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A fetish and fiction of finance: unraveling the subprime crisis

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RUNNING HEAD: Unraveling the subprime crisis

A Fetish and Fiction of Finance: Unraveling the Subprime Crisis

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Abstract

As the moderately strengthened financial regulation of Basel III comes into effect over the next seven years, this article sets out a cautionary reminder as to why regulation needs to move beyond a focus on the mitigation and distribution of risk. To do so, the article unravels the much-misunderstood experiences of eight Norwegian municipalities whose investments plummeted as the subprime crisis unfolded: investments that had no immediate ties to subprime mortgage lending or mortgage-backed securities. Focusing on the processes, practices, and instruments of financialization, the article puts forward two new analytical concepts—“the fetishization of the knowledge of risk” and “fictitious distance”—to help explain how the crisis spread so quickly and extensively that it threatened not only the municipalities’ investments, but the functioning of global finance as a whole. In so doing, it becomes clear that financialization has set a far more risky form of capitalism that is manifest through concrete economic geographies, from towns and cities in the United States to “distant” Norwegian municipalities. In the highly interconnected entanglement of geographies and finance that make up the global financial system, the fetishes and fictions of finance cannot be ignored.

Introduction

With the moderately strengthened risk-based framework, increased capital and liquidity requirements, and heightened leverage ratios of Basel III coming into effect over the next seven years, this article provides an important cautionary reminder as to why this legislation must not be seen as the end of the reform process, but: the beginning (Hellwig 2010; Turner 2011). With many institutions still too big to fail and the fallout of the subprime crisis still affecting the geographies and subjectivities of people across the globe, it is essential that politicians, regulators and critics alike remain focused on why supervisory and regulatory reform must be continued, and why shadow banking cannot exist beyond the reach of regulation (Harvey 2011).

To set out this timely intervention, we unravel the much-misunderstood experiences of eight “distant” Norwegian municipalities, which, in August 2007, found themselves to be unusual suspects, caught up in what the International Monetary Fund (IMF) (2008) described as “the most dangerous financial shock since the 1930s.” Indeed, as the sheer scale, scope, and intensity of this recent “catastrophic event” (Longstaff and Rajan 2006) unfolded, the question on almost every Norwegian mind was how on earth a crisis rooted in the U.S. subprime housing market had come to affect familiar locations like Vik, with a population of just 2,800; Haugesund, famous for its once-abundant herring supply; and Narvik located some 220 kilometers (about 137 miles) inside the Arctic Circle. And for many, the answer seemed clear: Each had misguidedly invested hundreds of millions of Norwegian krone (NOK) in highly complex collateralized debt obligations (CDOs), which sliced and diced the financial risk of the U.S. subprime mortgage market and repackaged it for distribution and sale around the globe. Indeed, the world’s media were quick to blame these structured financial products for extending America’s subprime contagion to the far reaches of the Arctic and for drawing in unsophisticated *kommunes* to investments “beyond their ability to

manage or even understand” (Cody 2009; Faber 2009; Fouché 2008; Negus 2008). And even academics, such as Aalbers (2009), Gotham (2009), and Newman (2009), in seeking to understand the spatialization of the crisis, directly linked Norwegian losses to U.S. subprime lending practices and securitization that, as Gotham (2009, 355) eloquently put it, “create[d] liquidity out of spatial fixity.”

However, as we demonstrate, this is not what happened. The Norwegian municipalities had been active, financialized participants (Langley 2007) seeking investments that would provide them with a regular income stream, “swapped” against future revenues from their hydroelectric resources. And the underlying assets of those investments were not subprime mortgages, but investments that are considered pretty mundane in the world of finance: American municipal bonds. How, then, did the municipalities lose such vast sums of money within weeks of investing in financial instruments that had no immediate apparent ties to the U.S. subprime market and its related mortgage-backed security CDO (MBS CDO)? And how can their story help one understand this global crisis?

In exploring these questions, we trace the systemic weaknesses that are inherent in the instruments, processes, and practices of global finance: weaknesses that single acts of legislation like Basel III cannot address alone. Taking a relational approach through the lens of financialization, we argue that it is only through a thoroughly spatialized reading of global finance that one can begin to understand how the supposed idiosyncratic risk of one financial market sector became systemic risk that spread so quickly and extensively that it threatened not only the municipalities’ investments, but the basic functioning of global finance as a whole. Since financialization underscores “the growing influence of capital markets, their intermediaries, and processes in contemporary economic and political life,” it is imperative, as Pike and Pollard (2010, 30) suggested, that we “embed finance into the heart of our understanding of economic geographies.” Thus, we consider both the landscapes of

contemporary financialized capitalism and the global financial system together as mutually constitutive sites of socioeconomic processes, relations, and subjectivities (French et al. 2008, 2009; Leyshon and Thrift 2007; Pike and Pollard 2010; Pryke 2006).

To do so, the article takes as its central focus the specific structured financial instruments that helped create such economic geographies, underscoring the inherently systemic nature of two interrelated analytical concepts that our research suggests were key to the global financial crisis. The first involves what we refer to as “the fetishization of the knowledge of risk.” By this, and drawing on Marx’s 1842 critique of religious fetishism as “the religion of sensuous appetites” (Raines 2002), we mean the imbuing of expert knowledge to manage risk with fantastical or supernatural qualities. Indeed, just as Marx asserted that the “fantasy of appetites” convinces worshippers to overlook the concrete materiality of the fetish in favor of a belief that its imbued powers will gratify their desires, we argue that the heightened search for value through increased financialization has similarly convinced “worshippers” to overlook the real relational social and economic geographies of investments in favor of the power of expert knowledge to cast its magic and satiate their hunger. Through our research, we demonstrate that such fetishization was apparent throughout the global financial system, for example, in the fantastical transformation of BBB-rated tranches of subprime mortgages into new “tranches of risk” with ratings up to AAA, and in the complex combinations of maturity transformation, leverage, swaps, and hedges that sought out value while, seemingly magically displacing risk in time and space.

The second analytical concept is something we put forward as a further “fiction of finance” (Harvey 2006), that is, “fictitious distance.” Fundamentally, we suggest that finance needs to be understood as a world in which value, risk, and knowledge intersect under two contradictory spatial and temporal conditions: proximity and distance. With the primary purpose of value extraction, those who deal in the alchemy of finance attempt to manipulate

time and space, seeking to distance themselves as far as possible from the ever-present specter of risk by means of their expert knowledge. In this sense, the processes of capital markets and disintermediated finance, such as contracts, securitization, swaps, and hedges, that consistently rely on calculable market conditions are distancing processes that are specifically designed to mitigate and/or distribute potential risks both temporally and spatially. Yet, through financialization and what French, Leyshon, and Thrift (2009) called, “a race to the bottom” in terms of financial regulation, we argue that the inherent risks of financial markets have grown exponentially and more tangibly proximate. Drawing on Harvey’s (2006) elaboration of Marx’s writings on finance capital and its fictions, we argue that there is always an “imaginary” element in the distancing of risk. Yet, as its proximity and complexity have heightened throughout the financial system, so its mitigation has become virtually incalculable, rendering the supposed distance from risk—magically manifest by knowledgeable experts into their processes—evermore fictitious. Furthermore, such processes take place in what Pryke and Allen (2000) referred to as a monetized or financialized “quick-fire space,” that is, the instantaneous, round-the-clock, electronic network of monetary transactions that stretches socio-economic relations across space, tying together the decisions, activities, rhythms, and fortunes of disparate peoples and societies. Thus, while the consequences of financial crises undoubtedly unravel in the “real” geographic spaces of everyday life, it is the almost-immediate temporal and effectual proximity of time-space that ultimately brings investors into direct contact with the socioeconomic realities of the market. Simply put, fictitious distance is the “imaginary insulation” of investors not just from the realities of their idiosyncratic markets, but from the interconnectivity of global finance as a system.

