The Chicago Infrastructure Trust: The Privatization of Public Works or the Socialization of Investment?

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ABSTRACT

The crisis in the municipal securities market in 2008 startled urban officials, who tend to be highly dependent on the market to build the things their communities need (e.g. streets, water systems, schools). Facing unsettled bond markets in the context of neoliberal austerity and retrenchment, many municipalities have begun experimenting with alternative financing arrangements such as public-private partnerships. To both its advocates and its critics, the Chicago Infrastructure Trust (CIT) may prove to be a new model of public works financing for cash-strapped cities and municipalities across the country. In the Chicago case, the trust selects from a vast range of public infrastructures and services. Those deemed suitable (i.e. profitable) are disaggregated, sorted, rebundled in tranches, and queued for waiting investors. The present analysis seeks to explore the history, structure, and functions of the CIT in the context of municipal market instability.

An analytic model derived from the work of Hyman Minsky and Karl Polanyi emphasizes the following institutional trajectory. In the mid-twentieth century, the municipal securities market was a rather staid and sedate place, made up of low-risk, long-term debt instruments. In the 1970s and 1980s, the world of municipal finance began changing as derivative products and other high-risk instruments and practices gained popularity. In a complementary turn of events, political developments such as neoliberal retrenchment and fiscal austerity pushed more municipalities into the arms of bankers and financiers. At the same time, however, local political communities were being removed as the intermediary between government units and capital markets. Efforts to regulate the municipal debt market after the crisis, while commendable, have not addressed the fundamental need to re-democratize decision-making processes. From this perspective, we can view the CIT as opening up an institutional space where there can be meaningful negotiations over the long-term financing and control of vital community infrastructures. Of course, corporate financial entities can come to dominate the new institutional space, thereby diminishing the potential for re-democratization. In the generalized abstract, however, by creating channels by which public works financing can be negotiated and contested on an urban level, the Chicago "model" could allow communities to re-exert critical control over public finance.

Part I – The Introduction

In February 2008, the "auction-rate" securities market failed – an important, albeit somewhat arcane, corner of the municipal bond market populated by cities (and counties, school districts, and so on) seeking to leverage short-term debt and floating-rate risks. The failure was but one manifestation of a much deeper, systemic crisis racking the municipal market at the time. As officials, analysts, and journalists sifted through the post-crisis wreckage, they found a "regulatory black hole" where deeply dysfunctional institutional arrangements and highly volatile derivative practices had been allowed to spread and take root (Wagner, 2009, 6). The relatively unsettled state of the municipal debt market in the post-crisis period has further strained the ability of cities and communities to build the things they need (roads, water systems, schools, etc.). Indeed, local officials must currently operate in an environment of austerity and continued neoliberal retrenchment; tax revenue windfalls or renewed streams of intergovernmental funding are not forthcoming. In response to these emergent conditions, municipalities have begun to more frequently explore various public-private partnerships (PPPs) and other alternative financing structures (Mattoon and Wetmore, 2012). As cities reach their debt capacity, these arrangements can become more innovative and experimental. For the most part, however, such initiatives tend to remain atomistic and disconnected, creating a kaleidoscope of individually negotiated local development and financing structures. No model has yet emerged as a clear alternative to the municipal market.

The creation of the Chicago Infrastructure Trust (CIT), in 2012, promises to change the terrain of public works finance: for both its advocates and critics, the CIT represents a potential paradigm shift in how cities are built and paid for. When Rahm Emanuel was elected Mayor of Chicago, Illinois, in 2011, he was confronted with structural budget deficits and the physical erosion of the city's vast infrastructure networks – issues made all the more intractable by the city's poor credit rating and (relatively) high bonding costs. Never one to shy away from a bold gesture, Emanuel soon announced a three-year, \$7 billion infrastructure plan. In the current, post-crisis era of urban austerity and public budget contraction, the size and scope of the initiative struck many commentators as "audacious" (Citation). The centerpiece of the plan, and the key to its purported audacity, is the Chicago Infrastructure Trust (CIT) – a public-private partnership (PPP) designed to connect private investment capital with municipal public works projects. The trust (the first-of-its-kind in the US) is being carefully watched, and many believe that, if successful, it could become *the* model for cash-strapped cities across the country.

The formation of PPPs for the purpose of urban infrastructure development is a well-worn practice in the US, but such partnerships are invariably limited to very large and highly complex "one-off" development projects with dedicated revenue streams and only a limited number of private equity partners. For the purposes of municipal development, the CIT represents a new model of public-private collaboration in the US. Instead of concentrating on a single project, the trust selects from a vast range of public infrastructures and services of various sizes. Those deemed suitable (i.e. profitable) are sorted, prepared (in tranches), and queued for waiting investors. The trust thus provides an institu-

tional space where "demand crowds" (large investors) and "supply crowds" (individual municipal agencies) exchange standardized commodities (disaggregated and rebundled urban public works and services). As we will see, local residents are highly skeptical of the plan. One of the reasons so many stakeholders have rendered critical (or, at best, non-committal) assessments of the new trust is due to the city's recent history with privatization. Additionally, the only project yet to be ushered through the CIT was very carefully chosen so as to accentuate the strengths of the model while minimizing its more contentious elements, making objective evaluation more difficult. The negative or indeterminate reactions to the plan also no doubt stem from the new institutional space being carved out by the trust – a space that exists at the intersection of (global) finance and (urban) politics.

A suitable framework for analyzing the Chicago Infrastructure Trust must thus accomplish two things. First, it must understand the CIT as the institutional outcome of historical processes and transformations. The trust grew out of the city's dissatisfaction with the municipal securities market, and should be understood against that backdrop. Plumbing the historical and institutional context of the trust grants us analytic leverage with respect to its newness and lack of substantive track record. Secondly, our framework must provide for a dual emphasis on both the financial and the socio-political dimensions of the CIT. Strict disciplinary boundaries will impede our exploration of this hybrid entity. The following analysis of the history, structure, and functions of the Chicago Infrastructure Trust, therefore, draws heavily from the theories of Hyman Minsky (1919-1996) and Karl Polanyi (1886-1964). These scholars provide us with a set of powerful and complementary analytic tools that are particularly well suited for the purpose of historically interrogating the institutional points of contact between finance and politics.

To begin, both theorists developed models that identify stages, or cycles, within the capitalist system – transformations that go a long way in shaping historical patterns of municipal public works financing. Minsky's work on the instability of financial markets, for instance, is suggestive of some of the historically shifting constraints faced by municipal officials in their efforts to engage capital markets. Specifically, Minsky (a post-Keynesian economist) proposes a cyclical model of economic change consisting of three successive "financing regimes" – hedge, speculative, and Ponzi – each more "dependent on financial market conditions" (and hence less stable) than the last (Minsky, 2008, 227). We can construct a similar (idealized) typology designating three forms of municipal public works funding that are successively more volatile and unstable. The first type (or stage) consists of no-risk and low-risk funding streams, such as intergovernmental grants, "pay as you go" approaches, and low-risk, long-term debt vehicles (general obligation bonds). The second consists of moderate-risk mechanisms, such as revenue-based debt and equity financing. And the third type consists of high-risk financing strategies, such as variable-rate debt structures, "swaps," and municipal privatization schemes. Over the last 30 years there has been a general shift whereby municipal capital budgets have become increasingly more reliant on higher-risk derivatives and aggressive equity relationships (Taub, 2005; Hidreth and Zorn, 2005). This arc mirrors the financial market cycle identified by Minsky – as well it should, given that the two trajectories are closely and causally linked.

It is here, at the institutional intersection of (financial) markets and politics, that the theories of Karl Polanyi (an economic historian and anthropologist) demonstrate their most profound utility. Take Polanyi's theory of the "double-movement," a model of societal change that is reminiscent of Minsky's cycle of financial market instability. For both theorists, the most desirable moment of the cycle occurs when there is a stable institutional relationship between markets and the polity. Minsky approvingly discusses this relationship in terms of the "containing or thwarting mechanisms" imposed by political/collective entities from outside the market (Ferri and Minsky, 1991). Polanyi provides a more fleshed-out accounting of this dynamic through his theory of market "embeddedness" – a reference to the position of markets within intricate webs of regulatory-legal structures and socio-moral strictures. The exact level of embeddedness in a society (or sector) at any given time is a matter of fierce struggle at various scales of socio-political activity. On one hand, embeddedness is constructed by and through (political) communities seeking protection from the vicissitudes of the market. On the other hand, certain corporate and elite entities seek to dismantle and abrogate mechanisms and practices that impinge on market activities. These actors seek to "disembed" markets from regulatory interventions and normative expectations that limit the range of acceptable economic behavior. Polanyi argues that the level of embeddedness tends to follow a cyclical doublemovement – in other words, modern history tends to swing, in the fashion of a pendulum, between embeddedness and disembeddedness (Citation). In the context of public works financing and governance, the concept of disembeddedness draws our attention to the mechanisms and practices that severed municipal infrastructure assets from their publiccollective foundations and subjected them to the logics and dictates of the market.

