are central to market regulation. Our approach provides a re-examination of the often unquestioned use of universal norms for differing market transactions in the financial sector. Researchers need to explore the interaction between social norms and market contexts (such as financial innovation) to better understand the behavior of financial markets. We contend that a mismatch between norms and market mechanisms can lead to significant unintended outcomes. Our approach of combining soft law (norms) and hard law (regulation) approaches to regulation provides added insights into agency, stewardship, and institutional theories.

**Practitioner/Policy Implications:** Regulators need to understand norms and financial market contexts to develop better legislative interventions. Specifically, differentiating between transaction types in financial markets will address the problems associated with information and search costs facing buyers of flawed financial innovation. We also provide proposals for policy makers seeking to embed accountability for risk taking across the key participants in the financial system to minimize market distortions in the majority of the financial sector.

**Keywords:** Corporate Governance, Legal Effectiveness, Governmental Protection, Hard versus soft law

## INTRODUCTION

Regulating market bubbles remains one of the most challenging tasks facing governments. The Global Financial Crisis (GFC) is the latest in a long tradition of financial

bubbles leading to public outcry and extensive regulatory intervention (Ferguson, 2008). The consequent flurry of regulatory reforms focuses on myriad issues: revised prudential standards; new regulatory bodies; increased transparency; limits on certain activities and trades; and so on (Conyon, Fernandes, Ferreira, Matos, & Murphy, 2011). Yet despite public outcry and government reaction, financial sector behavior appears largely unchanged (Knyght, Kakabadse, Kakabadse, & Kouzmin, 2011).

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It is timely, therefore, to question how we analyze bubbles and design regulatory interventions. Overcoming the usual cycle of crisis and reactionary regulation (Clarke, 2004) requires an approach that allows for an evolution in products and financial institutional forms that is sure to occur. Without a flexible approach, products and actors will develop ways to circumvent rules too specifically targeted to the last financial disaster.

Traditional economic assumptions of rational self-interest are the focus of current financial market reforms (e.g., Cukierman, 2011). This is despite significant evidence that human behavior is not uniform, but varies with social norms (e.g., Akerlof, 2007; Güth, Schmittberger, & Schwarze, 1982; Kandori, 1992). Ignoring the underlying social norms present in financial markets risks ignoring the generative mechanisms behind the GFC, particularly when norms vary between nations and markets (e.g., Boytsun, Deloof, & Matthyssens, 2011; Stafsudd, 2009). Instead, effective financial market regulation requires policy makers to target human behavior by understanding the context and nature of relevant participant norms. In the case of the GFC, we argue that flawed financial innovation and the market norm of *caveat emptor* (or buyer beware) provided the opportunity for market participants to unfairly exploit information asymmetries. Additional social norms governing remuneration systems and ratings agency reliance encouraged this exploitative behavior to spread through the financial network, resulting in unintended systemic risk.

We commence by outlining the growing evidence of relationships between formal and informal institutions and market behavior, focusing particularly on the neglected area of social norms. We then provide a norm-based explanation of the GFC by examining the role of a key financial instrument, the Collateralized Debt Obligation (CDO). Based on this explanation, we develop a model comprising six propositions that seeks to explain the development of systemic risk during the GFC from a norms based perspective. We conclude with the implications of our model, including some suggested regulatory interventions.

## LAW, SOCIAL NORMS AND MARKET BEHAVIOR

Markets of all kinds have become important vehicles for economic growth and are widely lauded as superior to command and control systems. Staggering efficiency gains made possible by these self-organizing systems (Leibenstein, 1966) have led many to adopt a philosophy that favors market freedom over government regulation (e.g., Friedman & Friedman, 1980). Yet many commentators highlight that this philosophical position can lead to insufficient regulation, particularly when based on “utopian economics” (Cassidy, 2009:17). It is becoming increasingly apparent that standard economic analysis is only useful where people’s “preferences correspond to economists’ typical descriptions of them” (Akerlof, 2007:6, original emphasis) and so interest in norms and other non-traditional motivations continues to grow within mainstream economics (e.g., Akerlof & Kranton, 2005; Bandiera, Barankay, & Rasul, 2005; Gneezy & Rustichini, 2000a, 2000b; McFadden, 2006).

Markets do not emerge naturally in isolation from society and the rule of law, but rather require a strong set of institutions to provide the “rules of the game in a society or, more formally, . . . the humanly devised constraints that shape human interaction” (North, 1990:3). These institutions are both formal (e.g., legislation, regulation, regulatory bodies, etc.) and informal (e.g., conventions, codes of behavior, etc.) that together provide a framework for human behavior. While there is no doubt that formal institutions (often termed hard regulation) shape market participant behavior they are most successful when they reinforce and influence informal institutions, particularly social norms (often referred to as soft regulation). Effective market reform requires an alignment between formal institutions and the “rules of conduct that constrain self-interested behavior but are not enforced by any authoritative body that can impose a sanction” – social norms (Coffee, 2001:2171) because the pattern of actors’ behaviors is sustained by the approval or disapproval of a social group (Alm, McClelland, & Schulze, 1999).

While reform has focused on changing formal institutions (laws, regulation, oversight bodies, and so on), little if any attention has been paid to social norms. Consequently, reforms largely ignore “informal protection . . . where the community provides efficient informal incentives . . . and punishment for deviant behavior” (Boytsun et al., 2011:55) irrespective of formal institutions. In the following sections we use evidence from studies of national and regional differences in norms to highlight the relationship between informal institutions and market behavior before applying this logic to an analysis of the GFC.

## Markets Need a Norm-Based Social Framework to Operate

Economics is peppered with seminal advice arguing that people and entities make decisions within a social framework that shapes behavior. For instance, Smith’s (1776) support of markets was based on the observation that individuals have a fundamental and unselfish interest in others’ happiness and pleasure. This shared “sympathy of sentiments” develops into an unconscious system of standards (e.g., see Younkins, 2008). Posner’s analysis of market practices extends this view by highlighting that accepted standards need not be positive. For instance, people who “are unusually ‘fair’ will avoid (or, again, be forced out of) roughhouse activities – including highly competitive businesses . . .” (Posner, 1997:1570). Thus, commentators and scholars emphasize the importance of an appropriate moral framework to underpin effective market governance (e.g., Dawson, 2004).

Traditional economic assumptions about market participant motivations (i.e., that individuals pursue rational self-interest) largely ignore the social forces that can contribute to market behavior (Akerlof, 2007). While self-interest is a major factor in individual decision-making, there is a distinguished research tradition highlighting that self-interest is contextual rather than universal. People do not follow “[a]lmost all economic models [that] assume that all people are exclusively pursuing their material self-interest and do

not care about ‘social’ goals per se” (Fehr & Schmidt, 1999:817).

Research into the relationship between rewards, sanctions, and behavior reveals a complex relationship not provided for in standard economic analysis (Festré, 2010). Seminal research on the ultimatum game (Güth et al., 1982) shows individuals’ perceptions of fairness cause them to deviate from rational self-interest in their decision-making irrespective of culture, time period, and payout levels (Fehr & Schmidt, 1999). Similar evidence suggests that formal institutions such as regulation are more likely to succeed when actors view a sanction as a moral issue rather than a cost; thus, imposing a fine on parents who picked their child up late from day care *decreased* compliance. Parents’ views on abiding by the rule changed from a moral imperative to a compliance cost (Gneezy & Rustichini, 2000a). Similarly, rewarding prosocial behavior with extrinsic rewards can reduce preferred behaviour, compensating people for donating blood can crowd-out intrinsic motivation (Mellström & Johannesson, 2008; Titmuss, 1970), or providing a share in donations to charity collectors can decrease the total collected (e.g., Gneezy & Rustichini, 2000b). These insights match some early analysis of the GFC that highlighted how decision-making deviated from standard economic assumptions (e.g., Rost & Osterloh, 2010).

Studies of national corporate governance systems provide an interesting starting point for understanding how formal (e.g., black letter or hard law) and informal institutions (e.g., social norms or soft law) within a market affect actor behavior (North, 1990). Regulation reform in a national setting requires an understanding of both factors as reform “focused solely on legal rules is likely to be limited at best” (Boytson et al., 2011:42). Reform following the GFC is analogous to the national setting as the neglect of relevant social norms can undermine regulatory interventions if market participant behavior is not modeled accurately (Coffee, 2001).