The article proceeds, first, with a review of the literature on financialization, stressing that as finance has broadened its reach in search of new sources and spaces of surplus value,

so, too, have risk, volatility and uncertainty become embedded in the entangled geographies of finance and ordinary socioeconomic life. Next, we ground our analytical concepts theoretically in the literature, clearly distinguishing them from other conceptualizations of fetishes and fictions. Two empirical sections then demonstrate how the concepts aid our understanding of the financial crisis. First, we demonstrate the centrality of the MBS CDO in precipitating and extending the subprime crisis. We then map out our forensic examination of the Norwegian municipalities' investments, identifying certain systemic risks and linkages that inescapably transported the municipalities into the heart of the subprime crisis. In so doing, we highlight that the progressive creep of a neoliberal financialization has set a framework for a far more risky form of capitalism in which the fetishes and fictions of finance cannot be ignored. Finally, we conclude by calling for the world of finance to be brought back into the realm of regulation and transparency.

Financialization

According to French et al. (2008, 2) the idea of financialization developed “to account for the empowering of financial markets and their influence over the unfolding of economy, polity and society.” Thus, an understanding of the scope, scale, and intensity of financialization is foundational to a spatialized reading of the global financial system and to an understanding of the geographies of finance and its periodic crises.

There is broad academic agreement that financialization underscores “the growing and systemic power of finance and financial engineering” (Blackburn 2006, 39), which permeates and shapes contemporary economic and social life from the world of corporate strategy to more quotidian geographies of personal finance (French et al. 2008; Leyshon and Thrift 2007). While capital market demand grows for corporate managers to return shareholder value through the appreciation of stocks and heightened yields (Froud, Haslam, Johal, and Williams 2000), “the individual is encouraged to think of himself or herself as a

two-legged cost and profit centre” with the financial industry anxious to supply a vast array of products and services, from mortgages and credit cards to investment strategies, such as bonds and pension funds (Blackburn 2006, 39).

Certainly, with the increased deregulation of financial markets that has occurred since the collapse of Bretton Woods and then the “Big Bang” of 1986, the deepening power of finance is reflected in its increasing role in the reproduction of economies, particularly in the West (French et al. 2008; Pryke and Allen 2000). Indeed, for authors of the Regulation school, financialization signifies a regime of capital accumulation in which value extraction takes place increasingly through financial markets and institutional investment, rather than through the circuits of commodity production and consumption that are typical of Fordism. Under such a finance-led regime, capitalism is far more dependent on the growth of finance as an industry to increase money capital and thereby reproduce itself, leading to what Sweezy (1995, 8) called an “inverted relation between the financial and the real.” As such, finance needs to be regarded as a new growth regime in its own right, rather than simply as a facilitator of an “old” or “real” economy based on production (Aglietta and Breton 2001; Dore 2000).

For Leyson and Thrift (2007) and Pryke and Allen (2000), the bedrock and survival of such financial capitalism relies on its capacity constantly to search out “new asset streams” through such processes as securitization and instruments like derivatives, both of which have been central drivers of financialization since the 1980s. In fact, for Leyshon and Thrift (2007), financial capitalism is inextricably entangled with the “real” economy, deriving essential flows of value from real assets that constitute the bread and butter of its reproduction. For example, although at its core securitization involves the bundling up and aggregation of assets to produce income streams, it is a process that allows financial speculation to reach directly into, and extract value from, the mundane geographies of

corporate and municipal loans and infrastructure projects, such as schools and hospitals. But it also extends financialization into the very human geographies and subjectivities of mortgages, credit card debt, and personal loans, thereby completing a “necessarily circuitous link” between financial speculation and diverse sources and spaces of surplus value (Leyshon and Thrift 2007, 98).

Langley (2006, 290) reiterated the mutually constitutive nature of financial subjects and networks, arguing that both the development and explosive growth of mortgage-backed securities would be “impossible without the calling up of everyday financial subjectivities within mortgage networks in order to produce and extend mortgage borrowing.” This point is important, for it was such a sellside-buyside network (Wójcik 2012) of demand (borrower), supply (lender) and demand (investor) under increasing financialization that largely underpinned the U.S. subprime crisis. But it is not just borrowers who have been called upon as “neoliberal financial citizens” (Langley 2006, 2007) to participate in economic activity through the global financial system. As Martin (2002) argued, in “the financialization of daily life,” individuals have been commercially inspired to take greater personal financial responsibility as investments, private insurance policies, and personal pensions have steadily replaced various systems of social and welfare support in the wake of the Keynesian state. Hence, “people from all walks of life” have accepted risks into their lives “that were hitherto the provenance of the professional” (Martin 2002, 18). As we demonstrate, this progressive creep of neoliberal disciplining through financialization was culturally inflected in the ordinary, entangled, economic geographies (Lee 2006) of distant Norwegian municipalities as they undertook the risks and responsibilities of contemporary socioeconomic life.

Superior Risk Abatement: A Fetish and Fiction of Finance

Thus far, then, financialization signifies the wider and deeper reach of financial capitalism “in ways that pervade the agency, spaces, and places of existing and new actors

and sites” (Pike and Pollard 2010, 33). However, as Pryke and Allen (2000) suggested, from the moment the deregulation of interest and exchange rates allowed financial institutions and capital markets to become, once more, a focus of international speculation, so risk, volatility, and uncertainty “have become a characteristic part of the international financial scene” (p. 267). Increased international competition, the constant search for higher yields and liquidity, and short-term opportunities to speculate on misaligned asset valuations have increased the risks and instability of global finance, thus embedding risk into the relational economic geographies of the financial system (Pike and Pollard 2010, 33). Yet in what Blackburn (2006) argued is a profound contradiction of financial capitalism, this volatile environment has concomitantly provided potential gains from the anticipation, management, and mitigation of risk. As finance capital has necessarily sought out new sources and spaces of surplus value, so “superior risk abatement” has become a central focus of knowledgeable financial engineers, convinced of their own capacity to create ever more sophisticated instruments and methodologies to “distance” risk, both temporally and spatially.

It is in this regard that Harvey’s (2006) explication of Marx’s incomplete writings on finance and particularly “fictitious capital” helps underpin the two analytical concepts we argue are key to understanding the global financial crisis. Taking “fictitious distance” first, for Marx, fictitious capital is more or less implied whenever credit is extended in advance of the production of surplus value, and for Harvey, it can be through the production of commodities or more complexly, through the production of rents or other interest and/or value-bearing products and services. Because credit is extended in advance, the paper held by the lender in the form of a stock, bond, security, or such, is merely a “marketable claim” on the production of surplus value and on the perceived value of the underlying asset—both of which are relationally produced in time and space (Lee 2006) and can fall as well as rise. Thus, “the credit system becomes the cutting edge of accumulation with all the attendant

dangers such exposure brings” as “the gap between fictitious values within the system and money tied to ‘real’ values widens” allowing risk to fill the void (Harvey 2006, 266). Since investors are always tethered to their underlying assets—no matter how apparently far removed (Leyshon and Thrift 2007)—it is this risk in the first instance that financial engineers must somehow distance. But similar to finance capital, there is always a fictitious or “imaginary” element in the processes that are used to distance risk because of the sociospatial and temporal disjunctures between values. In other words, like paper claims on value, the distancing of risk has no material or relational basis until the investor’s position is fully realized; the process of distancing risk is always fictitious and speculative to some degree.