Taken together, the theories of Hyman Minsky and Karl Polanyi point to the following institutional trajectory. In the mid-twentieth century, the municipal securities market was a rather staid and sedate place, made up of low-risk, long-term debt instruments. In the 1970s and 1980s, the world of municipal finance changed as derivative products and other high-risk instruments and practices began gaining popularity. In a complementary turn of events, political developments such as neoliberal retrenchment and fiscal austerity pushed more municipalities into the arms of bankers and financiers. At the same time, however, local political communities were being removed as the intermediary between government units and capital markets. The growth of quasi-public authorities, revenue bonds (issued without electoral approval), and "negotiated sales" (closed door bargaining) all contributed to the depoliticization of municipal finance. Efforts to re-embed the municipal debt market after the crisis, while commendable, have not addressed the fundamental need to re-democratize decision-making processes.

In this context, we can view the Chicago Infrastructure Trust as opening up an institutional space where there can be meaningful negotiations over the long-term financing and control of vital community infrastructures. The Chicago case suggests that simply bringing the process out of the "shadows" can serve to broadly re-politicize public works financing and decision-making. But the CIT should also give us pause, as it demonstrates the relative ease at which political and financial elites can come to dominate, thereby diminishing the potential for re-democratization. As an empirical case, the CIT provides a rather sobering study in the real and potential pitfalls of this type of endeavor. Indeed, in the last analysis, the story of the CIT is perhaps a cautionary tale. In the generalized ab-

stract, on the other hand, the Chicago "model" could provide communities with the institutional mechanism needed to re-exert control over public finance – it creates channels by which public works financing can be negotiated and contested on an urban level. In this manner, the model seems to resist *ex ante* evaluation, appearing better suited for consideration on an *ex post* or case-by-case basis. Hence, while our estimation of the CIT is muted, the model it represents gives some cause for optimism.

Our analysis begins with a brief overview of the municipal securities market. We then turn to Hyman Minsky's financial instability hypothesis and explore its implications for municipal debt crises. Specifically, we sketch how the cycle of instability he identifies (hedge, speculative, Ponzi), is mirrored in the rise of the municipal derivatives market and aggressive privatization schemes. These trends are deeply destabilizing and, ultimately, lead to what we might call a Minsky-Muni-Moment – a term that highlights the causal linkages between the financial sector and contemporary patterns of local fiscal distress. In the aftermath of crisis and collapse, efforts are taken to constrain the most dysfunctional municipal debt practices and damaging financing instruments. These efforts will be explored utilizing the theories of Karl Polanyi. This leads to an empirical analysis of the form and functions of the Chicago Infrastructure Trust. We conclude with some thoughts on the socio-spatial and political implications of the CIT model.

Part II – The Municipal Bond Market

Cities in capitalist societies are tasked with providing the "hard" infrastructures (transportation grids, water systems, etc.) and the "soft" infrastructures (health, education, etc.) that support social life and economic activity. Cities have always needed access to long-term debt for the large and upfront capital expenditures required for many types of public works and services. Indeed, urban growth and development in the US "cannot be understood historically apart from the municipal bond market" (Erie, 1992, 522; Sbragia, 1996, 102-134). Today, the municipal market consists of \$3.7 trillion in outstanding debt. This debt takes two basic forms. First, a large portion of the market consists of "general obligation bonds" that are backed by the taxing power (the "full faith and credit") of the issuing government unit – debt that must be electorally approved. Second, an even larger portion of outstanding municipal debt takes the form of "revenue bonds" that are backed by dedicated revenue streams (such as toll receipts) – debt which does not require electoral approval. Unlike general obligation bonds, which count against local debt ceilings, revenue bonds are designed to "bypass statutory or constitutional limits on tax-supported debt" (Leigland, 1995, 145). These characteristics have made revenue bonds a very popular debt instrument; by 2000, they were being issued at twice the rate of their general obligation counterparts (Hackworth, 2002, 708). As we will see, while these two basic debt structures still dominate the market, we must also consider an array of complex financial extensions, permutations, and innovations that played an outsized role in the collapse of the municipal market in 2008.

Ultimately, the federal government determines the architecture of the municipal securities market (at least its broadest contours) via the tax-exempt status of the interest paid on most municipal debt. All bonds furthering the "public good" are exempt from federal,

(and often) state, and local taxes, while municipal bonds that further private interests (often via "counduit financing") are subject to them. To the extent that investors will accept lower interest rates on the bonds, the tax-exemption acts as a subsidy for the issuing municipality.² This creates some interesting anomalies in the market. First, municipal bonds are not traditionally or inherently speculative; they are not primarily oriented around price appreciation. Rather, from the point of view of the investor, they are financial instruments used to "preserve capital... and produce tax-free income" (Mysak, 2012, 152). Secondly, individual ("retail") investors (who often live in the jurisdiction the bond was issued) hold 75 percent of all outstanding municipal debt (SEC, 2012, 1), either directly (as in the case of wealthy individuals or retirees seeking tax shelter) or indirectly (as in the case of mutual funds). Third, large institutional investors that cannot take advantage of the tax exemption (either fully or in part), such as sovereign wealth funds, do not generally participate in the market. Fourth, municipal bonds tend to be "buy-and-hold" investments that are kept until maturity, meaning the market does not fluctuate according to the news cycle. Lastly, because of this buy-and-hold mentality, the majority of the activity in the municipal securities market takes the form of new, freshly issued bonds (the "primary" market), while the buying and selling of older bonds (the "secondary" market) is relatively languid – though there is evidence that the quantity of trades the comprise the secondary market has grown over time (SEC, 2012, 20).

While the federal government sets the broad parameters of the municipal debt market via tax law, the myriad practices and debt instruments ("securities") that constitute the market are only lightly regulated or monitored. As the Securities and Exchange Commission notes, "[d]espite its size and importance, the municipal securities market has not been subject to the same level of regulation as other sectors of the US capital markets (SEC, 2012, ii). With the exception of federal fraud guidelines, whole swaths of the market are governed by little more than the supposed "self-regulating" nature of market mechanisms and participants.³ As we will see, for instance, "interest-rate swaps" recently came under fire for their role in the fiscal collapse of several municipalities. While it was apparent that their use was not infrequent, no comprehensive records were being kept and, hence, "to put a size on the market — on the number of municipalities that actually had engaged in swaps — proved an impossibility (Mysak, 2012, 178).

This opacity has been compounded on the local level by the rampant proliferation of authorities, special governments, and public-private partnerships – an array of quasipublic institutions that are empowered to issue tax-exempt securities in the municipal market, but which are not accountable to the electorate (Kirkpatrick and Smith, 2011). By and large, the favored debt instrument of these quasi-public authorities is the revenue bond, which can be negotiated, issued, and collected free of political interference. Used

¹ Historically, taxable bonds have comprised a small part of the market. In the aftermath of the Great Recession, however, they received a sizable bump due to the issuance of "Build for America Bonds" (BABs). In 2008, taxable securities accounted for 11% of all muni bonds issued, but jumped to 18% (2009) and 32% (2010) during the BABs program, before falling to 9.4% in 2011 (SEC, 2012, 11).

² The importance of the tax-exemption for investors is reflected in the old axiom that, "People don't buy municipal bonds to get rich; they buy them to stay rich" (Mysak, 2012, 152).

³ For a more generous interpretation of the reach of federal securities law vis-à-vis public finance, see Fippinger (1988).

in tandem, these tools (authorities and revenue bonds) have insulated urban infrastructural financing from political constraints and contingencies, such as popular electoral checks and constitutional debt limitations. As such, they vividly represent what Sbragia (1996) has called "the politics of circumvention" (1996), or what Perry (1995) has referred to as city-building through the "back door" of the democratic process.