Nation-focused research has clearly established a link between national norms and economic outcomes. For instance, at a country level the norm of openness is positively associated with the development of capital markets. Similarly, norms associated with religiosity are associated with capital market development (Stulz & Williamson, 2003), economic growth (Barro & McCleary, 2003) as well as attitudes positively affecting economic growth (Guiso, Sapienza, & Zingales, 2004). Similar to norms, country level trust and social capital have been correlated with national rates of growth (Knack & Keefer, 1997), the presence of large organizations (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1997), lending behavior (Besley & Coate, 1995), and stock market participation (Hong, Kubik, & Stein, 2004). Clearly social norms and the associated levels of national trust affect economic outcomes and market behaviors.

Social norms do not replace formal legal structures but rather operate in parallel with sanction-backed rules. For instance, in contrast to many developing nations, Sweden provides no evidence of widespread tunneling (i.e., expropriation of benefits by a dominant shareholder). This is despite formal institutions that allow dual class shares, pyramiding, and cross-holding – all factors normally associated with the phenomenon (Agnblad, Berglöf, Högfeldt, & Svancar, 2001; Holmén & Högfeldt, 2004). Stafsudd (2009)

attributes the lack of tunneling to Sweden’s social norms including higher levels of business honesty. She contends informal institutions explain the advanced nature and behaviors of the Swedish capital market as formal institutions and sanctions are only necessary when these social norms fail.

The effect of social norms is not confined to the national level and, although the research agenda is less well developed, there is clear evidence that social norms operate at a market and/or regional level. Thus, worker behavior within a single country and industry can vary with region-based social norms – for instance there is greater shirking in Southern (compared with northern) Italian banks (Ichino & Maggi, 2000). More strikingly, Guiso, Sapienza, & Zingales (2004) report that New York’s diamond traders do not use contracts as they have sufficient trust resulting from common membership in the Jewish orthodox sect. On a broader scale, financial development is more advanced in parts of Italy where trust is high (the north) than where it is not (the south) (Guiso et al., 2004). In summary, social norms within markets complement formal institutions and legal sanctions are unlikely to function unless backed by social norms. Instead, formal institutions are often a reflection of extant social norms that preceded them (Fehr & Fischbacher, 2004).

The financial sector meets the necessary conditions required for norms to matter. The sector is a social system (e.g., Mizruchi & Stearns, 1994) that satisfies sociological definitions of community (i.e., social interaction, co-location, and common ties (Hillery, 1955)). The US tradition of market participants serving in important policy and regulatory positions only strengthens this conclusion. Just as informal governance mechanisms are thought to be more important to small countries (Stafsudd, 2009), so too in finance. Strong, close network ties allow for “[r]epeated interactions” where actors are “more likely to enforce social control” (p. 67).

The spread of social norms through social networks and its subsequent effect on behavior is the subject of recent advances in fields as diverse as medicine, business and information technology. For instance, a series of 32-year longitudinal studies have highlighted how position in a social network is related to the later incidence of obesity (Christakis & Fowler, 2007), smoking cessation (Christakis & Fowler, 2008), happiness (Fowler & Christakis, 2008), as well as altruistic versus self-interested behavior (Fowler & Christakis, 2010). An actor’s direct and indirect contacts are clearly related to behavior and attitudes through a hypothesized change in social norms (Fowler & Christakis, 2010).

Taken together, evidence suggests that social norms matter to market behavior, and they are likely to matter more to the financial community. Since finance involves a dense, tight social network (Keister, 2002), and financial contracts rely on the trust that another party will fulfill their end of the bargain, social norms are critical to understanding participant behavior within the sector (Guiso et al., 2004).

### **Norms Work with and Reinforce Formal Institutions to Provide the Market Framework**

Social norms affect economic behavior and market outcomes not in isolation but in concert with formal institutions – both evolve and influence each other to reflect and shape com-

munity needs and expectations. For instance, the legal principle that shareholders do not owe a duty to each other (*Foss vs. Harbottle* (1843) 67 ER 189) has been superseded by numerous statutes designed to protect the integrity of the market (e.g., prohibitions on tipping off and insider trading [Farrar, 2005]). Sometimes the legislature changes the law to influence societal norms (e.g., modification of domestic violence laws); at other times the law is preceded by developments in societal norms and acts to codify these social norms (e.g., the prohibition on smoking in buildings in some countries or even states but not in others [Kahan, 2000]).

In a national setting, Roe (2002) argues cultural constraints provide boundaries for behavior in economic systems. Thus, Swedish society's lower outrage threshold around CEO pay provides a dampening effect on levels of executive pay compared to the US (Stafsudd, 2009). In this way, social norms can result in "'good' economic attitudes, and these, in turn, cause 'good' corporate governance patterns" such as transparency and less expropriation (Boytsun et al., 2011:43).

Yet regulatory responses to the GFC have focused on assumptions of rationality rather than a considered study of actor norms. Regulatory solutions address problems based on curbing rational self-interest, including: 1) moral hazard in risk-taking (e.g., being too big to fail); 2) planned and logical risk ring-fencing (e.g., quarantining trading from banking such as under the Volcker rule); 3) improving transparency and regulation of derivative trading; 4) remuneration claw backs to decrease gaming and risk taking. These interventions have been made "on the run" with little reflection on the systemic issues involved in the crisis (Davis, 2010b:125). As a result, the recent US legislation *Dodd-Frank Wall Street Reform and Consumer Protection Act* (H.R. 4173) has 243 rulemakings and requires 67 studies to be conducted (DavisPolk, 2010). In so doing, the interventions risk treating the symptom rather than the

cause as well as imposing unnecessary costs on the economy (Conyon et al., 2011).

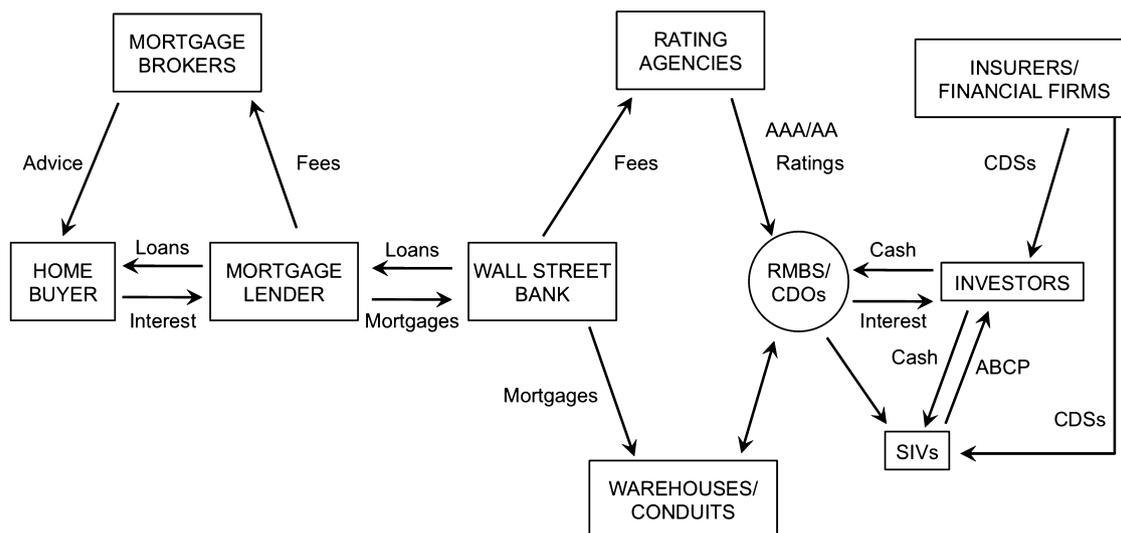
In contrast, there is significant evidence that "[i]nformal institutions . . . exercise an independent direct influence" on behavior in corporations (Boytsun et al., 2011:43). If, as national data suggest, the causes of the GFC are linked with social norms within financial sector networks, current regulatory efforts need to move beyond simplistic behavioral assumptions (Akerlof, 2007). If problems of transparency and excessive risk taking are symptoms not causes of the social norms underlying the GFC, then a recurrence of GFC conditions is almost guaranteed (Clarke, 2004). Addressing this problem requires an understanding of how social norms may have contributed to the latest financial meltdown.

## THE GFC – AN ANALYSIS AND NORM BASED EXPLANATION

Understanding the GFC is difficult, and we acknowledge that more comprehensive analyses have been and will continue to be made (e.g., Cassidy, 2009; Stiglitz, 2010). The crisis involved many different actors in sometimes apparently unrelated transaction chains with end users removed by several layers from the commercial financial markets (see Figure 1). Despite this complexity, it is possible to identify the generative mechanisms behind the GFC by analyzing a single product, the CDO. In so doing, we are not positing that a single product was responsible for the GFC, but rather that by examining the use of that product we can provide significant insights into the GFC's causes.