Although this disjuncture provides the very foundation of fictitious distance, we argue that through financialization and “a race to the bottom” in terms of financial regulation (French et al. 2009), the inherent risks of financial markets have grown exponentially and more tangibly proximate. Thus, just as finance capital becomes ever more fictitious in its secondary circulations (Harvey 2006, 280), so, too, does the notion of “distance” from risk. The reasons for the latter are threefold. First, as finance has become a growth regime in its own right, so investors have “tethered themselves” to “asset geographies” (Leyshon and Thrift 2007) that have become more speculative and risky, such as the high-cost loans market and the subprime mortgage market. Second, as finance has hungrily sought to increase the value derived from finance capital invested in asset geographies, so its processes and practices, such as maturity transformation and leverage, have put finance capital to work as fictitious capital within capital markets themselves, thereby “second-tethering” investors directly to the creation of fictitious value and the risky world of finance (Harvey 2006, 280). Third, as such risk layering has increased throughout the financial system, so its mitigation

has become virtually incalculable, often rendering the supposed distance from risk—engineered by knowledgeable experts into their processes—wholly fictitious.

Although it is tempting to view all finance’s distancing processes as “pure financial chicanery” (Blackburn, 2006), “traditional” securitization, or the use of a derivative to hedge a swing in the interest rate may be used effectively to distribute or offset risk, provided that trading conditions remain stable and calculable and the timing of the realization is favorable in the alignment of values. However, through increased financialization, hedge funds, investment banks, and finance houses have not limited themselves simply to “plain vanilla” strategies (Blackburn 2006) to satiate their appetite for value. Again, we turn to Marx to help explain the second of our analytical concepts, which, of course, is entangled with the first: the fetishization of the knowledge of risk. To distinguish, clearly, what we mean by fetishization, from Marx’s extensive theorizations of commodity fetishism in which the social relations subtending the commodity are obscured by the material relations between things (Harvey 2006, 17; see Castree 2001 for an excellent commentary on commodity fetishism in the geographic literature), we draw on Marx’s 1842 critique of religious fetishism as “the religion of sensuous appetites” (Raines 2002). In this work, Marx stated that the “fantasy of appetites” convinces worshippers to overlook the concrete materiality of the fetish in favor of a belief that its imbued superpowers will gratify their desires. In this article, we argue that the appetite for value driven by financialization has similarly convinced investors, financial engineers, and regulators to overlook the real relational social and economic geographies of investments in favor of the power of expert knowledge to cast its magic and to distance risk. Indeed, complex combinations of swaps, borrowing strategies, securities, and hedges are commonplace and often form single financial instruments, or BBB-rated tranches of already subprime mortgages may get repackaged, with a deft alchemy, into collateralized debt obligations with ratings up to AAA. Although we take less “glee” than Marx in recounting

the “height of distortion” (Harvey 2006, 269) that such combinations have produced within the global financial system, as we show in the coming sections, the fetishization of the knowledge of risk was central in both the precipitation and geographic extension of the subprime crisis. All too often, it has been forgotten that the instruments of financialization “are about risk transfer *not* the elimination of risk” since they are, in and of themselves, risk-taking procedures (Pryke and Allen 2000, 268).

In fact, with the increased volatility and uncertainty brought about by financial deregulation, the distancing and management of risk have become core strategies for providing stability in the global financial system while keeping the circuits of capitalism churning (Harvey 2011). Indeed, the global regulatory standards of Basel I (Amended) and II were based, specifically, on “intellectual assumptions” regarding the nature of risk (Turner 2009). And even Basel III, which was introduced in response to the subprime crisis, while highly critical of the “deficiencies” and “delusions” of sophisticated risk modeling and management, still has the mitigation and calibration of risk at its core (Hellwig 2010; Turner 2011). Yet as Pryke and Allen (2006, 269) argued, individual risks—from terms of borrowing to swap rates—all interact with one another within a highly interconnected network of monetary transactions, criss-crossing time and space to bring together previously separate, “distant” arenas of activity.

Although Pryke and Allen (2000) underscored their reservations that this interconnectivity somehow implies the “death of geography,” by this account, we begin to gain an understanding of the spatial and temporal dimensions of the global financial system itself: the inherent tensions and contradictions between distance and proximity that exist in “quick-fire space.” But they went further, emphasizing that the instantaneous transmission of supposedly “calculable, monetizable, uncertainty” increases the vulnerability of participants in the financial market to disruptions, which “may be set in motion by events outside the

immediate transaction, influenced by a different rhythm” (Pryke and Allen 2000, 271). This increased vulnerability is due to “the inescapable ways in which [financial instruments] now cut across a host of intersecting flows of times and spaces through which ‘infections’ may pass simultaneously...Risk management, therefore, does not see the absolute elimination of risk but its reconfiguration in time-space” (Pryke and Allen 2000, 270).

Together with our analytical concepts, these insights are important, for they remind us that, just like any other mode of capital accumulation, a finance-led regime is riven with contradictions, fictions, and crisis tendencies (Harvey 2006). By emphasizing the temporal and spatial dimensions of risk in an increasingly financialized culture, we echo the central problem of all the crisis prevention strategies of capital that crisis can never be eliminated, merely delayed (Harvey 2011). In this sense, risk management in financial markets becomes an attempt to render the coordinates of time and space calculable such that accumulation can occur (Pryke and Allen 2000). Thus, in the immediate temporal and effectual proximity of a highly financialized time-space, investors are never far from the idiosyncratic risks of their asset geographies or indeed from the risks of global finance as a system. The “imaginary insulation” of investors that risk management may provide is always something of a fiction, and the notion of calculable distance is evermore fictitious.

Methodological Statement

What follows is a forensic analysis of the interconnectivity of the geographies of global finance, showing how the idiosyncratic risks of the U.S. subprime mortgage crisis became systemic risk, which spread to the far reaches of the Arctic, bringing eight Norwegian municipalities to their knees financially. The analysis is based on a close reading of primary documentation, including analytical reports from J. P. Morgan (2008), the IMF (2008), Nomura Securities (2007a, 2007b), and Bear Stearns (2006) regarding the U.S. subprime market and the MBS CDO; Norwegian FSA official correspondence with the

municipalities and annual reports 2002–08; official documentation regarding the Norwegian municipalities’ investments including their Case against Citigroup, the Case against Depfa Bank, KPMG’s report assessing Narvik’s investments, and official county governor reports regarding the legality of the municipalities’ actions; and documentation—the “Blacks” and marketing materials—for the financial instruments themselves at the center of the scandal. Furthermore, interviews were conducted with key informants whose geographies ranged from New York to London, Detroit to Norway. The interviewees included securities managers (CDO and tender option bond specialists), the vice president of a structured products research team, ratings analysts, a U.S. real estate opportunities manager, and legal representatives. Given that this was a live court case, interviews were bound by strict confidentiality agreements, and direct quotations cannot be used. However, for the purposes of this article 18 key respondents provided essential information and testimony, which was triangulated with textual evidence, enabling us to draw well-supported conclusions.

The U.S. Subprime Market and the MBS CDO: A Crisis in the Making

The financialization and exploitation of minority and low-income households in the U.S. subprime mortgage crisis has been well documented (Aalbers 2008, 2009; Ashton 2008; Dymski 2009; Newman 2009; Wyly, Moos, Hammel, and Kabahizi 2009). However, to help elucidate the role of our two analytical concepts in the precipitation, extension, and interconnectivity of the crisis, this section briefly examines the dysfunctional processes and practices surrounding the formation of one of financialization’s most damaging instruments in recent decades: the MBS CDO.