Traditionally, the citizenry has played a crucial role as the democratic intermediary between local/state governments and capital markets. The proliferation of quasi-public agencies and the continued dominance of revenue-based securities have, in effect, profoundly threatened this role. In the place of a fully engaged democratic populace there have emerged new intermediaries with market-based priorities and market-oriented functions. Two such intermediaries are of particular interest. The first of these "capital market gatekeepers," are bond-rating agencies (Hackworth, 2007, 22-23). These private entities rate the creditworthiness of governmental bond issuers, ostensibly functioning to identify and discipline general-purpose governments that are not operating in a fiscally prudent manner. As ratings drop, interest rates rise, and borrowing becomes more expensive. Cities that keep revenues high relative to expenses are rewarded with a strong (triple-A) rating. If residents happen to be disinclined to make the "concessions" necessary to remain competitive, or if local officials are otherwise unable to enact the appropriate "business-like" policies, they will be compelled to do so – through the threat of rating downgrades (Hackworth, 2002).

A second important intermediation between local governments and capital markets involves the relationship between bond "underwriters," municipal "advisors," and local officials. Over the last two decades, it has become increasingly common for these parties to enter into a "negotiated sale" of the newly issued bonds. In a typical transaction, a municipal entity will organize a bond sale through a bank or securities firm, which – in their role as underwriter – will purchase the newly issued bonds from the issuer (in bulk) and sell them to retail investors. Cities can choose the underwriter (and hence the cost of the bonds) in two different ways. The traditional method was for cities to offer the bonds to underwriters through a competitive sale. Banks would enter a bid based on estimated market value, and once purchased, would try to sell the securities to retail investors. In this scenario, the city simply chooses the bid with the lowest interest costs and the underwriter assumes the risks associated with changing market conditions (SEC, 2012, 17). In the "negotiated sale" model, by contrast, the underwriter (in effect) pre-sells the bonds (they "know where all the bonds are going and at what price"), and must merely iron-out the details with the issuer, thereby (seemingly) scrubbing the transaction of risk (Myslak, 2012, 122-124). Over the past several decades, negotiated sales have become ubiquitous in the field.⁴ Importantly, according to the Municipal Securities Rulemaking Board (MSRB), the underwriter is to have an "arms'-length relationship" with the municipal issuer.⁵ This is due to the fact that the interests of the two parties can tend to conflict.

⁴ Until the later half of the twentieth century, competitive sales were the norm and negotiated sales were reserved for very large, complex, or low-rated projects. Beginning in 1976, however, "negotiation outnumbered competitive sales in terms of dollar volume" and eventually it would appear that "negotiation could be used effectively for all municipal bond deals" (Myslak, 2012, 122-124).

⁵ See the Municipal Securities Rulemaking Board's website (available at: http://www.msrb.org/Municipal-Bond-Market/How-the-Market-Works.aspx).

While "the underwriter wants to price the bonds to sell [at the highest possible interest rate] the issuer... wants to get the best price [at the lowest possible rate]" (Ibid, 158). However, in the self-regulating environment of the municipal market (in the pre-crisis era), the ideal of the adversarial, "arms'-length" relationship clashed with the reality of the "leave-the-driving-to-us" services being offered by banks and securities firms (and happily accepted by local officials).

As noted, certain unique characteristics of the municipal bond market, such as its tax-exempt status and essentially non-speculative nature, suggest that the debt behavior of government financing units will diverge from that of firms. Nevertheless, in the decades leading up to the Great Recession, the municipal market dramatically shed its staid reputation while following an arc of market-dependence and volatility that is accurately described by Hyman Minsky's financial instability hypothesis – a topic to which we now turn our attention.

Part III - Financial Instability & the Minsky-Muni-Moment

Neoclassical economics posits stable, equilibrium-seeking markets. The empirical history of modern financial crises, therefore, falls outside of what can be typically "thought" (or modeled) by traditional economists. "Standard economic theory," Hyman Minsky observes, "not only offers no explanation of [crisis] events but inferentially denies that they occur." In the infrequent case that they are acknowledged, financial crises are generally treated as exogenous shocks caused by "villains" or as disruptions generated by "nonessential institutional flaws" (1976, 1). Minsky's financial instability hypothesis (FIH), by contrast, is an economic model that puts systemic crisis at the front and center of the analysis and attributes its cyclical recurrence to the "normal" (rather than anomalous) functioning of financial markets. According to the FIH model, financial markets trend toward volatility and crisis – a tendency whose gestation begins, somewhat counter-intuitively, during periods of financial expansion and rising profits. During economic boom times, a heady sense of optimism (on the part of both borrowers and lenders) contributes to increasingly speculative debt structures, whereby firms more aggressively leverage debt for the purposes of investment and expansion. This speculative activity causes the price of financial assets to increase, which (temporarily) rewards and legitimates risky debt leverage practices. In response, a range of financial innovations are designed and deployed to take advantage of exuberant market conditions. All of which leads to the broad adoption of new financial norms and regulatory expectations that are, by this point, highly unstable.

Minsky elaborates on this historical process by specifying three distinct "stages," of financial activity. The typology – hedge, speculative, and Ponzi – hinges on the level and type of debt that is held in a financial system. Each individual "financing unit" that comprise an economy can be categorized with respect to its debt portfolio. The safest and most stable liability structure is employed by "hedge" financing units, which can honor their outstanding debt, both interest and principal, through normal operating revenues; incoming cash flows are greater than outgoing cash liabilities. The second type of debt structure is termed "speculative" and is employed by financing units whose revenues can pay the interest due on outstanding debt, but cannot pay down the principal. In such cases, matur-

ing debt is often refinanced or "rolled over." The final category is "Ponzi" financing, in which revenues cannot meet debt obligations – neither interest nor principal. Here, assets must be sold or new debt must be incurred in order to make scheduled debt payments (Minsky, 1992). These successive stages are marked by an increasingly fragile reliance on financial markets – while hedge financing is "impervious" to financial volatility (suffering difficulties only in the event that operational receipts "fall short of expectations"), speculative and Ponzi financing structures are highly "vulnerable... to changing market conditions" (Minsky, 2008, 231; 1982, 22-29). In this manner, argues Minsky, financial markets become more fragile and unstable as the cycle progresses.

Appropriately, then, some have eponymously termed the recent global economic meltdown a "Minsky-Moment" (McCulley, 2009) – a systemic crisis cyclically born of the endogenous instability of financial markets. The term refers to the moment in which, on balance, a financial system shifts from "traditional and benign borrowing" (i.e. hedge finance) to more aggressively speculative and Ponzi-esque debt structures (Whalen, 2008, 94). In this fragile context, modest financial contractions or economic disruptions can trigger a crisis that, if not arrested via state intervention (such as lender-of-last-resort measures), will quickly dissolve into systemic collapse. Minsky's "cash-flow analysis of the economy" (1982, xvii) implicates all types of "financing units" in this trajectory, where financing units are defined as economic entities with regular (incoming) revenues and (outgoing) debt service obligations – most importantly banks, firms, households, and governments (1982, 22-33). In an archetypical scenario, cash flows "first from depositors to banks and from banks to firms [in order to finance investment]: then, at some later dates, from firms to banks [debt repayment] and from banks to their depositors" (1992, 3). With the rise of neoliberalism, the gravitational pull of financial markets has become more pronounced, drawing more economic and socio-institutional "units" into its orbit. This trend has been particularly striking in the case of local municipal finance in the US.

In 1945, just as Hyman Minsky was preparing to begin his academic career at Brown University, outstanding (bonded) municipal debt in the US totaled \$20 billion. In 1960, several years into his stint at the University of California, Berkeley, the municipal bond market stood at \$66 billion. And in 1981, at the dawn of the "Reagan Revolution," while Minsky was writing "Essays on Instability and Finance," municipal debt stood at \$360 billion. Steady growth notwithstanding, "the municipal market in 1981 was not so very different from the market of 1961, or even 1941" (Mysak, 2012, xiii). But as federal and state retrenchment took hold in the 1980s-1990s, municipalities became more thoroughly incorporated into the system of financial (debt) relations described by Minsky. As a result, the municipal bond market ceased growing arithmetically and began growing exponentially, such that by the end of 2011, the market encompassed "over one million municipal bonds outstanding" that had been issued by almost 50,000 different municipal entities, "in the total aggregate principal amount of more than \$3.7 trillion" (SEC, 2012).

