BAILING OUT THE WEALTHY: THE GLOBAL FINANCIAL CRISIS, PONZI NEOLIBERALISM, AND URBAN SOCIAL CRISIS

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Abstract. This article seeks to critically examine the public policy response to the global financial crisis in the core of the developed world, and to understand the likely implications of this set of policy responses for the future trajectory of urban social crises. Instead of dealing with the internal contradictions of the financial-economic system that characterizes recent capitalism and produced the global financial crisis, governments of the wealthiest countries are actively attempting to 'solve' the problem by re-instilling the form of capitalism at the heart of the financial-economic system as it stood before the crash, which I refer to as 'ponzi neoliberalism'. The increasing dominance of ponzi dynamics in this system means it is inherently contradictory, inequitable, wealth-destroying in the aggregate, and unsustainable, with implications for the future form and trajectory of urban social inequality. In this article, I trace the roots of the global financial crisis and outline the parameters of ponzi neoliberalism. I then discuss how nation states are using public policy to resuscitate this system, and in doing so, are reproducing highly contradictory and unsustainable, but self-reinforcing, dynamics (doom-looping) that imperil future social and economic sustainability. I then consider the impact on the geography of the city, and argue that this strategy risks a deepening urban social crisis. The longer that ponzi neoliberalism is allowed to continue, the deeper and more problematic will be the crisis, and the more limited will be the state capacity to respond to its contradictions.

INTRODUCTION

The "great recession" that exploded into view in 2008 across most of the world has been accompanied by contradictory signals. The simultaneous crash of record bubbles in real estate and the stock market was accompanied by precipitous declines in employment, production, foreign investment and international trade, which extended through 2009 (OECD, 2009, 2010). Yet soon after the 2008 events, a legion of politicians, media spokespersons and central bank chairmen began promoting the idea that a recovery had already begun. Already by late March 2009 there was the discourse of "green shoots", followed by premonitions that the recession was "likely over", on the "rebound" (Murray and Zimmerman, 2009; Trichur, 2009a; Wong, 2009a). Victory over the recession was finally declared in the late fall of 2009, when third or fourth quarter results revealed positive gains in GDP in many countries (Crutsinger, 2009; Grant and Torobin, 2009; Marlow, 2009), while 2010 has been heralded as a year the economy finally became "airborne" once again (Yew, 2010). While often prefaced by statements to the fact that 'we are not yet out of the woods', the consistent and boosterish tone of such pronouncements came together to promote a singular message: it is safe to borrow and spend.

Many public figures were open about their desire (desperation) to instill confidence in the economy. Since both finance, and consumer spending, have grown to become very important as a proportion of GDP in many countries (the latter close to 70 percent in North America), it followed that in order to get the economy humming along again, banks needed to gain the confidence to trade and lend, and consumers needed the confidence to spend. A speech by Australia's Reserve Bank Governor, Glen Stevens serves as good an example as any: "Our task is very much one of seeking to behave, across the board, in ways that will foster, rather than erode, confidence. It is such confidence that, more than anything else, will help to drive us along the road to recovery" (cited in Keen, 2009a, 1). This need to maintain confidence is particularly evident during all debt-induced banking crises (which often lead to runs on the banks), and was also the norm during the Great Depression.

Confidence-building rhetoric was accompanied by a powerful economic inducements to spend and invest. Following the dictates of monetarists like Milton Friedman, and with a mission to "save lenders, woo investors" (McKenna, 2009), central banks reduced their interest rates to as close to zero as possible in order to encourage insolvent and bailed-out banks to earn their way out of the crisis, and to incite businesses and households to borrow. As 'confidence' returned, this advice was heeded and bank lending rebounded in many places. New credit flowed into the real estate sector, while also igniting a new stock market rally. Thus, in contrast to the typical pattern in which real estate is the last sector to rebound after a recession, a number of countries saw their real estate markets lead the recovery, and in some places have overtaken previous sales records (Wong, 2009b). In Canada residential real estate prices by December of 2009 had risen to over 19 percent above the previous year (Wong, 2009c), while in Australia they were up 11.3 percent (Vasek, 2010), and in the UK 4.1 percent (Leach, 2010). Even in the United States (US), still being ravaged by foreclosures and massive job losses, the Case-Shiller index of housing values in the United States measured a pause in the decline of real estate prices, although new home sales remained depressed and foreclosures continued rising (Evans-Pritchard, 2010; Reddy, 2009; Levy, 2010; Rappeport, 2010).