Securitization: The Contradictions of Value and Risk, Proximity and Distance

Before the expansion of subprime lending, MBSs were widely held by financial experts to be relatively safe financial instruments with investors treating the senior, AAA-rated tranches of nonagency MBSs as virtually “risk free” (interview with the vice president

of a structured products team; see also MacKenzie 2011). In fact, the traditional securitization was seen as a crucial innovation for both lenders and investors. For finance capital that was tied up in primary mortgage lending, the process enabled lenders to lift assets off balance sheets and sell them on the global securities market, thereby helping to overcome both the spatial and temporal limitation of value extraction and the geographic concentration of risk (French and Leyshon 2004; Gotham 2009; Mason and Rosner 2007a, 2007b). For hungry investors, structuring the MBS into rated tranches enabled them to take a position in the mortgage market depending on their appetite for risk and value. Quite simply, individual tranches do not contain specific mortgages from the underlying pool. Rather, they allow investors to relate their proximity to value to their distance from risk on the basis of the tranche's calculated credit enhancement threshold, rating and yield. Since defaults affect the lowest tranche first, the proximity to risk in this unrated tranche is rewarded by a greater share of the value flowing into the MBS. Conversely, investors in the AAA-rated tranche receive the lowest yield, since their calculated distance from risk is the greatest.

From the mid-1990s to 2001, one particular "asset geography" (Leyshon and Thrift 2007) that offered to satiate investors' hunger for value was subprime lending. Through risk-based pricing, borrowers who were previously considered too risky could receive a loan in return for higher interest rate payments and/or fees (interview with a U.S. real-estate opportunities manager). Although the growth in subprime lending during that time has been widely documented in the context of 'predatory' lending practices that often targeted low-income and racialized geographies (Kaplan 2008), the credit-enhancement thresholds that were calculated by securitization and credit ratings experts were generally sufficient to restrict the impact of subprime defaults to the lowest tranches of the MBS (interviews with CDO specialists, a ratings analyst, and the vice president of a structured products team). However, from 2001 on, the innovation of the MBS CDO drove an unprecedented wave of

fictitious capital into these geographies, transforming them into tradable financial instruments that inescapably tethered investors' claims to value to all the attendant risks as their extension of credit became the cutting edge of accumulation.

The MBS CDO: A Fetish and Fiction of Finance Writ Large

MBS CDOs repackaged the riskier BBB-rated tranches of MBSs into a similarly tranced CDO structure. Given their position in the MBS capital structure, the BBB-rated tranches offered good returns to hungry investors but were often unattractive because of their low credit rating. However, as Longstaff and Rajan (2006, 8) noted, repackaging securities through the CDO process can serve to “complete the financial market” by creating apparently high credit-quality securities that “might otherwise not exist.” (see also, Duffie and Gârleanu, 2001). The MBS CDO was therefore key to extending the subprime process. Yet it did so on a foundation of the two concepts our research suggests were central to the crisis: the fetishization of the knowledge of risk and fictitious distance.

According to the interviewees, in the creation of the “virtual financial identities” (Pollard 2001) that make mortgage assets globally tradable, the production of “credible technical knowledge” and its application in calculating the rating are foundational to distancing risk so that accumulation can take place. In the subprime crisis, both these factors were severely undermined. First, the quality of knowledge underpinning MBSs and MBS CDOs significantly diminished as both the demand for new sources of value and a belief in expert knowledge to distribute risk increased. Whereas in the primary mortgage market lenders compiled as complete knowledge as possible about the borrower because of their own proximity to risk, the supposed distancing of risk through increased securitization resulted in mortgage originators who were far less cautious when lending to subprime borrowers (interviews with a U.S. real estate opportunities manager and a CDO Specialist). For the securitization and ratings experts, what counted was “hard numeric data” like FICO scores,

LTV (loan-to-value) ratios, and levels of documentation that could be modeled and transformed into a legible rating that “investors could trust” even though “risk layering” was known to be taking place (interviews with a ratings analyst and a CDO specialist). However, as an increasing number of subprime mortgages were securitized to meet investors’ demands, so the ability of rating agency models to predict mortgage defaults declined (see also Rajan, Seru, and Vig 2009). In their hungry search for value, experts and investors overlooked the socioeconomic realities of subprime borrowers in favor of expert knowledge somehow to “magic” the risks away through the securitization process (interviews with the vice president of a structured products team and a CDO specialist).

Second, the application of that knowledge in structuring and rating MBS CDOs became pure financial alchemy. In repackaging tranches of MBSs into the CDO structure, securitization experts were unable to provide a risk assessment based on hard numeric data because individual tranches simply do not hold specific mortgages. This inability rendered problematic the calculation of important metrics like default probabilities and loss severity rates that were needed to model the credit-enhancement thresholds by which investors would be “insulated” from exposure to various degrees of risk. As a result—and from an intense belief in their own abilities to manage risk—knowledgeable experts simply treated the BBB-rated tranches of MBSs as though they were BBB corporate bonds, not mortgages, and assessed them via their rating (for different knowledge sociologies of MBS and CDO experts, see MacKenzie 2011) still managing to transform them into a CDO structure containing a predominant AAA-rated tranche (interviews with CDO specialists, a ratings analyst, and a vice president of a structured products team).

From late 2006, when U.S. subprime mortgage delinquency and foreclosure rates began to soar amid rising interest rates and tumbling property values, the affect of the disjunctures between values on MBS CDOs was devastatingly fast (J. P. Morgan 2008;

Nomura Securities, 2007b). The interviewees noted that treating BBB-rated tranches of already securitized subprime mortgages as corporate bonds ignored a crucial factor that an index of rated corporate bonds provides: relative market position. The BBB tranches of MBSs were not rated in relation to the overall mortgage market; they were rated in relation to other subprime mortgages. In effect, they held a market position that was only marginally better than the most likely level at which defaults and delinquencies would affect the value flows of many MBSs. Investors' paper claims to value were tethered to some of the riskiest mortgage assets in the market, quite unlike investment-grade corporate bonds. Furthermore, the ratings agencies failed to recognize the sensitivity of "resecuritized securities" to underlying market failures. The MBS CDO was, effectually, a "securitization squared", and was therefore just as sensitive to incremental losses in value flows as would be a CDO² (interviews with a CDO specialist, ratings analyst, and a vice president of a structured products team). Figure 1 diagrammatically models the effects that subprime mortgage defaults in the underlying MBS might have on the CDO into which BBB-rated tranches were resecuritized. Here, it becomes clear that the distance placed between investors in the AAA-rated tranches of MBS CDOs and the risks of defaults was wholly miscalculated and fictitious.

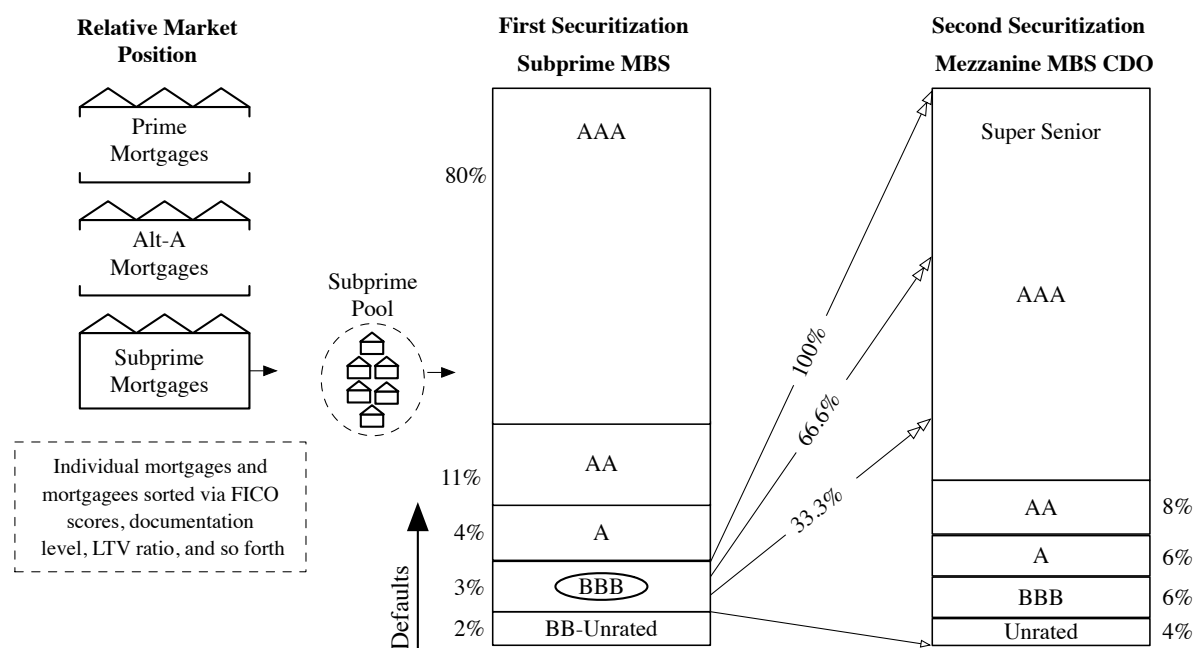


Figure 1. The magnification of risk through re-securitization. Source: Authors' Research (credit enhancement structures adapted from IMF (2008))