Financial innovation (i.e., "new securities, financial structures or other innovative solutions to meet market participants' needs" [Moles & Terry, 1997: para. 1]) lies at the center of the GFC transaction chain. While home owners borrowed

FIGURE 1  
The Mortgage Chain Behind the Subprime Mortgage Crisis



Source: Cassidy 2009: 257.

beyond their means (Ferguson, 2008), mortgage brokers engaged in unethical and illegal practices (Cassidy, 2009) and various other parties demonstrated questionable behavior, the chain of events was stimulated by financial innovation. Similarly, we acknowledge that macro economic structures certainly played their part, but the central cause of the GFC was the repackaging of doubtful loans in innovative ways by investment banks. Once these instruments gained ratings agencies' approval they stimulated compelling incentives for retail lenders to relax lending practices, implement doubtful remuneration practices and take on high-risk borrowers.

### **CDOs – An Example of the Dangers in Financial Innovation**

The use of CDOs leading up to the GFC provides an insightful example of the risks of financial innovation and how this innovation can trigger systemic failure (Partnoy, 2009). A basic CDO is an asset-backed security reliant on incoming repayments from loans, bonds or other debt. A standard cashflow CDO involves a Special Purpose Entity (SPE) buying debt (usually loans or bonds from banks), splitting the debt into different tranches of quality and then on-selling it. Investors can purchase different tranches of the resulting CDO security where a tranche is a "slice" of the CDO based on a pre-calculated risk profile; tranches with a higher risk profile get a higher return (Smith, 2009).

Given that this transaction provides 1) no increase in revenue and 2) no overall change in default risk for the parties, it is not immediately obvious where the extra value is created. Why are people willing to pay more for debt with the same repayment levels and an unchanged risk profile?

**The Theoretical Value of CDOs.** Skeel and Partnoy (2007) posit that repackaging debt into tranches provides market participants with access to a new security type and in doing so provides a more complete market. If underlying investments (whole mortgages) either 1) misprice the asset or 2) limit the investor pool, cashflow CDOs will provide real fixed income assets that have a higher credit rating than some of the underlying assets. For instance, if the ratings agencies' proprietary methodologies calculate risk more accurately, then value is created through financial mathematics, similar to the value created by adoption of derivative pricing mechanisms such as the Black-Scholes option pricing model. Alternatively, a CDO may create value if it opens access to market participants. For instance, if potential market participants are precluded from purchasing a certain class of assets and the CDO repackaging overcomes this exclusion, the resulting increase in market depth can add value. Importantly, both of these assumptions rely on valuing risk accurately (see Skeel & Partnoy, (2007) for a more detailed analysis).

**CDOs – Is the Value Illusory?** In the lead up to the GFC, CDO creators bought debt, restructured it, and then on-sold it at a higher price. Generating high, ongoing returns from this process requires a persistent difference between the prices in the underlying debt market and prices in the CDO

market. Basic economic theory, however, suggests that arbitrage opportunities would disappear as participants in the underlying debt market correct their pricing, particularly given the large transaction costs involved in establishing a CDO. Continuing arbitrage opportunities breach the "law of one price" (Mankiw, 2008:707) and can only persist if there is information asymmetry or regulatory controls.

In the absence of regulatory controls, persistent above-market returns indicate that the underlying financial innovation is flawed. For CDOs there were two key sources of information asymmetry that provided the basis for innovation failure: 1) complex pricing methodologies and 2) subsequent ratings agency approval. First, the proprietary methodologies developed to price CDO risk were "complex, arbitrary, and opaque" providing investment banks with "a ratings 'arbitrage' opportunity without adding any actual value" (Skeel & Partnoy, 2007:1041). As the market for CDOs experienced rapid growth, CDO ratings were based on untested correlation factors within and between markets. This flaw in CDO models was highlighted as a cause for concern prior to the meltdown (e.g., CGFS, 2005) and explicitly disclosed by the rating agencies (e.g., see Skeel & Partnoy, 2007). Many experienced actors were well aware that their innovation was highly speculative.

The flaw in the creation of these financial instruments was made worse by ratings agency reliance (a point to which we return). CDO calculations use ratings provided by the agencies instead of direct market feedback to assess underlying asset valuation and risk. By using a proxy (i.e., the rating) the creator ignores the ongoing assessment of multiple market participants and this encourages gaming. Each rating (e.g., the rating AAB) is based on a collection of underlying assets of heterogeneous quality. If a financial instrument creator can assemble a package of low quality assets from within a class, they stand to make more than if they use higher quality assets in the same rating class. While these differences are priced into market information, they are not priced into a rating nor the consequent CDO. This leads to a race to the bottom (within the various classes of assets) as CDOs become disconnected from the underlying markets.

The divergence of model calculations from underlying valuations created ongoing arbitrage opportunities. Additionally, the calculations used in the ratings process are carried out by the innovators and merely verified by the rating agency. This provides the conditions whereby the person creating the instrument has greater knowledge about its risk than both the ratings agency and purchaser, an ideal setting for exploiting an information asymmetry. In summary, while there are some logical arguments as to how financial innovations like CDOs create value, there are also several major and significant potential failure points.

### **MODELING THE DEVELOPMENT OF SYSTEMIC RISK**

The preceding sections provide the elements for developing a model of how social norms contributed to systemic risk during the GFC. First, we have highlighted that market regulation and government interventions focus on the rational self-interested assumptions of economics rather than an

assessment of the social norms at work in a market. Second, international and regional studies clearly establish that social norms are linked to market participant behavior. Third, financial innovation and the resulting information asymmetries associated with complex financial products such as CDOs were central to the GFC. In this section we synthesize these three points to develop a model of how systemic risk developed during the GFC, paying particular attention to the role of market norms.

### Professional Service Firms – the Driver of Financial Innovation

The example of CDOs highlights how financial innovation provides the opportunity for wealth creation. A new financial instrument that assesses risk better or aids the completion of the market will provide above market returns for the users, at least initially (Skeel & Partnoy, 2007). The market rules prior to the GFC facilitated the rapid growth of financial innovation; for instance, Figure 2 documents the growth in the sub-prime mortgage market prior to the GFC. This figure highlights that the doubling in market share of sub-prime mortgages was largely fueled by securitized instruments – those that required financial innovation and complex instruments (FCIC, 2011). Similar trends in non-traditional banking led the Secretary to the US Treasury to conclude that “[b]y far the most significant event in finance during the past decade has been the extraordinary development and expansion of financial derivatives” (Greenspan in FCIC, 2011: 48).

Financial innovation is a product of the human and social capital of its creators. Investment banks (the key financial sector innovators leading up to the GFC) supply the human capital required to meet the demand of the

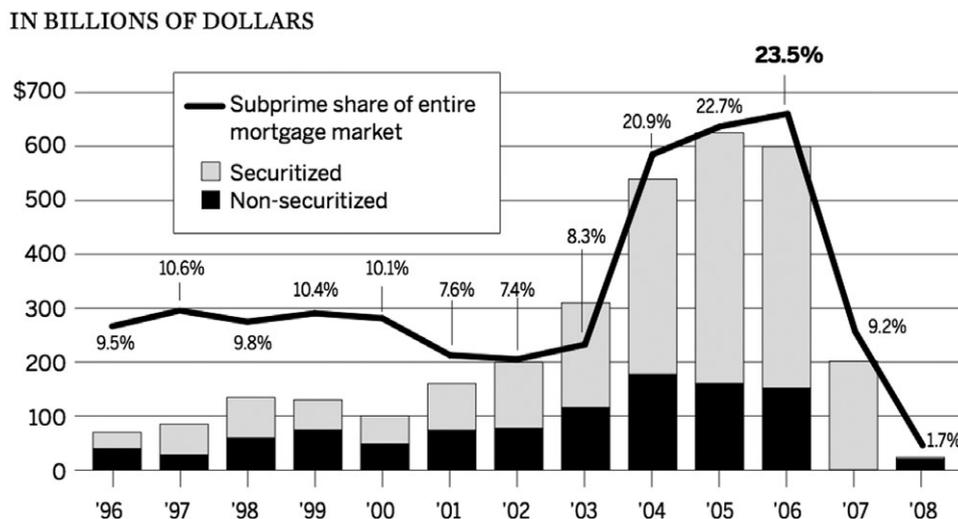
sector for innovation. Importantly, investment banks share the traits of most professional organizations (Hall, 1967; Scott, 1992; Wallace, 1995) and have long been considered professional services firms (e.g., Sharma, 1997). Their employees use their knowledge and skills to advise and construct products for clients (see, for example, Hitt, Bierman, Shimizu, & Kochhar, (2001) for the relationship between human capital and professional service firms). Employees also use their social capital to facilitate the transactions around those products for the benefit of the firms’ clients. In general, these knowledge workers are appointed and evaluated by their colleagues (i.e., other professionals) and their work largely involves independent decision-making around how they do their tasks (i.e., autonomy) (Wallace, 1995). Thus, our starting point is to observe that investment banks provided the generative mechanism for flawed financial innovation; without the human capital in these firms constructing new and untested products, the chain of systemic risk would not have emerged (see Figure 1). In summary:

*Proposition 1: The human capital present in professional service firms (i.e., investment banks) provided the necessary but not sufficient conditions for the GFC through the development of flawed financial innovation in a market reliant on social norms rather than regulation of flawed innovation.*

### The Role of the Caveat Emptor Norm in the GFC

Employee expertise within professional service firms presents a major conflict for them; their superior knowledge and experience creates value for clients but also exposes the client to possible exploitation. Society, regulators, and the law have long recognized that information asymmetry

FIGURE 2  
Growth in Subprime Mortgages in the US 1996–2008



Note: Percent securitized is defined as subprime securities issued divided by originations in a given year. In 2007, securities issued exceeded originations.

Source: Financial Crisis Inquiry Commission, 2011:70.

between client and provider based on the provider's knowledge and expertise is problematic (Sharma, 1997). Since buyers of professional services are often unable to assess the quality of the advice they receive, these kinds of firms are generally subject to express legal and normative regulation (Suddaby, Cooper, & Greenwood, 2007). In transaction cost terms (Williamson, 1985), the search and information costs associated with advice from professional service firms are so high that buyers rely on proxies such as reputation for external validation (e.g., Nayyar, 1993; Sharma & Patterson, 2000). In the case of CDO development, a purchaser would need to develop their own models and correlation factors between debt markets to test the CDO instruments – a prohibitive cost. As a consequence, in most fields of endeavor (e.g., law, accounting, etc.) professional service firms do not operate on the principle of *caveat emptor* (let the buyer beware). Instead, the professional owes a duty to their client.

This problem is recognized in the consumer segment of financial markets where *caveat emptor* has largely been replaced in developed economies with a set of legislation, regulation, and common law precedent that protects buyers against unfair transactions. In the commercial segment of the financial sector, however, *caveat emptor* remains a basic principle of contracting (e.g., in the US see Wade, 1994; in the UK see Norton, 2005). *Caveat emptor* is a principle developed by the common law over centuries that states “a buyer must ascertain the good quality of the goods he or she purchases” (Butt, 2004:64). The only exception occurs where the seller has given an express warranty, or where a condition or warranty can be implied from the nature and circumstances of the sale (Finnemore & James, 1996). In the absence of fraud, the buyer purchases at her/his own risk.

When *caveat emptor* was established, the quality of goods was easily assessed and the law matched a social norm of taking care when bartering. As goods became increasingly complex, however, consumers had difficulty ascertaining their quality and *caveat emptor* “was replaced in the 20th century by a recognizable body of product liability law offering protection to those who suffer product-related loss or damage” (Masel, Grant, & Vout, 2010:33.4.30). This global phenomenon is mirrored in most countries (e.g., see the OECD, 2010) Committee on Consumer Policy's guide to the development of consumer regulation).

The financial sector has not followed this trend, but rather developed into two streams, one for consumer transactions and one for commercial transactions. This has led to a bifurcation in buyer protection and the relevant social norms. End consumer transactions in the financial sector are now often subject to highly complex and detailed regulation designed to protect the end user of financial products from unscrupulous sellers (e.g., Tarr, 1980, 2010). Commercial transactions, however, remain based upon a system that allows for the sale of risky (and even unsound) assets provided there is sufficient disclosure (Taylor, Pflaum, & Flesch, 1996). There is no legislative ability to review the merits of an investment, only an ability to prosecute for fraud or insufficient disclosure. There is some understandable logic to this approach when applied to securities as distinct from products. The selling of a security involves the selling of risk. Under the eco-

nomic principle of risk and return, the buyer is willing to assume greater risk in the expectation of receiving a higher return. To have the seller of such a security “guarantee” either the return or remove the risk of failure would undermine many benefits of financial markets.

The continued use of *caveat emptor* in commercial financial markets rests on two unstated assumptions required for equal and shared information between the parties: 1) the seller must fully inform the buyer as to the risk profile of the security and 2) the average buyer should have the ability to understand the risk profile of the product they are buying (e.g., ANZSFRC, 2010). Without these two assumptions, the search and information costs become exorbitant and undermine the efficiency of the market transactions; quite simply “both monitoring and metering are highly problematic when knowledge-intensive service products are involved” (Sharma, 1997:776).

The financial innovation that drove the spread of CDOs breaches these assumptions and so fails to strike a “balance between *caveat emptor* and . . . protection implicit in the current . . . regulatory approach” (Davis, 2010a: para. 14). Investment banks created products based on their expertise and then took advantage of the asymmetric information they possessed. Investment banks (creators and sellers of the product) would, for instance, simultaneously take an undisclosed financial position based on the security failing. This is problematic when products are not understood by the participants and/or based on flawed information.

Email correspondence within Goldman Sachs provides corroborating evidence for this conclusion. Extracts included details of how “two Goldman bankers . . . ‘structured like mad and traveled the world, and worked their tails off to make some lemonade from some big old lemons’” (Phillips, 2010: para. 14). Vice-President Fabrice Tourre boasted he had “managed to sell a few Abacus bonds to widows and orphans that I ran into at the airport” (Story, 2010: para. 16). These weren't isolated incidents but part of the management system, evidenced by how the firm developed and sold “shitty” deals such as Timberwolf, making that deal in particular a top priority for the sales team for at least several weeks (Perton, 2010: para. 2). As a result, the US Senate Permanent Subcommittee on Investigations issued a rare bipartisan declaration that Goldman was selling highly risky securities while betting that these same securities would fail (Phillips, 2010).

The social norm of *caveat emptor* applied by the investment banks in these instances is largely out of step with community expectations and the evolution of consumer protection. In a recent open meeting of the US Securities and Exchange Commission (SEC), Commissioner Aguilar commented that “. . . market participants would not be able to function, much less profit, without the trust of investors and the public as a whole” and that a regulatory regime works best when it “prevents misconduct in the first place” (Aguilar, 2010: para. 1). Clearly, the SEC is advocating the development of an approach to market participation that is founded on the norms of fairness with advisors not exploiting information and expertise asymmetries.

But under current law and market norms operating in the commercial component of the financial sector, so long as

there is no fraud, there is no breach. The entrenched nature of the *caveat emptor* norm was reflected in the words of Goldman Sachs MD Michael Swenson who, despite widespread public backlash, commented that "I do not think that we did anything wrong" (Phillips, 2010: para. 7). He is pointing out they deal with sophisticated investors who should be able to make their own assessment of the securities in which they trade – and more fool them for not doing so. Thus, we contend that:

*Proposition 2: The norm of caveat emptor provided a necessary but not sufficient condition for the GFC by moderating the relationship between the investment banks and flawed innovation. The higher the acceptance of caveat emptor the greater the propensity for flawed innovation in the financial market.*

As previously explained, the presence of financial innovation does not of itself result in systemic risk. Rather systemic risk emerges through information asymmetries, most evident when there are persistent profits as a result of market failure for mispriced products. The demand side of the market (buyers) remains oblivious to the true risks involved in flawed, innovative financial instruments because 1) the *caveat emptor* norm does not require disclosure of the flaws and 2) buyers do not understand the product and its assumptions (a factor made worse as a result of ratings reliance, a point to which we return). Consequently, in a sign of the failure of the market to detect pricing errors, financial innovators took increasingly aggressive "market making" positions based on their inside knowledge (e.g., Larson & Weise, 2010a, 2010b).