That such events could occur even as the wheels of industry continued idling (Crane, 2009) and during "the deepest recession since the Great Depression", is astonishing and unprecedented, particularly considering the global financial crisis (GFC) is partly a result of undue speculation in real estate. However, it must also be recognized upholding real estate values has been THE intention of policy makers. The financial programs, bailouts, quantitative easing, and monetary interventions enacted by the US Treasury, Federal Reserve, and central banks around the world have all been geared to putting a floor under real estate, in turn saving the banks and re-starting the economy largely as it existed before the crash. The "airborne" recovery has been taken as a vindication of this approach. Yet, despite the confidence of politicians and other public figures, there remains large question marks around a recovery modeled on the pre-crash economy. Debates through 2009 and the first half of 2010 mainly concerned the relative benefits of government intervention in the banking sector, the impact of sovereign budgetary deficits on the strength of the 'recovery', whether the future would be deflationary or inflationary, and whether there might be a 'double-dip' recession. In all this, the prevailing mainstream assumption has been that it is necessary and desirable to reinstate the pre-crash economy to the extent possible, albeit with some reforms of the worst excesses, and this is what the recovery strategy has been built on.

This article examines the implications of the approach taken to date, particularly in the Anglo-American countries, to rescue the financial system and resume economic growth. It is argued that instead of being a desirable option, the use of state resources to encourage a resumption of the pre-crash economy will have significant damaging impacts. Importantly, it will spur greater income inequality, social and spatial polarization of the city, declining public infrastructure and service levels, and the decline of cities' productive and employment bases.

Furthermore, it will exacerbate and intensify the problems that underlay the original crisis, leading to greater, rather than less, economic, political and social instability and vulnerability. Indeed, as will be argued, the government response lays the foundation for a new urban social crisis.

Before it can be understood why the coordinated state response to the recession is so problematic, it is important to explore the roots of the global financial crisis and some important features of the global capitalist economy as it evolved since the late 1990s. The first section thus discusses the development and parameters of global neoliberal/ monopoly-finance capitalism as it evolved in the core nations in the years leading up to the crash, which I characterize as "ponzi neoliberalism". The second section explores the ways that governments are responding to the crisis in trying to re-ignite this system, and discusses the problems and risks with this approach. Finally, the article concludes by considering the implications of this analysis for urban social sustainability in the core nations.

ROOTS OF THE CRISIS: FROM POST-FORDIST NEOLIBERAL GLOBALISM TO PONZI NEOLIBERALISM

The mainstream explanation for the GFC pins the blame on the shady lending of subprime and other unorthodox mortgages in the United States, encouraged by US government policy and inadequate regulation, to borrowers who could not pay back the loans, and to certain financial innovations (the 'alphabet soup' of derivatives: ABS, MBS, CMOs, CDOs, CDS, ABCP, etc), which allowed these mortgages to be parsed up, bundled and sold with high (AAA) ratings to financial firms and other investors who thought their investments were safe (see, for instance, Booth, 2008; Hlinka, 2008; Immergluck, 2009; Quercia and Ratcliffe, 2008). The forms that such problematic mortgages took should have raised flags right away: interest-only loans, "liar" loans in which borrowers do not need to verify their income, Alt-A and adjustable rate (ARM) loans that entice borrowers with very low interest rates for the first few years, but reset at much higher rates later, loans for more than the cost of the property, and loans that capitalize part of the interest into the principal over time. Because these mortgage products allowed many to afford houses that would be beyond their means without them, it is immediately understandable why their propagation would over time lead to both house-price inflation, and eventually, high default rates (see Immergluck, 2008, 2009). The strong ideological pre-disposition toward homeownership in the North American culture, political economy, and psyche, as well as the erroneous assumption that real estate values always increase, are said to explain how policy makers and lenders could be so blind to the obvious pitfalls of such a strategy (Ibid.,).

While the above story is not incorrect, many have already noted that it is only part of the explanation and the roots of the current crisis are considerably deeper and more complex. Indeed, as Castree has intimated (2010) to accept the above argument as the cause of the GFC is potentially dangerous, because it implies that all that needs to change in order to prevent it from occurring again is for mortgage lending standards, and the financial products derived from them, to be reformed and regulated. It also pins much of the blame on the United States, instead of the edifice of the current neoliberal incarnation of global capitalism (Ibid.). In truth, the GFC, of which the mortgage crisis is but one part, is the result of the complex interlocking logic of the most recent version of neoliberal capitalism, a system that is particularly unsustainable and socially destructive, yet driven forward through a self-reinforcing set of positive-feedback loops that are inherently unstable and must lead to crises.