Defaults become apparent, first, in the MBS on the left in Figure 1. Assuming that this pool of mortgages contains a representative sample of the U.S. subprime market, and assuming a loss severity rate of 100 percent, in this model, a 2 percent default rate in the subprime market would wipe out all the fictitious capital of investors in the bottom tranche. A further 1 percent default rate would affect the BBB tranche, and a total default rate in subprime mortgages of 5 percent would eliminate both the bottom and BBB tranches. If the MBS CDO to the right in Figure 1 was made up entirely of resecuritized BBB tranches, the first 2 percent of defaults on the left would have no effect. But just a further 1 percent default in the underlying assets would wipe out 33.3 percent of the MBS CDO, having an immediate impact on the AAA-rated tranche. And, of course, a total default rate of 5 percent would eradicate the MBS CDO. In this model, the defaults are magnified 33 1/3 to 1 from the BBB tranche of the MBS to the CDO¹. Thus, investors in the MBS CDO were more tangibly

¹ Our thanks to Francis Longstaff for his feedback on the magnification of losses across connected structured instruments. See also IMF (2008, Box 2.2) for a useful analysis.

proximate to the material risks of the underlying asset geographies than they ever expected. Their calculated distance from risk—based on fetishized expert knowledge—was fictitious.

Although the model has been simplified for illustrative purposes, using the actual foreclosure inventory rates (FIR) in subprime mortgages is no less powerful. By the first quarter of 2008, the subprime FIR soared to 10.74 percent (Mortgage Bankers Association 2008). Even with loss severity rates of 50 percent, considered by the IMF as an underestimate, that would mean a 5.37 percent loss in the underlying MBS, totally eradicating the “super senior” tranches of the MBS CDO. Indeed, when foreclosures peaked in the third quarter of 2009, some 56 percent of BBB-rated tranches of subprime MBSs had defaulted (Erturk and Gillis 2009), and no fewer than 937,840 U.S. homes were being repossessed, auctioned, and sold off (RealtyTrac 2010).

In the following section, we trace the systemic risks and linkages (Hellwig 2009) that help explain the extent and intensity of the subprime mortgage crisis throughout the world. In an examination of the specific investment instruments of the Norwegian municipalities of Bremanger, Hattfjelldal, Hemnes, Haugesund², Kvinesdal, Rana, Narvik, and Vik—investments that had no immediate ties to the U.S. subprime market—our argument is twofold. First, that the excessive risk layering in the processes, practices, and instruments of financialization, brought about by the fetishization of the knowledge of risk, was central to both the precipitation and extension of the crisis. And second that, as Hellwig (2009, 169) asserted, “in the sub-prime crisis there has been no surgical separation of failing assets and failing institutions from the rest of the financial system.” Thus, it becomes clear that in the “quick-fire space” of global finance (Pryke and Allen 2000), the activities and geographies of financialization are intractably interconnected. Your risk becomes my risk becomes our risk,

² Haugesund was a plaintiff only in the court case against DEPFA Bank, not in the case against Citigroup.

leaving knowledgeable experts scratching their heads as calculated distance becomes a pure work of fiction.

From the U.S. Subprime Mortgage Market to the Far Reaches of the Arctic

It may be difficult to imagine the eight municipalities at the center of Norway's Terra Securities scandal as anything other than "unusual suspects," caught up in a global financial crisis in which they played no real part. Perhaps that's because of the constant referral by the world's media to places like Vik and Narvik as "sleepy backwaters" (Faber, 2009; Negus, 2008), whose naive leaders were manipulated by "men in Armani suits" into dabbling in "the black arts of investment bankers in distant places" (Cody 2009; Fouché 2008; Lander 2007). And perhaps, too, Norway's social-democratic welfare state, renowned for its redistributive policies, high public expenditures, social rights, and generous social entitlements (Stamsø 2008), seems incongruous with the profit-driven world of finance and its associated risks.

However, since the 1980s, Norway has seen increasing support at the national, regional, and local levels of government for neoliberal free-market policies to stimulate growth through enhanced Norwegian competitiveness (Stamsø; Tranøy, 2008). And Norwegian municipalities and households have increasingly accepted risk and uncertainty in their lives through a broad range of financial product innovations that are designed to draw new borrowers and new investors into the market (NFSA 2007a). Thus, as Norway has increased its emphasis on deregulation and monetary policy, so financialization has become inflected in the ordinary, entangled geographies (Lee 2006) of socioeconomic life, and a geography of winners and losers has increasingly emerged (Tranøy 2008).