Basic economic theory suggests that in an informed, efficient market this would have been a temporary effect as the price of securities in the underlying market (for instance, the pricing of mortgages in the market underlying CDOs) increases with demand. The continued arbitrage opportunities were only possible because of flawed innovation and exploited information asymmetry. In contrast, the input markets for the flawed products (in the case of CDOs, the mortgage markets) were subject to direct valuation and not reliant on financial calculations. They did not rise proportionally despite the increased demand brought on by the financial innovation. Thus, an informed input market combined with a misinformed demand sector led to the conditions for an ongoing arbitrage and persistent above-market returns such that we propose:

*Proposition 3: Persistent above-market returns based on flawed financial innovation eventuated as the product creators exploited information asymmetries under the norms of caveat emptor and ratings agency reliance.*

### **Ratings Reliance as a Norm and Facilitator of the GFC**

A second damaging social norm that magnified the information asymmetry problems between creators and buyers was reliance on ratings agencies. In 1936, the Comptroller made regulation of US securities dependent on the assessments of rating agencies. Consequently, rating agencies have "become deeply embedded in investor culture" (Partnoy, 2009:438). This is despite the original intent of the move. In a speech

that foreshadowed the possible problems faced today, the Comptroller noted that (O'Connor in Harold, 1938:32):

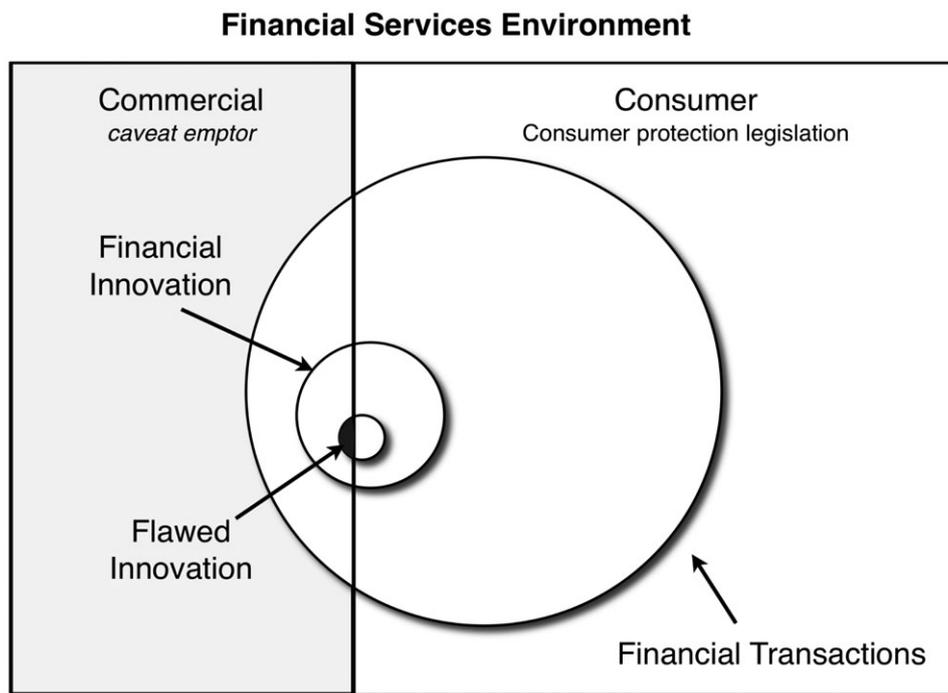
The responsibility for the proper investment of bank funds, now, as in the past, rests with the Directors of the institution, and there has been and [there] is no intention . . . to delegate this responsibility to the rating agencies, or in any way intimate that this responsibility may be considered as having been fully performed by the mere ascertaining that a particular security falls within a particular rating classification.

From a transaction cost perspective, the search and information functions necessary for assessing the risk in the transaction were largely outsourced to the ratings agencies. Financial products can be opaque and misleading on their face, even to experienced investors (Partnoy, 2009). Transactions like CDOs involved a specialist advisor (the investment bank) constructing the product and then having it verified by a third party (the ratings agencies). This process abdicated critical aspects of the risk assessment to third parties whereby those trading did not undertake independent assessments of the credit worthiness of investments; instead investors, promoters and governors of the SPEs underpinning the instruments placed reliance on credit ratings agencies. These key parties were now one step removed from responsibility for the underlying assumptions on which the financial innovation was based. This is particularly problematic given that the vendor of the security pays for the rating, not the buyer who is likely suffering from the information asymmetry (Partnoy, 2009).

The social norm of market reliance on ratings agencies is compounded by the evolution of the Delaware court's increasingly narrow view of a director's fiduciary duties. Directors owe a duty of care i.e., to act with skill, judgment, or competence (Bainbridge, 2008; Baxt, 2005). At first glance, it seems improbable that someone selling or buying a financial product without assessing its risk could establish that they were acting with due care, particularly if the entire entity they govern (in the case of SPEs) is based on the product. The balance between measured risk taking and holding directors and officers accountable for their competence is delicate and the Delaware courts have established a preference that incompetent managers and directors are not accountable for their failings (Alces, 2009). Instead, the courts rely on a procedural test of care (*In re Caremark Int'l, Inc. Derivative Litig.*, 698 A.2d 959, 967 (Del. Ch. 1996)) where if, "a decision [is] substantively wrong . . . [this] provides no ground for director liability . . . [when] the process employed was either rational or employed in a good faith effort to advance corporate interests."

The business judgment rule supports this position and only requires decisions be made on an informed basis (Alces, 2009). Applied to deals such as CDO transactions, the boards had a process where two independent experts assessed the financial instruments. Thus, despite not exercising any skill, judgment, or competence (even over the very foundation of the entity they governed in the case of SPEs), and in direct contrast to the Comptroller's 1936 intent, directors and officers satisfied these lower procedural standards without assessing the risk of the products underlying their trades. Quite simply the limits of the methodologies

FIGURE 3  
Source of the GFC: Financial Innovation under a Norm of *Caveat Emptor*



used by ratings agencies and the risks involved in instruments like CDOs were not sufficiently understood (CGFS, 2008) nor questioned by directors of SPEs. Where ratings agencies' assessments are accurate, this does not cause a problem. However, in the case of flawed innovation, it provides a necessary condition for their widespread adoption as the market does not self-correct over the short to medium term. Ratings agencies assure buyers that the flawed innovation is sound and in so doing prolong the profitability of flawed financial innovation by reducing the information and search behavior of the buyers. Thus we propose that:

*Proposition 4: The social norm of relying on ratings agency assessment of risk provided a necessary but not sufficient condition for the GFC by moderating the relationship between flawed innovation and persistent above-market profits.*

The mechanisms behind the failures in the CDO market are representative of a widespread problem; similar logic applies to other innovative and complex financial instruments. It is not the particular security or innovation itself that is a problem, but rather the unknowns associated with financial innovation that can be exploited by market participants with asymmetric information due to the underlying sector norm of buyer beware. The conditions making events such as the GFC possible involved complex transactions with methodologically questionable assumptions not readily apparent to the buyer or even the creator/seller (Partnoy, 2009). The particular focus of our model is presented in Figure 3.

As Figure 3 highlights, existing consumer protection legislation protects consumers against some flawed innovation within the financial transactions market – and so consumer

protection does not form part of the generative mechanisms for the GFC. Instead, the source of the GFC was flawed financial innovation that arose in the commercial environment where the norm of *caveat emptor* prevailed (the shaded area in Figure 3). As the figure also highlights, our focus is not on all financial innovation, but rather the subset of innovation that is fundamentally flawed and results in persistent above-market returns in the commercial sector. Problems of flawed innovation in the consumer market are best addressed with consumer protection legislation, which is already extensive. Our key contention is that the social norms of *caveat emptor* and ratings reliance allow flawed financial innovation to persist in the commercial segment of the financial services market, thus creating systemic risk.

### The Reinforcing Role of Remuneration

Finally, the reward and reinforcement systems in the financial sector are thought to be an important contributor to the adoption and spread of social norms driving financial sector behavior (Davis, 2010a, 2010b). Incentives and behavior are deeply intertwined (e.g., Gibbons, 1998) and the difficulty of ensuring that incentives reinforce desired norms and behaviors is widely accepted (Kerr, 1975).

Much of the effort spent in investigating the role of remuneration systems at banks in the GFC has concentrated on the remuneration of CEOs and sometimes senior executives (e.g., Conyon et al., 2011; Fahlenbrach & Stulz, 2011); this may have limited application when understanding the stability of the financial system. Conventional research is largely motivated by an agency theory perspective and seeks to understand if the remuneration for senior executives

maximizes shareholder interests through increased risk taking by senior management (Eisenhardt, 1989). Regulation of the financial system, however, aims to ensure the robustness of the financial system, usually through protecting non-shareholding parties such as depositors. The stated (and often unstated) position on remuneration practices is that parties other than the shareholders are “uninvited guests” to the pay debate (Conyon et al., 2011:10) and so only indirectly addresses the regulation debate.