We can begin by observing, from a Minskian "cash-flow" perspective, that all cities and municipalities will have a debt portfolio that (relative to its revenues) can be categorized

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⁶ Data compiled by the US Securities and Exchange Commission (SEC), available at: (http://www.sec.gov/spotlight/municipalsecurities.shtml).

in terms of its financial "posture" (hedged, speculative, or Ponzi). As we have seen, the first and most stable of these postures is the "hedged" variant. Due to their taxing powers, municipalities have the fundamental capacity to "fulfill all of their contractual payment obligations" with tax receipts and other revenue streams. This means that, historically at least, "[g]overnments... are typically hedge units" (Minsky, 1992, 7). A hedged governmental posture certainly does not preclude debt financing, but the debt structures utilized by hedged municipalities are typically long term, fixed, and low-risk. In the type of liability structure favored by hedged cities, tax receipts and other reliable revenue streams can comfortably cover debt repayment obligations. The prototypical example of this type of debt instrument is the general obligation bond, a low-cost, long-term liability backed by the taxing power of the government issuer.⁷

Municipal entities may also engage the bond market in a more "speculative" manner, in that their normal operating receipts do not cover their debt obligations. We might expect this to be the case, for example, in cities that make big capital investments in future development (e.g. a stadium or convention center), but where revenues fail to live up to projections. In such cases, officials may opt to float short-term debt, in pseudo-continuous fashion, to meet the operational requirements of the municipality. In times of expansion and growth, this may be politically preferable to raising taxes and/or cutting spending. At this point, however, the government ceases to be a "hedged" unit. "Government units are often speculative financing units," Minsky observes, "which operate by rolling over short term debt." In particular, he continues, "government units with large floating (short term) debts can find the cost of carrying debts rising relative to the taxes... available for servicing debt." In such cases, "[h]igh interest rates can make government units into Ponzi units" (1982, 33). It would not be surprising if Minsky was thinking of New York City when making this observation; as the city neared bankruptcy in the mid-1970s, it increasingly relied on rolled-over short-term debt – "money borrowed under its capital budget" – to cover its operating expenses (Mysak, 2012, 129; Tabb, 1982).

A Minskian analysis of the municipal securities market draws our attention to the cash-flows between cities and banks (and between banks and retail bond investors). This relationship is greatly complicated if/when municipalities reinvest the original bond proceeds back into the market. This can occur in three ways. The first method of reinvestment entails temporarily "parking" bond proceeds in a short-term investment vehicle, until such time that the proceeds are used by the municipality. Secondly, and more rarely, municipalities may issue (taxable) bonds for the purpose of capturing profits. For example, the proceeds from "pension obligation bonds" (in a classic example of debt leverage) are reinvested by municipal officials, essentially betting that the investment "will earn more than the interest rate payable on the bonds" — a process known as arbitrage (Myslak, 2012, 5; 144). Third, banks may illegally pursue arbitrage profits on tax-exempt bond proceeds, a practice specifically targeted by the Tax Reform Act of 1986. As financing units, therefore, municipalities do not "leverage" debt in precisely the same manner as their corporate counterparts. The firms described by Minsky's financial instability hypothesis face

⁷ There are short-term debt structures that are also compatible with a hedged governmental posture. For instance, tax and revenue anticipation notes (TRANS) are not uncommonly used by hedged government units facing continuous expenses but "fluctuating seasonal receipts" (Doty, 2012).

competitive and psychological pressures that compel them to leverage debt in increasingly aggressive and risky ways. "[U]nlike corporations," by contrast, "municipal issuers *rarely borrow for leverage*" (Doty, 2012; emphasis added). Traditionally, city officials have instead tended to indirectly "leverage" long-term debt for the purpose of urban growth – efforts that often take the form of infrastructure development.

In spite of this divergence between the debt behavior of firms and the debt behavior of municipalities (vis-à-vis leverage), Minsky's model of financial instability fits the trajectory of the municipal securities market very well. First, it should be noted that, while their occurrence is rather infrequent, there are (in fact) cases in which cities have leveraged debt in exactly the manner predicted by Minsky. The most infamous case of this sort is Orange County, California, which declared bankruptcy in 1994 after accruing investment losses of over \$1.5 billion (Platte and Vrana, 12/2/94). At the time, the county's aggressive investment strategy had racked-up an impressive track record, averaging returns of 9-10 percent annually since 1980 (Ibid; Mysak, 2012, 133). As the fund's reputation grew, so did its size. At the time of the bankruptcy, the county's investment pool had swelled to encompass 187 cities and agencies from across California. For a time these entities were well rewarded.⁸ By this time, the county was borrowing large amounts of money for the purpose of arbitrage. In 1994, the county had invested "part of its \$7.5 billion investment pool in derivative securities and borrowed an additional \$13 billion to further enhance its returns" (Ibid). In true Ponzi-esque fashion, this highly leveraged strategy could only work for as long as the value of county investments was rising and interest rates remained low. In 1994, however, interest rates almost doubled (going from 3 percent to 5.5 percent) damaging the pool's fixed income investments. In the end, the county faced a cashflow crisis reminiscent of a "Minsky Moment" – its more exotic investments now cost more than they were paying out and investors in the pool began demanding their money back. Ultimately, the county simply ran out of cash (Ibid, 135).

The Orange County episode alerted markets, regulators, and the media to the fact that "in certain localities, the municipal treasury was being operated as a... profit center" (Mysak, 2012, 133). In the annals of municipal finance, of course, the case is still an outlier. Importantly, however, the basic strategy used by County officials was not anomalous. While the instruments developed in Orange County were highly complex, some bafflingly so, "most of them – at their core – were bets that interest rates would stay low" (Partnoy, 2004, 112). It is this essential strategy of capturing the "spread" between long-term and short-term rates that has led the municipal market along the continuum identified by Minsky – from debt structures that are safe and stable to practices and mechanisms that are increasingly risky and volatile.

The growing instability of municipal securities in the years leading up to the crisis was directly linked to the "derivatives market" for municipal borrowers, which had "grow[n] steadily since its inception in the mid-1980s" until the recent financial crisis (Taub, 2005, 19). Municipal issuers use derivative products to "manage their exposure to interest rate risk" and "increase returns" through instruments such as interest-rate swaps, variable-rate

⁸ In 1992, for example, Orange County's pool returned an average yield of 8.52 percent, compared Los Angeles County's 3.88 percent (Myslak, 2012, 133).

demand obligations, floaters/inverse floaters, and the like (SEC, 2012, 8; Hildreth and Zorn, 2005). These instruments tended to reflect the financial innovations that were occurring in the broader capital markets. In order to maintain "market liquidity," Taub notes, the "principles and practices in the municipal derivatives market have generally reflected principles and practices in the general derivatives market" (2005, 19). The derivative used most commonly by municipalities was the "interest rate swap" (and its many various iterations), which allowed cities to "make[e] side bets on the future direction of interest rates" (Myslak, 2012, 177). In a typical scenario, a municipality issues a variable rate bond whose interest rate is reset daily, weekly, or monthly. These instruments were often insured (and hence rated triple-A on the creditworthiness of the insurer), meaning the city is, in effect, "paying short-term rates on 30 year-year debt" (Ibid, 179). The municipality then enters into a "swap," whereby it agrees to make payments to the bank "based on a fixed rate in exchange for payments [from the bank] based on a floating rate" (Taub, 2005, 19). In such agreements, the "issuer hopes (or bets) the... rates it pays investors will be matched [or exceeded] by the floating rates it receives from the bank." In the pre-crisis era, few acknowledged the inherent instability of these instruments. Quite to the contrary, they were roundly praised for allowing cities to "lock in" low borrowing costs via the "synthetic fixed-rate' portion of the deal" (Myslak, 2012, 179).