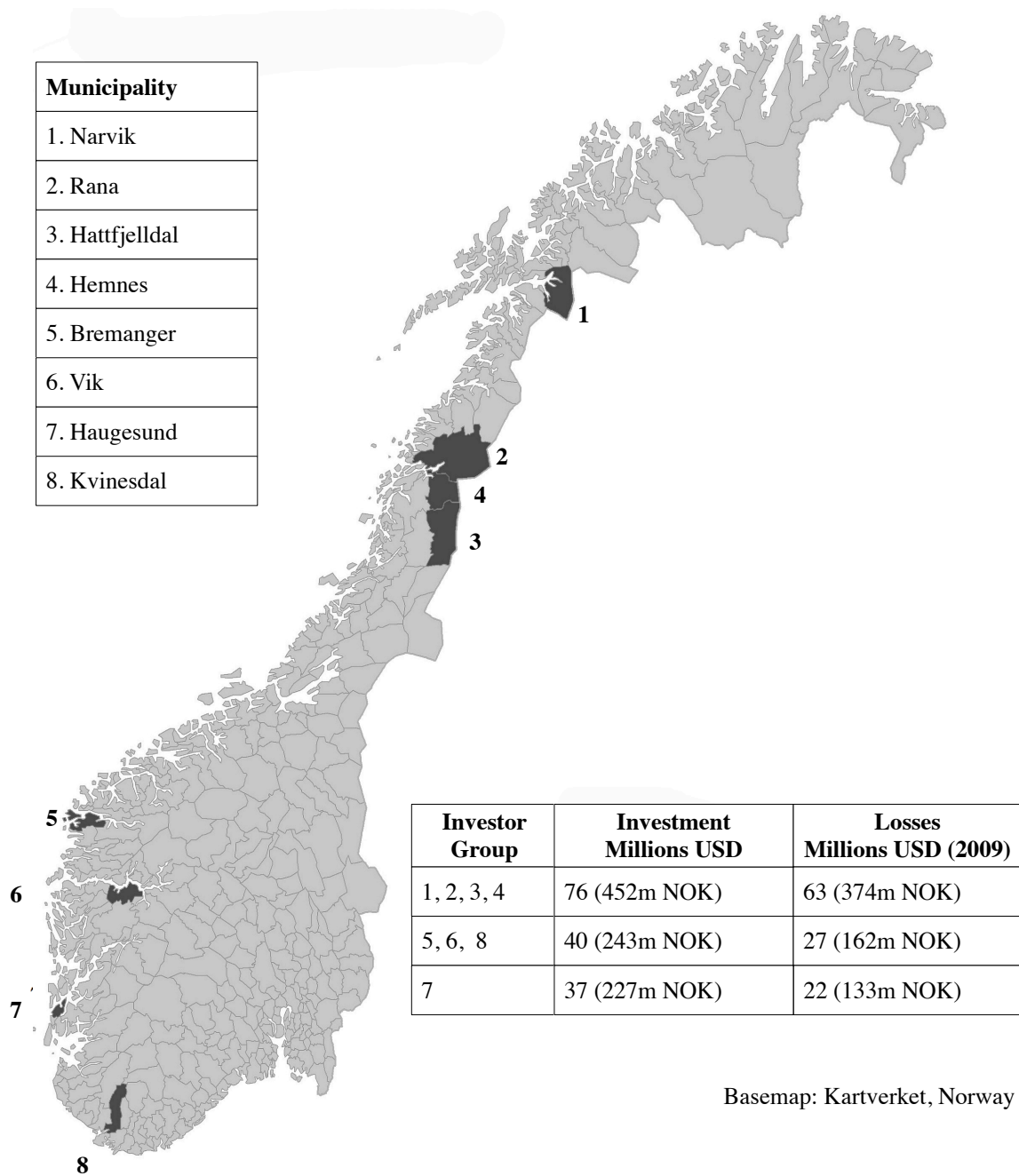


Figure 2. Impacted Norwegian municipalities including rounded investments and losses.

Sources: Case 09/CV/7058, 2009; Haugesund kommune, 2010

In 2001, Vik, a rural kommune of just 2,800 inhabitants in the county of Sogn og Fjordane, was the first municipality to circumvent Norway’s Local Government Act (LGA, 1992), which set out tight regulations regarding borrowing and investing by municipalities.

Simply, it is illegal for municipalities to borrow for the purposes of financial investment (LGA, Section 50), and investments that involve any significant level of financial risk are prohibited (LGA, Section 52; see KPMG 2008). With the advice of Terra Securities—a subsidiary of an alliance of 78 local Norwegian savings banks called Terra Gruppen—Vik, in an ingeniously calculated move, “borrowed without borrowing” by using an interest rate swap set against future income from its hydroelectric resources. The fictitious capital raised—denoted as “present value”—was invested in Norwegian corporate bonds, the value flows from which would help finance its present-day expenditures (Lynum 2007; Vik 2008). It is important to note that the Norwegian Ministry of Local Government interpreted the swap as legal, thereby paving the way for other municipalities with hydroelectric resources to undertake similar contracts. Furthermore, the ministry made no comment regarding the subsequent investment instruments, leaving the municipalities to interpret the legality of any risks that were involved (interview with a plaintiff representative; Case 2008/Folio 1320, 2009; Fylkesmannen, 2008a, 2008b).

Until July 2007, Terra Securities enjoyed a close and trusting working relationship with numerous Norwegian municipalities whose physical geographies provided a means of increasing their local fiscal capacity, advising on and arranging both swap agreements and investments originated by big-name banks like Citigroup and Goldman Sachs (Case 09/CV/7058, 2009; KPMG 2008). Given that the revenue generated from hydroelectric resources is largely exempt from having to be entered into Norway’s income equalization program, which seeks to redistribute wealth to less well-off municipalities (Borge, Farmer, and Torvik 2012), those with hydropower could enhance their local budgets significantly, provided that the underlying asset geographies of their investments performed well. Indeed, the returns were generally sufficient to enhance cash flows, manipulating time and space to bring forward to the present day future value for the social infrastructure projects that local

government in Norway must provide. For example, Narvik and Haugesund invested in local childcare, early schooling, social services, and elderly care, while Vik and Kvinesdal improved local cultural facilities and the general infrastructure, such as roads and public space. The benefits from becoming financialized citizens were too substantial to pass by (interview with a plaintiff representative; Vik 2008; Fylkesmannen 2008a, 2008b). However, in the summer of 2007, Citigroup—through Terra Securities—sold a set of investments to the eight Norwegian municipalities whose fictitious value was ultimately tethered to asset geographies in the United States in the form of American municipal bonds (Munis): a value that would plummet within weeks of initiating the investment (see Figure 2) (Case 09/CV/7058, 2009; KPMG 2008).

The Municipalities' Investments: An Intersection of Value, Risk and Knowledge

The primary structured investment instrument was a tender option bond (TOB), which at first sight seems highly complex. However, at its core, the Citigroup Municipal Investor TOB—like so many other instruments of global finance—had two key calculated strategies: one for the enhancement of value extraction and the other for the mitigation and distancing of risk. First, the TOB strategy was a classic “borrow short to buy long” that “played the yield curve.” Simply put, Citigroup’s strategy was to borrow short-term finance capital from money market funds through the issuance of a floating rate certificate, promising to pay an agreed interest rate to be reset weekly and capital should the lender require³. The proceeds would be used to purchase long-term, AAA-rated, tax-exempt Munis, which paid out a higher rate of interest than the loan, thus generating a positive value stream. Investor funds, which was mostly fictitious capital tied up in corporate CDOs, would be held in “low-risk,” high-quality fund-linked notes (FLNs) and used as collateral to raise the short-term loans. Thus the

³ TOBs carry a “put option” that allows the lender to ask for his or her capital back at par value at any reset date. The floating rate certificate is the borrower’s promise to repay both the interest and capital to the lender. This option effectively protects the lender from value fluctuations of the bond, and risk is, therefore, carried by the borrower.

TOB could leverage investor funds approximately eight times and put evermore fictitious capital to work, thereby vastly increasing potential value returns by second-tethering investors to the risky world of finance (interview with a TOB specialist; Citigroup 2007; Case 09/CV/7058, 2009).

As a stand-alone strategy, this would be extremely risky because of the risk layering, and not something that a bank with a knowledgeable, alchemist's armory of risk-distancing processes would likely undertake. Thus, Citigroup experts identified an "attractive arbitrage opportunity" that could be used to hedge the risks and, seemingly, make a "risk-free" profit at zero cost. Theoretically, assuming a 35 percent marginal tax rate, AAA-rated tax-exempt Munis were expected to trade at about 65 percent of the taxable London Interbank Offered Rate swap curve (LIBOR). However, Citigroup identified that long-term Munis, as of December 2006, had historically traded at notably cheaper levels. Although arbitraging the trade would require a near-perfect correlation between short-term and long-term market interest rates and LIBOR swap rates, Citigroup, which was itself an investor in the TOB, was convinced that the risks could be distanced because of the historic consistency of the curve, which had "performed well in bad times as well as good" (interview with a plaintiff representative; Citigroup 2007; Case 09/CV/7058, 2009; KPMG 2008). Thus, Citigroup's TOB comprised a number of elements that were expertly calculated to satiate investors' hunger for value while simultaneously distancing the ever-present specter of risk. Yet none of these elements had any direct ties to the U.S. subprime mortgage market. So what went wrong?

A Fetish and Fiction of Finance: Tracing the Systemic Linkages

To understand how the idiosyncratic risks of subprime lending set in motion the catastrophic failure of the municipalities' investments, one must first appreciate that each calculated element of the TOB can be identified as a "systemic linkage" (Hellwig 2009),

which, although having little to do with the intrinsic problems of U.S. subprime lending practices per se, had plenty to do with the fetishization of the knowledge of risk and the evermore fictitious distance that was apparent throughout the global financial system. Just like the “Old lady who swallowed the cow, to catch the dog, to catch the cat,” and so on, each element of the TOB—each systemic process and practice of a financialized system—interconnected in the inescapable proximity of time-space contributing to its own demise.