Even so, evidence is emerging that remuneration practices exacerbated the potential conflict between shareholder interests and systemic stability (Bebchuk & Spamann, 2010; Bhagat & Bolton, 2010). For instance Fahlenbrach & Stulz (2011) report evidence of more high powered incentivization in bank CEOs; the wealth of a bank CEO increased \$24 for each \$1,000 of shareholder wealth (more than five times the \$4.36 for S&P 500 CEOs as reported by Murphy (1999)) and they suffered more severe losses when the firms lost value. At the CEO level, increased sensitivity to pay for performance appears to have exacerbated an increased risk appetite of bank shareholders (Van Bakkum, 2010) to the detriment of the system and exacerbation of the moral hazard associated with bailing out banks.

On a more general level, the decisions around instruments were not the domain of CEOs, but rather traders and middle level managers. For instance the only employee being pursued in the infamous Goldman Sachs Abacus 2007-AC1 transaction is a 28 year old mid-level executive. What is interesting about investment banks is that the highest paid employees are often these people (traders and fund managers) and not the senior executives (Westbrook, 2010). Thus, remuneration practices have deep and wide effects on decision making in the firm and the systemic bonus culture of investment banks has persisted post GFC (for instance, Goldman Sachs, employee bonuses amounted to \$15.3 billion in 2010 – an average of US\$493,000 per employee). This systemic movement to higher levels of pay most often tied to performance is demonstrated in the comparative growth in financial sector remuneration to levels not seen since the Great Depression (see Figure 4) (FCIC, 2011).

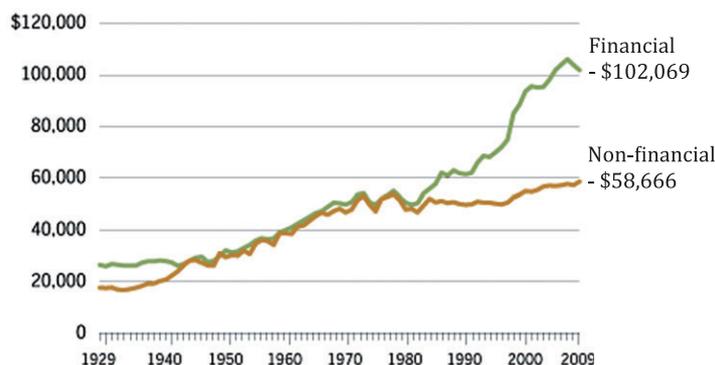
Mid-level managers in investment banks are unlikely to be remunerated on corporate wide goals and risk profiles; instead they will be rewarded for their individual performance on the instruments they deal with and the markets in which they deal. Consequently, many bonuses that caused public outrage were not related to corporate performance, but rather they involved rewarding individuals for behavior such as remaining in their position (Murphy, 2009; Quinn, 2009). An emphasis on output based controls for the professionals such as these is thought to increase the opportunistic behavior of the professionals involved (Sharma, 1997). Thus, we contend that where flawed innovation leads to ongoing above-market returns, there will be an increase in remuneration (as a result of the social norms) for those who facilitate these transactions such that:

*Proposition 5: Due to the financial sector's remuneration norms, persistent above-market returns (including those from flawed financial products) led to high levels of performance based, individual remuneration in the creators of financial products.*

While most commentators see remuneration as a single firm governance decision (e.g., a board setting a sub-optimal remuneration scheme within a single firm (Bebchuk & Fried, 2003)), there is growing evidence that remuneration failures are systemic. Specifically, as firms increasingly use benchmarking as the basis for their remuneration schemes, failures in single firms (where executives leapfrog their benchmarks) quickly spread to “subsequent ‘legitimate’ pay increases for others” (DiPrete, Eirich, & Pittinsky, 2010: 1673).

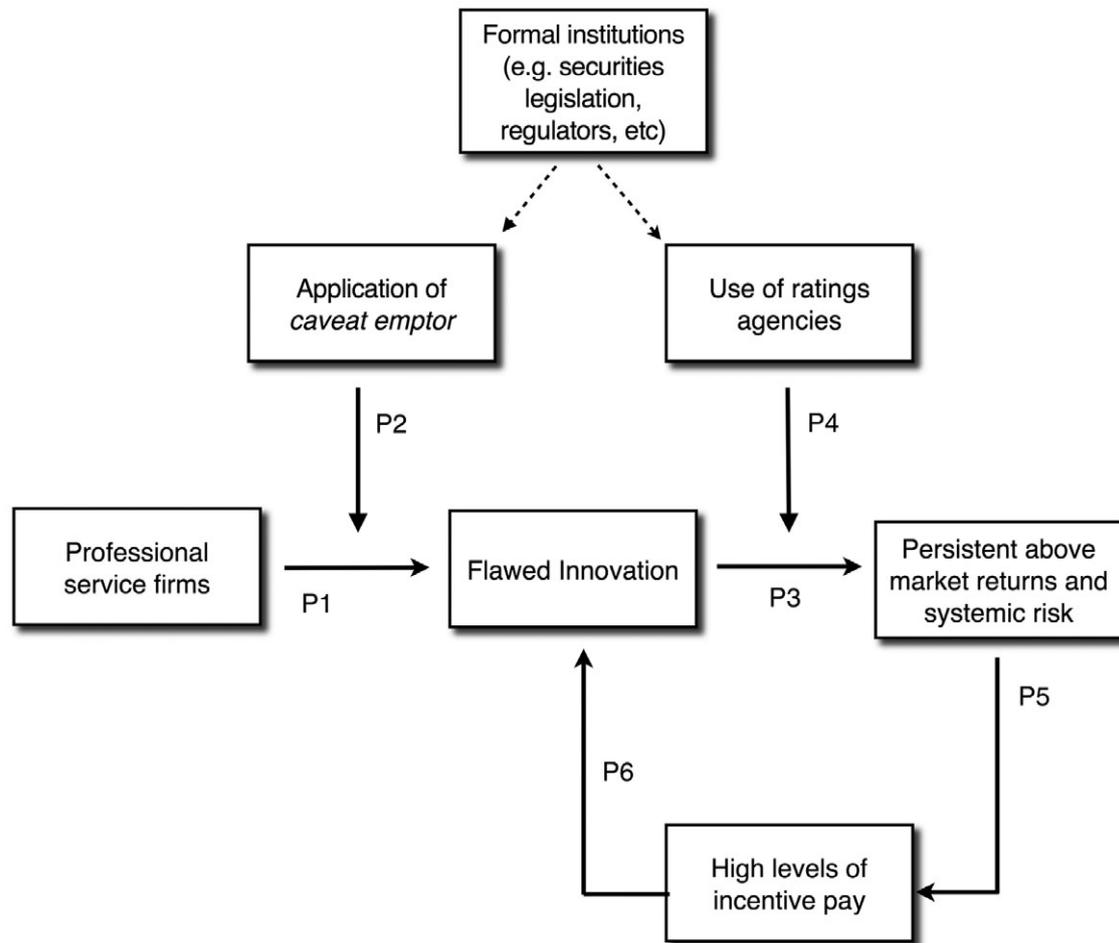
Comments from investment banks during the crisis highlight the conditions for a similar effect as sector remuneration practices were embedded due to the business imperative to retain and attract talent. This position was evident throughout the financial sector at the time; for example the continued, intense “[c]ompetitive recruiting in investment banking and capital markets” meant that Bank of America needed to take “the steps necessary to retain key talent” (Oppenheim in DeCambre, 2009: para 7; for an academic perspective on the phenomena see Freeman, 2010; Murphy, 2009). Thus, the

**FIGURE 4**  
Growth in Wages Comparison Between Financial and Nonfinancial Sectors in the US 1928–2009



Source: Financial Crisis Inquiry Commission, 2011:62.

FIGURE 5  
A Norms-Based Model of the Evolution of Systemic Risk in the GFC



remuneration practices at one firm become an important environmental factor for competing firms, particularly when talent (or human capital) is central to value creation and maintaining profits. Thus, as with the norms of *caveat emptor* and ratings-reliance, so too we would propose:

*Proposition 6: Norms surrounding remuneration practices spread through the financial sector with the resulting mimicry creating a positive feedback loop to flawed financial innovation.*

Figure 5 provides a summary of our propositions. It highlights that professional service firms in the financial sector (e.g., investment banks) created complex and opaque financial products, some of which generated fundamentally flawed transactions where parties to the transaction had no way of ascertaining their true risk profile. The sector norms of *caveat emptor* and reliance on a third party (ratings agencies) coincided to allow the professional service firms to generate persistent above market returns from flawed financial innovation. These above market returns stimulated the remuneration system to induce mimicry across the financial sector, resulting in further flawed innovation.