In retrospect, of course, the seeming stability of these instruments was a mirage; a collective illusion born in times of euphoric growth and prosperity. This illusion was unceremoniously shattered in 2007-2008 when large parts of the municipal market failed. The first cracks began to emerge in the wake of the subprime mortgage crisis, which damaged the credit rating of many large "monoline" insurance firms that were providing "credit enhancement" to municipal issuers. Notably, municipal bond insurance and enhancement services helped to legitimate the growing sense that municipal derivatives were a safe and stable tool for both cities and investors. In this manner, the growth of bond insurance and enhancement mirrored, and was attendant to, the growth of the municipal derivatives market. First introduced in 1971, municipal bond insurance only gained widespread popularity "after the introduction of variable-rate municipal bonds in the early 1980s" (SEC, 2012, 10).¹⁰ However, as the subprime crisis eroded the ratings of the big bond insurers (and the projects they had vouched for), investors began demanding higher yields, leading some auctions of variable-rate securities to fail (late 2007). The big blow was to come in February of 2008, when "major dealers stopped bidding for the paper entirely, and... thousands of auctions" were disrupted (Mysak, 2012, 10). The market for "auction-rate securities" (ARS) had failed. 11 In response, municipalities rushed to refinance their variable-rate debt into safer vehicles – most often in the form of "long-term, fixed-rate debt" (Mysak, 2012, 179). The market never recovered (SEC, 2012, 10).

The effects of the crisis would send shudders through the entire universe of municipal derivatives – take, briefly, its impact on the holders of "interest rate swaps." These unfortu-

⁹ Further adding to the morass, "almost all swaps were based on LIBOR [London Interbank Offered Rate] which [was] manipulated through collusive practices" (Taylor, 2013, 4).

¹⁰ In the years directly preceding the financial crisis (2000-2007), "more than half of the municipal securities principal issued [was] supported by at least one type of credit enhancement" (SEC, 2012, 10).

¹¹ "[I]ntroduced into the municipal market in 1988," the ARS market had grown to \$200 billion at the time of its implosion (SEC, 2012, 9).

nate cities were doubly squeezed. On one hand, they were paying more for their variable-rate debt, "as a result of either failed auctions, downgraded insurers, or the movements in the variable-rate municipal market." On the other hand, such cities were also "collect[ing] a lot less from their swap counterparties, as the Federal Reserve slashed interest rates and bank's own short-term rates plummeted" (Mysak, 2012, 179). In the end, the growth of municipal derivatives is deeply implicated in the transformation of the (self-regulated) municipal securities market from hedged, to speculative and Ponzi-esque.

Minsky also provides important clues concerning the causes of this transformation; these clues point to the psychological, institutional, and historical factors that contribute to general financial instability. From a Minskian perspective, the first factor to consider is the financial euphoria that grips economic actors during periods of economic growth and prosperity. As fears of recession recede and market confidence blossoms, market participants willingly – even eagerly at the acme of the economic cycle – take on more risks. The Orange County bankruptcy (1994) represents an extreme case of this type of mentality. But in retrospect the case was a "canary in the coalmine" of the municipal securities market. A decade later, debt leverage practices and municipal derivatives were the rule, not the exception. The psychological traits underpinning these tactics (market euphoria) are transmitted (and exacerbated) via the "negotiated sale." For underwriters, a "trust-us-we-know-what-we're-doing" sales pitch is much more effective during economic boom times. And, not surprisingly, once the adversarial negotiating relationship (between city and bank) is replaced with blind dependence, municipal officials are much more likely to adopt risky, derivative-based financial strategies.

Second, we would also do well to note the competitive context of the instability cycle. During the run-up to a Minsky-Moment, "enterprises in highly profitable areas of the economy are rewarded handsomely for taking on increasing amounts of debt, and their success encourages similar behavior by others... because nobody wants to be left behind due to underinvestment" (Whalen, 2008, 97). In the case of cities, this pressure takes the form of intense inter-urban competition for mobile investment capital (Logan and Molotch, 1987). In response, cities turned to supply-side subsidies and infrastructural incentives to attract business and industry, signaling the shift from a "managerial" model of urban governance to an "initiatory" and "entrepreneurial" approach (Harvey, 1989).¹² In this context, even municipal issuers without the capacity to sustain a "hedged" posture are often compelled to pursue growth through speculative infrastructure development, which is increasingly financed by way of debt leverage and derivatives. A Minskian perspective also suggests (contra conventional wisdom) that fiscal crisis is more closely associated with the rise of the municipal derivatives market than with the profligacy and corruption of officials, or with government spending more generally. "While government units can mismanage their affairs and individually get into trouble," Minsky reports, "government borrowing is not the critical element making for instability" (1982, 33; 18).

¹² "Urban entrepreneurialism" is implemented by public-private entities that focus on "investment and economic development with the speculative construction of place rather than amelioration of [inequitable] conditions within a particular territory" (Harvey, 1989, 8).

Hyman Minsky's financial instability hypothesis provides a model that can be used to better understand transformations in the municipal securities market that led to its (partial) collapse in 2008. The FIH model identifies the psychological profile of the participants (irrationally exuberant), the sequential chronology of the process (from hedged to speculative to Ponzi), the "trigger" event (rising interest rates), and the end-result (systemic crisis and collapse). In fact, to reflect the analytic purchase gained from the FIH model, we might term the recent period of municipal fiscal distress a *Minsky-Muni-Moment* — the moment when, on balance, municipal debt shifts to speculative and unstable liability structures, ultimately ending in local fiscal crisis, municipal bankruptcies, bond defaults, rating downgrades, and urban austerity. While Minsky draws our attention to the financial "pull" factors linking municipal budgets to the municipal derivatives market, it still remains to theorize the political "push" factors the propel cities away from a safe and stable "hedged" posture. To fill out the political, institutional, and historical dimensions of the account, we turn to the work of Karl Polanyi.

Part III – Polanyi's Politics of (In)stability: Fictitious Commodities & the Double-Movement

When directly applied to the municipal finance sector, Minsky's FIH raises important questions concerning the politics of financial instability. Governmental units are not pure financing units; their motivations and logics are based, rather, on a contested mix of use values and exchange values (Logan and Molotch, 1987). Importantly for our purposes, this leads to municipal debt behavior that diverges from the debt behavior of corporate financing units. Ultimately, "the concerns and objectives of government issuers are different than those of corporate end-users" (Taub, 2005, 19). These differences hinge, in large part, on politics. Put differently, the question of why certain municipalities move away from their traditional, hedged posture is properly a political one.

The theories of Karl Polanyi can be used effectively to interrogate the political, historical, and institutional dimensions of the relationship between government units and banks and the nature of municipal crisis. We can begin with Polanyi's theory of "embeddedness" – a pivotal concept that refers to the extent to which market structures, behaviors, and logics are enmeshed within webs of social expectations and regulatory limitations. Modern history can be read as the outcome of struggles between those who would "disembed" the market from its social and regulatory moorings and those who seek to contain the most destructive and inequitable impulses of "free" markets. As markets are incrementally disembedded, some may be enriched for a time, but truly disembedded markets are destined to lead to systemic crisis and collapse. Ideally, then, markets are imbricate – layered within a robust palimpsest of social, political, and cultural restraints and controls.

Like Minsky, Polanyi appreciates the economic fecundity of markets. In certain contexts, pure market mechanisms can be a benign force that efficiently produce beneficial goods and services and may serve valuable functions related to social integration (Citation). However, he makes a crucial distinction between markets for "true" commodities (items created for the express purpose of being sold in the market) and markets for "fictitious" commodities (that exist for other reasons entirely). Commodities of the former type tend

to abide by the laws of the market (supply and demand, the price mechanism) while commodities of the latter type do not. Polanyi focused his attention on the status of markets relating to the primary factors of production – land, labor, and money. In no small measure, capitalism rests on the thorough commodification of these crucial economic elements (via real estate markets, the labor markets, and capital markets), and yet, Polanyi argues, this is nothing more than an elaborate fiction. These "fictitious commodities" are not "produced for sale" on the market and, hence, are not equilibrium-seeking when left to their own unregulated devices. From a Polanyian perspective, therefore, the concept of embeddedness focuses our attention on socio-political struggles over the structure and functions of markets for land, labor, and money.

Municipal finance is deeply implicated in political struggles over all three of the fictitious commodities. First, as we have seen, the primary function of long-term municipal debt is for the construction of large-scale infrastructure development projects often related to physical transport, water, and power systems (land). Second, the post-crisis, neoliberal era of austerity has witnessed a public sector backlash that has targeted public employee unions for special scrutiny and criticism (labor). When cities face fiscal hardship, critics sympathetic to the neoliberal agenda point to the long-term obligations (pensions, healthcare benefits) associated with public employee unions as being the primary culprit (and not, for instance, the unregulated rise of the municipal derivatives market). And third, the funding of urban public works through securities and derivatives directly links the socio-spatial fate of communities to capital markets (money).