To map out this entanglement of finance and geography, we begin with the “risk-free” arbitrage opportunity calculated by knowledgeable experts, which was foundational to the massive losses incurred by the multi-billion-dollar TOB market from late 2007 (see also Deng et al. 2009; Posner 2007). According to the interviewees, to help explain the spread between long-term Muni yields and LIBOR swap rates, Citigroup experts chose to overlook the real risks associated with U.S. Munis in favor of an unsubstantiated “belief” regarding “investor preference” (interviews with a plaintiff representative and TOB specialists). Given their tax-exempt status, so the story goes, the appetite for Munis comes primarily from retail investors with short time horizons, thereby creating a demand for short-term bonds at the lower end of the yield curve. However, U.S. towns and cities like to know what their debts will be over the long term and so issue more long-term bonds whose subsequent “excess supply” leads to their higher yields (Case 09/CV/7058, 2009; Citigroup 2007).

Although the expert knowledge here seems credible, Deng et al. (2009) underscored that some 30 years of academic literature has highlighted that the higher yields on long-term Munis have little to do with “investor preference” and much to do with risk. Far from being safe, mundane investments, long-term Munis are inherently risky involving credit risk—the risk that the bond issuer might default on the loan—and liquidity risk—the fact that long-term Munis do not have much of a secondary market—and, therefore, offer investors a premium in compensation for their proximity to risk. As we will show, ignoring the concrete

materiality of both credit risk and liquidity risk were two key systemic linkages to the heart of the crisis (interview with a TOB specialist; Case 09/CV/7058, 2009).

Moreover, the success of the risk-distancing strategy relied on hedging the highly leveraged Munis with taxable LIBOR swaps. Given that the TOB financed the purchase of long-term, fixed-rate Munis with short-term floating-rate loans, it needed to enter into a swap agreement to pay fixed-rate interest in exchange for receiving a floating-rate cash flow. As one interviewee stressed, although the risk of substantial losses was evident in Citigroup's marketing materials, the municipalities needed to have "absolute faith" that the swap calculated by Citigroup experts would achieve a near-perfect correlation to distance investors from the extreme risks involved (plaintiff representative). From 1994 to 2006, 20-year after-tax swap rates and 20-year Muni yields were partially correlated but not nearly perfectly—a fact that the eight municipalities in our study claimed that Citigroup experts knew (Case 09/CV/7058, 2009). However, as the subprime crisis hit, the gap between values "dramatically diverged" from just over 0.3 percent to 3.6 percent, thereby rendering the calculated hedge totally ineffectual. Some 30 years of academic knowledge was "egregiously" ignored (Case 09/CV/7058, 2009; interview with a plaintiff representative) by TOB experts in favor of their own alchemistic processes and practices. In their hungry search for value, the eight municipalities put their faith in expert knowledge, despite the known risks of the value-extraction strategy. And Citigroup experts, convinced of their own capacity to distance risk, overlooked the material risks that were involved.

With the calculated distance from risk rendered wholly fictitious, the Norwegian municipalities were brought into direct contact with the risks of the TOB's value-extraction strategy to which they were inexorably tethered: risks that were embedded systemically throughout the world of finance. One primary systemic risk was the high level of leverage throughout the global financial system. Just as the TOB used a calculated leverage strategy to

satiate investors' appetites for value, so too did "systemically important financial institutions" (IMF 2008, 37), such as banks, particularly in the funding of structured investment products, such as MBS CDOs (interview with the vice president of a structured products team). While leveraging equity eight times could significantly magnify value returns to hungry investors, risk was similarly magnified in that losses incurred in the underlying assets could affect borrowed finance capital as much as equity. Thus, for our TOB investors, the systemically common practice of leverage exposed the Norwegian municipalities to the extreme risk of bankruptcy (Case 09/CV/7058, 2009). And for the banks, leveraging the funding of structured investment products significantly amplified the risks and impact of the subprime crisis throughout the financial system (interview with a vice president of a structured products team).

Furthermore, much of the leverage was based on the same borrow-short to buy-long strategy implemented by the TOB experts, thus bringing the risks of maturity transformation directly back into the heart of the system. Although some risk of maturity transformation was carried transparently on the balance sheets of banks, some \$5.9 trillion worth was hidden in the unregulated world of "shadow-banking": wrapped up in a variety of off-shored financial vehicles like TOBs and structured investment vehicles (SIVs) (interview with the vice president of a structured products team; J. P. Morgan 2008).

An important point is that SIVs were regularly used by banks to purchase of the super-senior, AAA-rated tranches of MBS CDOs (see Figure 1), the value flows of which had become insufficient to attract hungry nonbank investors. Using the SIV as a wrapper, the banks could significantly increase the value returns by leveraging short-term fictitious capital from the market, which they promised to repay by issuing asset-backed commercial papers. Given that the underlying assets were rated AAA and were supposedly distanced from risk through tranching, there was no shortage of hungry commercial-paper investors even though

subprime mortgage lending was known to be increasingly risky (interviews with the vice president of a structured products team and CDO specialists). Indeed, in an attempt to distance themselves from any credit risks involved, the banks often purchased protection from a specialist insurer—a “monoline”—in the form of a credit default swap. Again, given the apparent distance from risk denoted by the rating, monolines, such as AMBAC and MBIA, in their own search for profit, were happy to offer protection at par value (interview with a plaintiff representative). Convinced of the capacity of expert knowledge to distance risk, a variety of systemically important institutions tethered themselves to all the attendant risks of subprime asset geographies and the risks of global finance, brought into the relational economic geographies of the system through their own processes, practices, and instruments.

For the eight Norwegian municipalities, the systemic importance of the monolines proved a catastrophic linkage directly into the heart of the subprime crisis. Although the TOB portfolio was based on long-term, “highly rated”, U.S. Munis, for many years, because of an inadequate disclosure system regarding the credit risks of U.S. towns and cities, Muni issuers relied on monoline insurance to “up the ratings” of about 50 percent of their issued bonds, making them far more attractive to hungry investors. Given that monolines are themselves rated, the market merely transferred the monolines’ ratings—often AA or AAA—to the issued bond. Thus, the market chose to ignore the lack of knowledge regarding the material economic geographies of the underlying assets, preferring instead to put its faith in the monolines’ ratings to distance investors from credit risk, thereby helping to improve bond liquidity in the secondary market (interview with a plaintiff representative; Kwiatkoski 2009).

From August 2007, just a month after the Norwegian municipalities invested in the TOB, all three ratings agencies began downgrading the credit ratings of many MBSs and MBS CDOs as subprime mortgage defaults began consuming the credit-enhancement

thresholds that were magically manifest by knowledgeable experts to distance investors from risk (see Figure 1). Consequently, as the proximity of the monolines to subprime risk became increasingly apparent, their credit ratings were called into question (interview with a plaintiff representative). Indeed, at the beginning of 2007, seven bond insurers held AAA ratings. By mid-2008, every one had been downgraded as the ratings agencies expressed, to the market, their expert assessment that the monolines might not be able to meet their insurance obligations (Kwiatkoski 2009). The subsequent collapse of the market's confidence in the monolines thus rendered proximate the ever-present specter of the credit and liquidity risks of long-term Munis: risks that Citigroup experts had ignored.

From a system wide perspective, the ratings agencies' actions underscored the intrinsic riskiness of the illiquid subprime assets that underpinned MBSs and MBS CDOs, calling into question the solvency of the financial institutions and investors that held them (interview with a ratings analyst; IMF 2008). In particular, the highly leveraged SIVs that held upwards of \$400 billion of long-term assets funded by short-term loans became a focus of market concern—as did TOBs (Case 09/CV/7058, 2009). Given their low levels of equity, finance capital swiftly began to question the fictitious value of the commercial papers and promissory notes that guaranteed repayment of the loans. And as the colossal scale of maturity transformation and leverage became increasingly visible, so the market began to realize the proximity of risk to which they were all inexorably tethered. As a result, the lenders of short-term funding voted with their feet, forcing a “rapid firesale” of, largely, illiquid assets in what can only be described as a classic “bank run” (J. P. Morgan 2008).