### REGULATING FOR THE NEXT CRISIS, NOT THE LAST CRISIS

We maintain that present financial regulatory responses largely ignore the key interaction between social norms and financial innovation we have outlined. Instead, they focus on traditional or standard economic assumptions in search of a universal solution. Current regulatory interventions aimed at improving transparency would not address the transaction failure we have outlined, because transparency surrounding flawed assumptions (e.g., market correlation factors) was already in place. Further reforms aimed at improving information exchange will not reduce information costs that are based on knowledge of flawed product calculations, particularly if the creators of innovation are motivated to exploit the information asymmetry.

Instead, regulatory intervention would benefit from focusing on motivating the most knowledgeable parties to pass on their knowledge and assessment of the product where they believe it to be flawed. Without a tight focus, regulatory effort may be wasted or counter-productive if it does not directly address the issues of financial sector norms

(e.g., see Australian Productivity Commission, (2007) for a review of regulatory costs or Conyon et al. 2011 for a detailed review of the development and costs of regulating executive remuneration). This requires an intervention to focus on the intersection of financial innovation and the norms of *caveat emptor* and ratings reliance. Such an approach motivates the person in the most knowledgeable position to be responsible for the soundness of the instrument, without requiring an excessive regulatory burden outside this narrow focus. In addition to meeting societal norms of fairness, this approach is likely to be economically efficient as the search and information costs for the purchaser are prohibitive, if not impracticable in the circumstances outlined. In the remainder of this section, we detail a minimal regulatory intervention designed to curb these interactions and so address possible future systemic concerns (Clarke, 2004).

### Regulate the Trade, Not the Product or Trader

Since problematic instruments (e.g., CDOs) and actors in the financial system (e.g., investment bankers) evolve over time, regulating either is unlikely to result in preventing future crises. Instead, we contend that a particular type of transaction is problematic and should be the focus of regulatory intervention. Regulating in this way can begin by differentiating between transactions that provide a material benefit for the parties to the transaction versus those that involve pure speculation. This requires a distinction between both the type of product and the nature of the trader.

There is a fundamental difference between a real product and a synthetic product. A real product such as a traditional, generic financial product (e.g., mortgage or deposit) involves an underlying asset or cash flow backed debt from a single source. These kinds of transactions (which we term class one transactions) have been around for centuries and are well understood by market participants and most consumers. There is clear financial benefit to both sides of the transaction (e.g., the bank has an interest payment stream and the borrower has immediate access to the funds). With long-established legal principles supplemented by numerous consumer protections, these products do not require substantial regulatory intervention.

By contrast, a synthetic product (e.g., a constructed product such as an option, credit default swap, futures contract or such) does not directly involve a real asset or cash flow. It is derived from an underlying product and is a contract backed by other real products or a promise surrounding cash flows in the future that need never be executed. Since there is no tangible cash flow involved in the transaction, individuals can enter the trade with either a real or speculative intent. Traders with a real intent have some form of real interest in the subject matter of the transaction such that they have a material benefit even if the transaction itself loses. Speculative traders, on the other hand, do not have a material interest in the subject matter of the trade and instead the transaction amounts to speculation about the future price or value of the real asset(s) underlying the transaction.

**FIGURE 6**  
A Focus on Regulating the Transaction, Rather than the Product or Trader

	Real product	Synthetic product
Real trader	No change (class 1 transaction)	No change (class 2 transaction)
Speculative trader	No change (class 1 transaction)	Impose duty of care (class 3 transaction)

Transactions involving synthetic products and real traders (which we term a class transaction) are less likely to suffer from information asymmetry. A real trader will be intrinsically interested in the subject matter of the trade (for example, a copper producer using a derivative to hedge future prices lives and breathes copper pricing) and so the transaction is more akin to insurance than speculation. Since a real trader is unlikely to suffer from information asymmetries and their downside is balanced (i.e., they gain in some other area of business if their position "loses"), current regulation would be sufficient.

By contrast, speculative traders dealing with synthetic products (which we term class three transactions) are more susceptible to information asymmetries. They are divorced from the underlying cash flows and risk calculations both via the nature of the product and the nature of their interest. Unlike real traders, speculative traders are involved in a zero sum game – they will suffer loss if they are incorrect about their positions – and so the trade takes on the attributes of a gamble rather than a hedge. It is precisely in these situations that further regulation is required (see Figure 6).

In summary, neither regulating the trader (real or speculative) nor the financial instrument (real or synthetic) is the answer. Instead, we propose the imposition of a duty of care on the developer of a financial instrument at the level of a specific kind of transaction (i.e., the intersection of synthetic instrument and speculative trader). Since each trade has two parties (the buyer and the seller), it is possible that a trade could be both a class two transaction (if one party has a real interest in the underlying cash flow) and a class three transaction (if one party is a speculative trader).

### Duty of Care – A Necessary Requirement for Class Three Transactions

Because flawed financial innovation can have substantial, negative effects on the financial system, it is reasonable to

expect that creators and sellers of products derived from that innovation be held accountable for errors. Modifying the *caveat emptor* norm through regulation for class three transactions would be one possible way of achieving this aim with minimal impact on financial innovation. Specifically, creators and sellers of products involved in class three transactions would be required to notify their clients of 1) any material concerns they have with the product underlying the transaction, and/or 2) any financial involvement in the transaction (or similar transactions) that their firm holds. Both of these actions provide the speculative trader with improved information about the transaction they are about to enter at minimal cost.

Requiring the creator to notify the transaction parties of their position and concerns with a product will address problematic financial products, particularly those where the creator knows or is recklessly ignorant that the product is likely to fail. If a transaction involves a product where the price is no longer a reflection of the intrinsic value of the underlying asset, the creator should notify the transaction parties of this point. Uncontrolled *caveat emptor* allows the creators of flawed innovation to continue their business without recourse, like Ford selling Pintos they know have faulty fuel pumps. Instead, what is required are appropriate warnings to market participants.

Imposing a duty of care to overcome the *caveat emptor* norm for Class 3 transactions is more targeted than calls for fiduciary duties in client-broker relationships (e.g., Nasiripour, 2010) or a general duty of care surrounding all financial innovation. While fiduciary duties and a general duty of care would result in greater disclosure and care by financiers, it may have an unintended effect of absolving traders of responsibility for assessing the transaction's risks and stymieing financial innovation. Instead, we argue there are numerous approaches that could be adapted to ensure a duty of care, such as the financial advisor requirements under the *Corporations Act 2001* (Cth) in Australia (e.g., see s. 1022).

Under this proposal, creators and promoters of products involving Class 3 transactions only would be required to meet a duty of care surrounding the product underpinning that transaction. When the investor (sophisticated or not) has no material gain (i.e., it is not a hedge position) in a loss on a synthetic product, the individual and firm constructing the financial instrument would be subject to an action for negligence in cases of 1) misinformation, 2) insufficient disclosure, or 3) inherent product design flaws. We acknowledge that this proposal increases uncertainty for financial innovation – but that is precisely the point. When dealing with untested products and clients with no interest in the underlying real products, financial innovators need to be aware of the deleterious effects of their creations and held accountable for encouraging or facilitating ignorant risk taking.

### Developing Different Sector Norms

Other interventions that target social norms are also possible, and in this section we introduce some themes that could be taken up by policy makers. Since investment banks share the traits of professional service firms, the importance of norms is heightened as they have a strong influence on

market behavior (Levine & Zajac, 2007; Posner, 1997, 1998). Professional service firms rely on organizational culture and behavior imitation for success (e.g., Alchian, 1950; Schipper, 2009). Thus, another possible intervention could focus on mechanisms that provide for alternative norm development in the financial firms and sector (Sharma, 1997). “Collibration” (i.e., where government “tips the scales in the market” to achieve the desired regulatory outcome (Kirkbride & Letza, 2004:89) could be used to encourage this through a combination of market mechanisms and state-based authority. Specifically, members of the profession could be accountable to a professional association or other authority ahead of their firm (for instance, lawyers are officers of the court first, a member of a firm second (e.g., s 38[1] *Legal Profession Act 2007* [Qld])). This could be reinforced through regulation of the financial profession including specifying conduct required when there are conflicts of interest (e.g., in the case of lawyers, between the practitioner's duties to the Court or licensing body, and their duties as director, officer or employee under the *Corporations Act 2001* (Cth)). These issues are treated so seriously that the expected behaviors in the profession (or norms) are explicitly taught and reinforced as part of the professionalization and socialization of people joining the profession (e.g., Van den Bergh, 2007).