Because of its position at the intersection of the fictitious commodities, municipal finance emerges as a crucial site of resistance and negotiation. Struggles over the relative embeddedness of municipal finance can take different forms and unfold on different scales of socio-political organization. So, for instance, the regulatory, institutional, and infrastructural embeddedness erected through the federal intervention of the Keynesian state (1940s-1970s) was largely dismantled or left to erode. ¹³ Under conditions of neoliberalism (1980s-present), markets were systematically disembedded through processes of federal deregulation and privatization. As federal funding diminished, cities turned to capital markets to fund their infrastructural needs. Clearly, then, the manner in which the double movement unfolds on national and international scales has profound effects on local finance and development activity. But urban political struggles over the fictitious commodities do not necessarily move in lockstep with federal patterns of retrenchment and disembeddedness. Communities may construct webs of embeddedness on the local and regional levels that run counter to the laissez faire reforms occurring on higher scales (Kirkpatrick, 2011). Alternately, in the aftermath of crisis, national attempts to contain and regulate markets may be counteracted by local elites still seeking to maintain disembedded market conditions. It is the latter scenario that we will consider below: Systemic crisis in the municipal securities market led to federal (and coordinated state) efforts to control, constrain, and re-regulate (i.e. re-embed) the capital market. In the same post-

¹³ The decline of Keynesianism is reflected in federal infrastructure spending. Between 1960-70, US expenditures on (nonmilitary) infrastructure initiatives stood at 10% of the US budget. By the early 1990s, this figure had dropped to under 4%, and (with the exception of a bump for post-crisis recovery efforts) has held relatively steady since (CBO, 2007).

crisis period, however, Chicago officials continued to pursue fiscal and infrastructural development strategies that were predicated on and contributed to disembeded markets – namely, the privatization of public infrastructure projects.

An important layer of the embeddedness of capital is propagated through federal regulatory regimes. However, early efforts to regulate US capital markets carved out "broad exemptions for municipal securities" (SEC, 2012, 27). The market remained a rather staid place and the matter was not seriously revisited until Congress passed the Securities Act Amendments of 1975. In response to allegations of widespread corruption in the growing market, the Amendments granted the Securities and Exchange Commission (SEC) jurisdiction over the municipal market and created the Municipal Securities Rulemaking Board (MSRB) with the authority to "promulgate rules governing the sale of municipal securities by broker-dealers." However, the regulatory schemes drafted by the MSRB were little more than suggested best-practices, as the agency was expressly "not granted authority to enforce its [own] rules" (Ibid). 15

By the early 1980s, municipal securities constituted a largely "self-regulating" market that was experiencing rapid growth and diversification – and was a healthy profit center for large dealers of municipal debt. The Tax Reform Act of 1986 would change the structure of the market, but not the level of regulation or oversight. ¹⁶ After the Act, a new business model emerged that "placed an emphasis on profitability from underwriting new issues of municipal debt" (Taylor, 2013). This shift led to the adoption of "negotiated sales" (as opposed to competitive sales) as the preferred tactic. These changes "fueled the boom in helping issuers invest bond proceeds and the aggressive sales of interest-rate swaps and other derivative products, as well as variable-rate and auction-rate structures." All of which, Myslak observes, "offered the potential for more profits than the simple underwriting of new long-term, fixed-rate bond issues" (Ibid). Negotiated sales are the socio-institutional mechanism that transmits the increasingly complex and volatile instruments developed by bankers and financiers to municipal balance sheets. "The move to fee-based profits versus risk-taking profits [i.e. negotiated sales versus competitive sales] ha[d] been occurring in other parts of the financial services industry," reports longtime head of the MSRB, Christopher Taylor. "It was slowly moving to the muni arena... but the [Tax Reform] Act certainly hastened its adoption" (Taylor, 2013).

In the aftermath of the Great Recession, two fundamental problems with the "negotiated sales" model came to light. First, because of the actual adversarial relationship between cities and underwriters, it was crucial for local officials to fulfill their due diligence in researching both market conditions (with respect to bond yields) and compensation practices (with respect to underwriter expenses). However, by all appearances quite the opposite occurred as underwriters developed nonadversarial and pseudo-permanent relation-

¹⁴ This is true of both the Securities Act of 1933 and the Securities Act of 1934. The municipal exemption did not apply to antifraud provisions of these Acts (SEC, 2012, 27).

¹⁵ For instance, the "Tower Amendment" (1975) drastically limited the ability of the SEC and the MSRB to compel issuers to make disclosures or other presale requirements (SEC, 2012, 27-28; Mysak, 194).

¹⁶ The Act "sharply curtailed" (via changes in the tax exemption formula) the role of banks and insurance companies as bond purchasers, "leaving individuals as the primary customers for municipal securities" (Mysak, 2012, 198).

ships with municipalities. In fact, "many issuers employ the same underwriters and bond lawyers for decades" (Mysak, 2012, 123). Bankers thus understandably began referring to the municipal securities market as a "relationship business." These longstanding relationships generated high levels of trust, which enabled underwriters to develop a comprehensive, "leave-the-driving-to-us" set of services (Ibid, 158). Secondly, one of the services underwriters offered to chummy municipal clients was financial advising. As the complexity of the available financial instruments outstripped the expertise of most issuers, officials were encouraged to hire financial advisors for bond negotiations. Issuers were vigorously warned of the conflict of interests arising from combing the two functions. ¹⁷ Until recently, however, banks could (and regularly did) legally engage in "role-switching" whereby they would act as both underwriter and advisor, "provided they obtained their client's consent" (Ackerman, 2013).

In a "self-regulating" environment, aggressive sales tactics took hold and unstable financial instruments were able to spread freely, all relatively unencumbered by oversight or intervention (antifraud initiatives notwithstanding). If there was any doubt as to the regulatory status of municipal derivatives, the Commodity Futures Modernization Act of 2000 expressly ruled that such activity was exempted from federal rules governing securities, and expressly declared "that federal law would henceforth 'preempt the field" of existing regulatory regimes that may have been enacted on the state level. In the resulting "regulatory black hole" (Wagner, 2009, 6), profits were reestablished, but incidences of corruption, fraud, and graft also increased markedly. The list of serious scandals originating in the municipal securities market during this period is certainly daunting: pay-to-play, premium laundering, yield burning, bid-rigging, excessive compensation/pay packages, and various conspiracies top the list of investigations launched by federal agencies — efforts that gained intensity in the aftermath of the financial crisis. ¹⁸

Ultimately, however, it wasn't scandal but crisis that "launched a [regulatory] revolution in the municipal bond market" (Mysak, 2012, 164). As we have seen, the subprime crisis triggered credit downgrades for large bond insurers (leading to the virtual "annihilation" of the sector since 2008). From the point of view of the issuer, insurance is increasingly viewed as ineffective and expensive; from the point of view of the retail investor, it is increasingly seen as a discredited method of evaluation. The decline of bond insurance and enhancement services has "renewed investor focus on the disclosure practices and underlying credit quality of municipal securities, municipal issuers, and conduit borrowers" (SEC, 2012, ii). Renewed investor scrutiny led, not to clarification, but to increased confusion. In retrospect, this confusion had existed all along — Taylor notes that in the years leading up to the crisis, "muni issuers and many market participants assumed that... interest rate swaps were covered by US securities laws [while] in fact, they were not" (2013, 4). After the crisis, newly alert investors encountered "widespread confusion over how the

¹⁷ For instance, according to a 2008 "Best Practices" report by the Government Finance Officers Association, "[i]ssuers must keep in mind that the roles of the underwriter and the financial advisor are separate, adversarial roles and cannot be provided by the same party" (GFAO, 2008).

¹⁸ As of early 2013, an extensive investigations conducted by the IRS, SEC and Justice Department had led to 13 convictions and more than \$650 million in fines being levied against major banks and investment firms (such as Bank of America and J.P. Morgan) for improprieties in the muni market (Taylor, 2013, 4).

market is regulated" (MSRB, 2009, 3). As the practical problems associated with market failure grew in size and scope, calls for reform became increasingly loud and insistent.