With a full-blown liquidity crisis under way and asset values tumbling, the market malfunctioned just as would be expected. As Harvey (2006, 292) put it, “in the course of a crisis, capitalism is forced to abandon the fictions of finance and return to the world of hard cash, to the eternal verities of the monetary basis.” In the case of this crisis—a crisis that was

geographically tethered to the financial exploitation of specific lives and spaces in U.S. cities—capitalism’s flight to quality (ironically?) involved the mass rejection of finance’s “rotten apples” in favor of U.S. Treasuries (Case 09/CV/7058, 2009). For the eight Norwegian municipalities, this proved doubly wounding.

First, the market’s flight to Treasuries caused the value of Munis to plummet. Given that the TOB’s funding strategy was based on weekly refinancing through short-term loans—the availability of which had all but vanished—the TOB was forced to realize its position on illiquid assets whose paper claim to value was fictitious. Second, while the downgrading of monoline insurers had pushed long-term Muni yields upward, the Munis’ lack of attraction because of their inherent riskiness pushed yields even higher, just as LIBOR rates were falling. Thus, the hedging strategy, designed by knowledgeable experts to distance investors from risk, was rendered totally ineffectual, leaving the Norwegian investors inescapably proximate to the risks of the U.S. subprime mortgage crisis (Case 09/CV/7058, 2009).

Until an investor’s position is fully realized, the distancing of risk has no material or relational basis because of these sociospatial and temporal disjunctures between values. The knowledge of risk may be fetishized, but in the rapid crossfire of a highly financialized and interconnected global financial system—where your risk becomes my risk becomes our risk—the processes of distancing risk are always, evermore, fictitious.

Epilogue: The Concrete Materialities of Finance’s Unraveling

Just months after the municipalities invested in the TOB, the repercussions of this fetish and fiction of finance began to unravel in their local socioeconomic geographies across Norway. In Vik, to the south of the country, 10 percent budget cuts across all local services left firemen working on call on evenings and weekends, while some elderly people had to sleep in hallways at the local retirement home (Cody, 2009b). In Rana, in the central county of Nordland, official resignations and the dismissal of the chief municipal officer and

financial director shook its numerous small towns from Båsmoen to Ytteren (Skaalmo 2008). And as each of the municipalities halted or cut its investments in kindergartens, schools, youth clubs, sports facilities, and other local services, Narvik, one of the most northern towns in the world, missed the payroll for its municipal workers and turned off the streetlights during the dark Arctic nights (Case 09/CV/7058, 2009; Cody 2009a; Fouché 2008; Lander, 2007).

Yet, the Citigroup TOB had one more systemic linkage to the heart of the crisis that none of the Norwegian municipalities had even understood: a credit-default swap (CDS) (NFSA 2007b). As subprime lending took flight, the use of CDSs to insure and speculate against the risk of default expanded markedly, with banks, monolines, hedgefunds, and giant insurers holding some \$62 trillion worth by 2007, making them a huge potential source of systemic risk, as we have shown (IMF 2008). However, unbeknownst to the eight municipalities, the TOB itself connected directly to a CDS (interviews with a plaintiff representative and a CDO specialist; FLN 2007).

As an investor in the Municipal Investors TOB—a factor that the eight Norwegian municipalities believed was “a good thing” (Case 09/CV/7058, 2009)—Citigroup sought to distance its own exposure to risk not only through the TOB’s hedging strategy, but through a simple CDS purchased as insurance. Indeed, the bank paid out just a few basis points to gain full coverage at par value for some \$250 million worth of Munis (FLN 2007). However, it was not some big-name monoline with whom Citigroup virtually exchanged proximity for distance. Rather, Citigroup experts built a CDS into the “low-risk” FLNs held by Bremanger, Hattfjelldal, Hemnes, Haugesund, Kvinesdal, Rana, Narvik, and Vik. Thus, as the risks and fictions of financialization’s processes, practices, and instruments unraveled as the subprime crisis, so eight small, yet actively financialized, Norwegian municipalities unwittingly underwrote the losses of one of global finance’s mightiest banks.

Conclusion

We began this article by arguing that a thoroughly spatialized reading of Norwegian losses in the subprime crisis would provide an important cautionary reminder of why single acts of legislation like Basel III must not be seen as the end of the reform process, rather, the beginning. Although Basel III will introduce increased capital and liquidity requirements and heightened leverage ratios over the next seven years, its focus is still primarily on risk management and calibration, as though the “delusions” (Turner 2011) of previous regulation can somehow be overcome by “tighten[ing] a screw here, and putting a new nail there” (Hellwig 2010, 10). Yet, as we have demonstrated, the risk-distancing strategies that were held as the “height of sophistication” before the crisis were, in fact, central to both its precipitation and geographic extension, leaving, as Hellwig (2010, 2) stated, “the entire ship of banking regulation” in need of “a thorough overhaul.”

To underscore the broader implications that our examination of how the eight Norwegian municipalities became inescapably entangled with the socioeconomic geographies of global finance and the subprime crisis, we presented two new analytical concepts that we suggested were key to understanding the crisis: the fetishization of the knowledge of risk and fictitious distance. And by tracing the systemic processes and practices that are highly typical of financialization (French et al, 2008; Newman, 2009; Pryke and Allen 2000; Tickell 1998; Weber, 2010), we sought to demonstrate just how crucial these two concepts are.

First, it is clear that in their hungry search for value investors, financial engineers and systemically important institutions chose to overlook both the concrete materiality of the underlying asset geographies and the real risks of the value-extraction strategies and risk-distancing strategies to which they were inexorably tethered in favor of expert knowledge somehow to “magic” the risks away. And second, we have demonstrated that although there

is always an element of fiction in the notion that risk can be distanced, the substantial risk layering that has occurred because of this fetishization has rendered risk more tangibly proximate, not only to the very fabric of global finance, but to the material economic geographies where the consequences of the unraveling of risk become manifest. The eight Norwegian municipalities did not face bankruptcy in their local economic geographies because they invested directly in subprime mortgage assets: they faced bankruptcy because the fetish and fiction of finance were embedded systemically throughout the financial system. With all the sociospatial disjunctures between values that we have interrogated—from the future value of Norwegian hydroelectric resources that ultimately purchased a fictitious claim to value in the form of long-term U.S. Munis to the fictitious claims to value that were tethered to some of the riskiest subprime mortgage assets in the market and all the processes and practices in between—the notion of distance from risk is a pure work of fiction.

As critics call for various regulatory solutions (Harvey 2011; Hellwig 2010; Turner 2011), the implications of these findings are crucial to any regulation that seeks to overcome the precrisis “delusions” that the financial system has “an inherent tendency towards efficient and stable risk dispersion” (Turner 2011). It does not. The hungry search for new geographies of surplus value and the power of finance to raise seemingly endless supplies of fictitious capital—which has tethered and second tethered investors to the cutting edge of accumulation—is not a recipe for the distancing or minimizing of risk. Nor is the hand-in-glove relationship between the financial industry and the ratings agencies (Langley 2008) sufficient to render those risks transparent. Thus, further research must engage with how knowledge of what constitutes the relational economic geographies of global finance may be harnessed to produce a more stable regime.

From the specific lives and spaces that underpinned the U.S. subprime mortgage crisis to the financialized citizenry and natural resources of distant Norwegian municipalities, as

scholars of economic geography, we must, as Wójcik (2012) asserted, demystify global finance and render transparent the concrete materiality of the relational economic geographies that make up our financial world. In the highly interconnected entanglement of geographies and finance that this research has highlighted, the fetishes and fictions of a finance-led regime cannot be ignored.

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