Beyond its direct impact on individual behavior, professional norms are also likely to become the standard by which courts judge an individual's actions. For instance, the standard of what constitutes “reasonable” enquiries to be made by a banker is “current banking practice” (Tarr, 1980:100). Professional standards will therefore aid improved behavior through a direct socialization effect within the profession and indirectly through possible sanctions imposed by courts. It is beyond the scope of this paper to prescribe in detail all the norms required nor actions that could be taken, and instead we highlight that a possible approach is to require that all investment bankers be members of a self-regulating professional body that is supported by mandatory, legal sanctions for breaches of agreed behavioral standards. This body would develop and embed a series of widespread standards, rights and responsibilities for the profession (including rights to practice) with the aim of building norms that support trust in the financial markets (Aguilar, 2010).

### Re-establish the Fiduciary Duties of the Governors of Financial Entities

Another important step that could be taken would be re-establishing basic governance accountability standards for the entities used to create the financial products. Quite simply, those in control of entities involved in the creation of complex financial products (i.e., not only the investment banks and trading organizations, but also the SPEs) should owe fiduciary duties to the entities they control. For instance, in the case of CDOs, individuals with responsibility for the SPEs would be accountable for the assessment of risk involved in developing the product on which the SPE is based.

Furthermore, this fiduciary responsibility should be codified to reduce any erosion of responsibility (Alces, 2009).

Current norms and law allow people who are responsible for the oversight of multi-million and multi-billion dollar transactions to delegate these responsibilities to third parties, such as credit ratings agencies. Revising regulation in this arena could provide that these individuals be required to bring independent consideration to the risks associated with the venture and product and ensure that all associated documentation and promotional materials reflect their conclusions. Alces (2009:281) argues that the US has experienced an erosion of fiduciary duties in the corporate arena in the US that appears to contrast with the Australian experience of expanding fiduciary requirements. Importantly, the Australian example provides little evidence that increasing fiduciary obligations undermines competitiveness. The Australian corporate and regulatory regime is one that has survived the GFC better than most and is actively studied by other nations (Farrar, 2010) with economic performance that leads the world (Swan, 2010). This is despite a clear historical trend to increase requirements of directors around solvency (s 588G *Corporations Act* [Cth]) and due care and diligence (s 181 *Corporations Act 2001* [Cth]) and increasing expectations for directors around their fiduciary duties (e.g., *Australian Securities and Investments Commission v Macdonald* [No 11] [2009] NSWSC 287). There is also a stringent regulation of financial firms by the regulator, the Australian Prudential Regulatory Authority (APRA), including independent reviews of institutional performance, mandated board performance reviews and interviews of directors.

We acknowledge the difficulty this may pose for courts in determining what constitutes a breach and what penalty to apply, but our position is based on the underlying principle that uncertainty is the basis for a fiduciary duty – a fiduciary duty is not pre-specified in detail (Alces, 2009) in order to overcome conscious gaming. Indeed, every-day jurisprudence requires lawyers and judges to struggle with just such questions (Alces, 2009). It does not require the legislature to prescribe every kind of product and service, every potential action or omission and so on. This flexibility means that the system allows for the evolution of the norm to reflect prevailing technology and community standards.

### **Embed the Change in Norms with Sanctions and Downsides**

While the preceding observations concentrate on clarifying and embedding the norms in the market participants from a societal perspective, our final observation concentrates on norms surrounding corporate incentive alignment. The *Dodd-Frank Act* does provide for the claw back of director and officer compensation, but only for egregious acts in failed companies (DavisPolk, 2010). While limits on compensation packages may not be justified, there is a clear case for ensuring incentive payments balance risk and reward for the individuals; remuneration needs to involve a downside that dissuades the gaming of compensation systems.

In order to strengthen the norms associated with regulation, penalties could enforce a forfeit of any remuneration or incentives that were based on the performance of flawed

products or the transgression of professional standards. Under this proposal the courts could impose a penalty that takes into account the benefits the wrongdoer has derived from the action or representation. For instance, under this proposal any incentive payment paid to the creators, traders or promoters of the infamous ABACUS 2007-ACI transactions might be considered as part of a penalty (e.g., see Tarr, 2010 for the treatment of penalty provisions).

For this provision to work best, it would need to apply to managers who allow subordinates to develop or sell flawed products. In these cases, if managers or supervisors met performance hurdles based on flawed transactions, their incentive payments would also be subject to a penalty imposed by a court. This system would not only dissuade those individuals involved in individual transactions, it would also motivate management throughout the organization to monitor the culture and transactions of the institution.

## **CONCLUSIONS**

Current financial regulations do not explicitly address the role of social norms in the development of financial bubbles. In this paper we propose a model of how the social norm of *caveat emptor* encouraged the development and sale of flawed financial products. Additionally, the market norm of ratings agency reliance meant that little attention was paid to the fundamentals of these highly technical instruments – a situation remarkably similar to accounts of previous bubbles (e.g., Partnoy, 2009) – and mimicry in approaches to remuneration spread the flaws through the financial system.

Any response needs to address these fundamentals of human behavior and we have outlined the broad direction a number of regulatory interventions could take. Developing a duty of care for targeted transactions aims to overcome problems inherent in the exploitation of complex, flawed financial products. Similarly, regulating the professional conduct of investment bankers and the ability of governors to delegate risk assessment also addresses the effect of human behavior on the exploitation of flawed products by creating mechanisms by which their creators and sellers can be held to account. Finally, interventions on remuneration are designed to break the positive feedback loop between flawed product development and financial innovation.

### **Implications for Theory**

This systemic, actor focused approach to understanding the GFC opens up a number of avenues for further research based on the role of norms in corporate governance. From an agency theory perspective, this approach reinforces the often forgotten assumption that markets operate within a set of social and market norms (Posner, 1997; Smith, 1776). Consequently, it raises many questions for agency theory itself, including the role of different industry or market-based norms on the behavior of directors and officers as well as the problems of double agency (e.g., Black, 1992) whereby the directors are acting for shareholders who may have different social expectations around important issues

such as executive remuneration (Stafsudd, 2009). Changes to the power distribution around remuneration (e.g., the numerous “say on pay” reforms undertaken across several jurisdictions are aimed squarely at the double agency problem) highlight a growing recognition that director and shareholder norms may well diverge (Hillman, Nicholson, & Shropshire, 2008). In short, agency theory would benefit from research aimed at understanding divergences in principal interest based on norms as well as self-interest with guile.

Other corporate governance theories may also benefit from incorporating social norms into their calculations. For instance, stewardship theory has proposed that managers’ actions are sometimes motivated by higher order needs and the desire to do a good job (e.g., Davis, Schoorman, & Donaldson, 1999). When and where do these norms prevail? Good insights available from the international and geographically focused governance literature (e.g., Guiso et al., 2004) may benefit from being extended into other contexts such as market sectors.

Understanding norms in a market and/or industry may help develop institutional theory to explain how or why institutions persist in the face of contradictory forces. For instance, why are independent directors favored by governance codes and regulators when more than 30 years of intensive research has failed to provide a clear link between independent directors and firm performance? Is this question addressed more effectively from a systemic analysis of power in and around institutional investors and their norms?

### Final Thoughts

The GFC was not caused by any single market failure or event, but a systemic flaw that emerged from an interaction between financial innovation and the norms of the financial sector, particularly the norms associated with investment banking. An over-reliance on credit ratings agencies and an overemphasis on *caveat emptor* for transactions involving asymmetric information between parties, all reinforced with highly sensitive remuneration practices led to an unforeseen rise in systemic risk. Based on this analysis, we outline possible regulatory interventions (or formal institutions) designed to address the negative aspects of the informal institutions governing markets. These focus on the establishment of a professional association with a scrutinized regulatory function, a revision of the duty of care for directors of financial institutions and vehicles (such as SPEs), a statutory duty of care for the creators of innovative financial products in limited circumstances, and an appropriate penalty regime where a breach of any of the previous three regulatory requirements is found.

The GFC will not be the last financial bubble the world faces. Nor will these proposed interventions fully tame the “animal spirits” of the market (Keynes, 1936:161). While these proposed interventions will benefit from further development, amendment, and elaboration, the essence of our argument is clear. The GFC was made fundamentally worse by the underlying norms of a key sector in the financial community. Our proposed actions provide a path for addressing the cause rather than the symptoms of the GFC.

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