Post-crisis reforms and restructurings can be grouped into four categories. First, steps were taken to decrease the number of "unregulated market participants" dealing in municipal securities and derivatives (MSRB, 2009, 3). This has involved, primarily, expanding the regulatory reach of the MSRB to include financial advisors. 19 This sets industry standards for advisors that its supporters hope will curb problems associated with "roleswitching" and graft that plagued the market before the crisis. Advisors must register with the MSRB (and other basic administrative requirements), and are now prohibited from making political contributions (Myslak, 20012, 143). Ultimately, however, the new measure denied the agency the "express statutory authority" necessary to enforce the rules that the advisors are now supposedly subject to.²⁰ Second, many states independently launched investigations into financial abuses in the municipal sector. For instance, a 2009 investigation by the Auditor General of Pennsylvania recommended that "no [municipality] should enter into or utilize [swaps or derivatives] from this day forward" and that such instruments that were held should "immediately terminate and refinance with conventional debt instruments" (Wagner, 2009, 3).²¹ Individual state efforts have led to some coordinated initiatives; one of the results of the crisis, Doty reports, "is that securities regulators on the state level, organized through the North American Securities Administrators Association, as well as certain state Attorneys General, undertook a large number of coordinated actions, in cooperation with the SEC and FINRA" (Doty, 2010). Third, there have been significant strides made with respect to transparency and disclosure practices. For example, a 2008 rule change designated the MSRB as the "central repository for continuing municipal securities disclosure." This took the form of EMMA (Electronic Municipal Market Access), a vast "central database for information about municipal securities offerings, issuers, and obligors" (SEC, 2012, 35) that is free and open to the public.²² Lastly, there was a significant "recalibration" of the credit rating system in 2010. At issue was the traditional two-tiered rating system by which municipal and corporate entities were evaluated according to two different standards. Municipalities were subjected to the tougher of the two standards, despite extremely low rates of default relative to their corporate counterparts (Citation). A practice which, according to its critics, cost municipal issuers billions of dollars. The 2010 recalibration replaced the dual system with a single, "global" standard that "harmonized" the corporate and municipal scales and, in one fell-swoop, raised the credit ratings of thousands of municipalities.

As a fictitious commodity, capital (money) is not inherently self-regulatory. If money were to ever be fully and truly disembedded, Polanyi reasons, it will result in systemic crisis and societal devastation. A good argument could be made that this is precisely what happened in the lead-up to the Great Recession. In the aftermath of the crisis, federal

¹⁹ Specifically, the "Dodd-Frank" Act (2010) modified the 1975 Amendments to include financial advisors. ²⁰ Oddly, enforcement power is divided into several agencies, such as the Financial Industry Regulatory Authority (FINRA), the Federal Deposit Insurance Corporation (FDIC), among others (SEC, 2012, 34). ²¹ The study concluded that "[swaps] are highly risky and impenetrably complex transactions that... amount to gambling with public money. [T]hey are... marketed deceptively, and they principally benefit the investment banks... who sell them to relatively unsophisticated public officials" (Wagner, 2009). ²² EMMA's website (http://www.emma.msrb.org/) had 25 million page views in 2012 (SEC, 2012, 35).

efforts to address the "regulatory black hole" that had enveloped the municipal securities market can be understood in terms of embeddedness. Extensive and ongoing fraud investigations, "heightened regulatory scrutiny," new administrative structures, and new transparency, disclosure, and ratings standards represent a concerted effort to re-embed municipal capital markets into a federal regulatory regime. Of course, these efforts were slowed, obstructed, and opposed by those arguing for a continued faith in free markets. Furthermore, developments on other scales, relating to different fictitious commodities, may work at counter-purposes to these re-embedding efforts. Take, for example, the infrastructure development strategy adopted in Chicago in the immediate wake of the crisis.

In the aftermath of the financial crisis, as federal agencies were attempting to make sense of (and begin regulating) the municipal market, Chicago Mayor Richard Daly was pursuing an aggressive strategy of privatization that exhibited some of the worst tendencies of the municipal securities and derivatives market. The financial agreements orchestrated by Daly were developed using anti-democratic and non-competitive mechanisms. These characteristics allowed the city to adopt privatization agreements that were speculative and, ultimately, ended in financial losses reminiscent of the worst municipal derivative debacles, but this time with a twist – communities and city officials also lost long-term control of the assets in question.

Like all US cities, Chicago has wrestled with the fiscal challenges associated with deindustrialization, decentralization, and suburbanization. In the wake of the subprime mortgage crisis and the global financial meltdown many cities have suffered further fiscal distress. In the summer of 2008, with the economy in free-fall, Chicago was staring down a \$500 million budget deficit (Joravsky and Dumke, 2009, 4/9/09). Former Mayor Daly, who had already exhausted the list of one-time fixes (such as tapping city reserves and issuing furloughs to city employees), turned to parking meters as a new source of lump-sum revenue. In late 2008, Daly (a reliable proponent of privatization strategies), ²³ successfully pushed a deal through the city council leasing the city's 36,000 parking meters to group of financial investors (led my Morgan Stanley) for \$1.15 billion for a period of 75 years. In true speculative or Ponzi fashion, virtually the entire "windfall" went to "fill immediate budget shortfalls" (Chicago Tribune, 6/17/12). After its passage, the basic framework of the deal soon became public: according to the projections on which the deal was based, the holder of the lease would expect to collect \$11.6 billion in revenues over the course of the contract – a clear indication the asset was significantly undervalued by the city.

The parking meter deal is an infamous example of major policy initiatives being strong-armed through the democratic process. Having worked – in private – to negotiate a deal on the parking meters for over a year, the Mayor announced the transaction to the media and forced a city council vote two days later.²⁴ Despite obligatory official pronounce-

²³ Daly's political and infrastructural legacy largely hinges on his privatization schemes, including (in addition to parking meters fiasco) projects involving the Chicago Skyway Toll Bridge and municipal garages. Daly's administration cemented Chicago's reputation as "the most aggressive city in the United States in the privatization of public infrastructure" (Dutzik, et al., 2009, 1).

²⁴ The Mayor announced the plan on December 2, 2008. On Dec. 3, copies of the proposed ordinance were distributed to Aldermen. On Dec. 4, the day of the vote, "[m]any Alderman concede[d] the still don't understand it" (Joravsky and Dumke, 2009, 4/9/09). Later that day the deal passed with a 40-5 vote.

ments concerning the transparency of the process, by all accounts the Daly administration was highly secretive and obstructionist throughout. Over a year later, public officials were still stonewalling FOIA requests for key financial documents. Similarly, when asked at a public hearing about the "assumptions" that were made in looking at the deal, a Morgan Stanley executive replied the information was "proprietary" (Joravsky and Dumke, 2009, 5/21/09). The poor terms of the deal can be traced to the fact that is was structured in a manner similar to a "negotiated sale." A financial advisor was chosen (as a result of a nobid selection process) who negotiated a complex deal between a consortium of investors and the city. All of the problems we might expect to emerge in such a relationship were reported in the parking meter deal, with opprobrious campaign donations and conflict of interest charges topping the list (Joravsky and Dumke, 2009, 6/18/09).

Chicago's experiences with privatization throws the issue of *control* into sharp relief. In contrast to the municipal securities and derivatives market, accessing capital through private or public-private entities can call into question the "ownership" and "control" of the municipal assets in question. To the extent that the private party involved in the transaction controls the asset, it can transfer risk back to the public sector. Much of the risk inherent in the parking meter deal, for instance, was assumed by the city, which is proving costly. For instance, the city is contractually obligated to pay the investors whenever parking is disrupted due to city functions (street repairs, neighborhood festivals, parades, etc.), which alone could cost the city \$500,000 per year (Dannin, 2011). In an even more egregious example, in 2012 the city was billed \$22 million for the revenues "lost" by providing free parking to the disabled for the previous year (Chicago Tribune, 6/17/12).

Not surprisingly, therefore, brash neoliberal tactics such as privatization no longer appear to be politically viable in Chicago. Public opinion has turned sharply against arrangements whereby one-time cash infusions from speculative and Ponzi deals are quickly depleted as officials pay down old debt. Even the Chicago dailies, long-time supporters of the city's privatization efforts, howled against the plan.²⁵ Indeed, according to numerous reports, there is still palpable "outrage" directed at the privatization deals of the Daly administration. Not surprisingly, therefore, many Chicago residents are understandably wary of the Chicago Infrastructure Trust. The media are also expressing skepticism concerning the CIT. As a Chicago Tribune editorial recently deduced, "The parking meter mess was structured differently than an investment deal brokered by the Infrastructure Trust would be. But the two are generically the same – partnerships in which a public entity attracts, and rewards, private investment" (Chicago Tribune, 4/17/12).

The city has thus understandably tried to distance the CIT from previous privatization agreements. According to administration officials, the trust allows the city to tap into a large pool of debt and equity capital while avoiding all of the worst aspects of privatization. This argument is premised on three basic claims: First, that public infrastructure assets will remain owned by the public; second, that revenues generated by infrastructure development will be "shared" with investors (instead of being surrendered in their en-

²⁵ A recent editorial – in a tone indicative of that taken by many local media – declared, "[Daley] all but gave to private investors one of the public's crown jewels: Future parking-meter revenues went for a fraction of their value, on grossly one-sided terms" (Chicago Tribune, 6/17/12).

tirety) — a process determined by project-by-project "negotiations"; and third, that decision-making processes will be transparent (Citations). There is good reason to be suspicious of these claims. Skepticism may stem from the history and political culture of Chicago, it may be based on the specific structure of the CIT, or it may derive from broader, theoretical concerns. At the same time, however, there is also reason to believe that the CIT could potentially serve as a mechanism by which local political communities can regain control over the financing and governance of public infrastructure networks.

Bibliography/Works Cited

Ackerman, Andrew (2013). "Regulators are Concerned About Municipal-Bond Deals." The Wall Street Journal, April 8, 2013. Available at: http://online.wsj.com/article/SB10001424127887323550604578411123063809056.html.

Babson, Adam and Tamara Larsen (2011). Russell Research: Structuring a Private Infrastructure Portfolio. Russell Investments. (Available at:)

Chicago Tribune (2012). "Opps, Here We Go Again." (Opinion-Editorial) *Chicago Tribune*, April 17, 2012.

Congressional Budget Office (2007). Trends in Public Spending on Transportation and Water Infrastructure, 1956-2004, Washington, DC: August 2007.

Dannin, Ellen (2011). "Crumbling Infrastructure, Crumbling Democracy: Infrastructure Privatization Contracts and Their Effects on State and Local Governance." *Northwestern Journal of Law and Social Policy*, 47(6), 47-105.

Doty, Robert (2012). Bloomberg Visual Guide to Municipal Bonds. Hoboken, NJ: Bloomberg Press.

Dutzik, Tony, Brian Imus, and Phineas Baxandall (2009). "Privatization and the Public Interest: The Need for Transparency and Accountability in Chicago's Public Asset Lease Deal." Illinois PIRG Education Fund.

Erie, Steven P. (1992). "How the Urban West was Won: The Local State and Economic Growth in Los Angeles, 1880-1932." *Urban Affairs Review*, 27(4), pp. 519-554.

Ferri, Piero and Hyman Minsky (1991). "Market Processes and Thwarting Systems." Working Paper No. 64, The Jerome Levy Economics Institute.

Fippinger, Robert A. (1988). The Securities Law of Public Finance. New York: Practicing Law Institute.

Government Finance Officers Association (2008). Recommended Practice: Selecting Underwriters for Negotiated Bond Sales (GFOA).

Graham, S. & Marvin, S. (2001). Splintering Urbanism: Networked infrastructures, technological mobilities and the urban condition. London and New York: Routledge.

Hackworth, Jason (2002). "Local Autonomy, Bond-Rating Agencies and Neoliberal Urbanism in the United States." *International Journal of Urban and Regional Research*, 26(4), pp. 707-25.

----- (2007). The Neoliberal City: Governance, Ideology, and Development in American Urbanism. Ithaca and London: Cornell University Press.

Harvey, David (1989). "From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism," *Geografiska Annaler B*, 71 (1989): 3-17.

Hildreth, Bartley W., and Zorn, Kurt, C. (2005), "The Evolution of the State and Local Government Municipal Debt Market over the Past Quarter Century." *Public Budgeting and Finance*, 25(4), pp. 127-153.

Jaravsky, Ben and Mick Dumke (2009). "Fail, Part One: Chicago's Parking Meter Lease Deal." Chicago Reader, April 9, 2009. Available at: http://www.chicagoreader.com/chicago/fail-parking-meters-lease-deal/Content?oid=1098561.

----- (2009). "Fail, Part Two: One Billion Dollars!" Chicago Reader, May 21, 2009. Available at: http://www.chicagoreader.com/chicago/one-billion-dollars-parking-meter-fiasco-part-two/Content?oid=1123046.

------(2009). "Fail, Part Three: The Insiders." The Chicago Reader, June 18, 2009. Available at: http://www.chicagoreader.com/chicago/parking-meter-fiasco-part-three/Content?oid=1127436.

Kirkpatrick, L. Owen (2011). "The Local Politics of Embeddedness: Karl Polanyi and the Community Development Movement." In J.P. Rothe, L. Carroll, and D. Ozegovic (eds.), *Deliberations on Community Development*. NY: Nova Science Publishers.

Kirkpatrick, L. Owen, and Michael Peter Smith (2011). "The Infrastructural Limits to Growth: Rethinking the Urban Growth Machine in Times of Fiscal Crisis." *International Journal of Urban and Regional Research* 35(3): 478-503.

Leigland, James (1995). "Public Infrastructure and Special Purpose Governments: Who Pays and How?" in D. Perry (ed.), *Building the Public City: The Politics, Governance, and Finance of Public Infrastructure.* Thousand Oaks, London: Sage Publications, pp. 138-168.

Logan, John and Molotch, Harvey (1987). Urban Fortunes: The Political Economy of Place. Berkeley, Los Angeles and London: University of California Press.

Logan, Tim (2013). "Rahm Emanuel Has and Idea: Changing the World of Public Financing with Chicago's Infrastructure Trust." *Next City*, 1(33), 1-18.

Matton, Richard and Sarah Wetmore (2012). "Beyond Parking Meters: The Future of Public-Private Partnerships." Chicago Fed Letter; The Federal Reserve Bank of Chicago, 299a (June).

Minsky, Hyman P. (1976). Banking and a Fragile Financial Environment." Paper Prepared for the American Economic Association Meetings. Atlantic City, September 16, 1976.

McCulley, Paul (2009). "The Shadow Banking System and Hyman Minsky's Economic Journey." Global Central Bank Focus, PIMCO: Allianz Global Investors. (Available at:)

MRSB (2009). Unregulated Municipal Market Participants: A Case for Reform. Municipal Securities Rulemaking Board.

Mysak, Joe (2012). Encyclopedia of Municipal Bonds: a Reference Guide to Market Events, Structures, Dynamics, And Investment Knowledge. Hoboken, NJ: Wiley, 2012

Partnoy, Frank (2004). *Infectious Greed: How Deceit And Risk Corrupted the Financial Markets*. Revised and updated Edition. London: Profile Books.

Platte, Mark and Debora Vrana (1994), "Orange County's Fund Value Falls \$1.5 Billion." Los Angeles Times, December 2, 1994.

Sbragia, Alberta (1996). Debt Wish: Entrepreneurial Cities, U.S. Federalism, and Economic Development. Pittsburgh: Pittsburgh University Press.

Tabb, William, K. (1982). *The Long Default: New York City and the Fiscal Crisis*. Monthly Review Press: New York and London.

Taub, David L. (2005). "Understanding Municipal Derivatives." *Government Finance Review* 21(4): 18-23.

Taylor, Christopher (2013). Statement to the Committee on Ways and Means. House of Representatives, March 19, 2013.

U.S. Securities and Exchange Commission (2012). Report on the Municipal Securities Market. (Available at: http://www.sec.gov/news/studies/2012/munireport073112.pdf.)

Wagner, Jack (2009). A Special Investigation of the Bethlehem Area School District, Lehigh/Northampton Counties: A Case Study of the Use of Qualified Interest Rate Management Agreements ('Swaps') by Local Government Units in Pennsylvania, with Recommendations. Pennsylvania Department of the Auditor General.

Whalen, Charles (2008). "Understanding the Credit Crunch as a Minsky Moment." *Challenge* 51(1): 91-109.