Much important scholarship has already related the GFC to stagnation in the productive economy, growing financialization, and waning US hegemony within the global economy, and ultimately a result of the tendency within capitalism toward falling profit rates and overaccumulation (Bellamy and Magdoff, 2009; Cox, 2009; Harvey, 2010; Sideri, 2009; M. Smith, 2010). While insightful, the degree to which the global political-economic system, which evolved from the neoliberal monopoly-finance capitalism of the 1980s and 1990s, has shifted toward a particularly wealth-destroying form has not received sufficient attention. It is important to understand the dynamics of what I term ponzi neoliberalism before the implications of its re-igniting can be fully appreciated. While some key authors have already pointed out the ponzi character of recent asset bubbles (Das, 2009; Harvey, 2009, 4; Keen, 2009b), I seek to demonstrate that these bubbles are but one aspect of the larger globalized ponzi edifice, instigated by and dependent upon neoliberal policies, that if propped up by the state for much longer seriously threatens the basis for social reproduction and production.

A good place to begin is with the liberalization of finance and the growing trade imbalances on the part of core developed nations, particularly the United States. After the demise of the 'Breton Woods' fixed exchange rate regime, itself a result of US over-stretching in the Vietnam war and the declining rate of profit among US export-based manufacturing, countries whose currencies were accepted as global reserve currencies (mainly the US dollar, but also the British Pound and very recently the Euro), began to experience growing and persistent trade (current account) deficits with the rest of the world. As the financial crises elsewhere in the world grew from the late 1970s, due to rising interest rates and the debt crises of third world economies related to the neoliberal discipline imposed by IMF structural adjustment programs (SAPs), so did demand for the US dollar and the few other global currencies. This meant that the United States (and other countries, such as the UK) could consume far beyond what their level of exports would imply, and after the early 1980s inflation crisis, drove down their real interest rates which deterred saving and encouraged borrowing. It also made their exports increasingly expensive and thus potentially uncompetitive with those from other nations with weaker currencies, fuelling the relocation of manufacturing and other production processes from developed to developing nations. This only intensified once China, which fixed its exchange rate to the dollar, was awarded preferred trading nation status and became a major exporting nation (Harvey, 2005). Low real interest rates allowed for the growth of destabilizing carry trades (in which funds are borrowed in low-interest-rate currencies in order to lend in higher-interest-rate economies), and for debt levels to be sustained at ever higher levels (Blecker, 2005; Dymski, 2009; Turner, 2008). This drove the globalization of trade, as the carry trades provided the investment dollars to build the manufacturing infrastructure that re-located to Asia, while the high dollar and easy credit fuelled ever higher levels of consumption of imports. Such an imbalance could continue because the flows of 'hot money' (carry trade credit) investment into developing nations have been partially balanced by the recycling of foreign exchange reserves amassed in those countries (due to rapid export industry growth) back into the debt issued by the developed world (US Treasury bonds, UK Gilts, and various other private sector debt, including mortgage-backed securities), keeping interest rates low and supporting ever-increased debt loads in the developed world. However, growing trade and budget deficits meant that governments in emerging nations were lending money to developed nations so that they could purchase their goods, a clearly unsustainable proposition in the long term.

The 'Bretton Woods II' floating exchange rate regime that emerged is tied to the growth of the 'financialisation' of the economy, the rise of the "Dollar-Wall Street regime" (Gowan, 1999, 2009), and to the development of the ensuing financial innovations (particularly the various kinds of derivatives) meant to hedge investment risk (see D'Arista, 2005; Epstein, 2005; Harvey, 2005; Krippner, 2005; McNally, 2009). With the demise of the gold standard, exchange rates began to fluctuate wildly, affecting capital valuations and real interest-rate differentials. Firms with global operations needed to hedge against exchange and interest rate risk, and the risk of international defaults. Exchange-rate swaps (ERS), interest-rate swaps (IRS) and credit-default swaps (CDS), emerged out of this context, each of which acts as a form of insurance against valuations moving opposite to assumptions (often modeled using intricate mathematical formulae). Because they contain various sorts of provisions for pay out, they are traded and can be counted as assets on the books of financial institutions. Because they are unregulated (and followers of monetarism argued against their regulation), they can, and often are, used as a form of gambling (see Dodd, 2005; Steinherr, 1998).[1] While it is impossible to know with any certainty the true value of outstanding derivatives, recent estimates place the total notational value (the total amount of insurance) at around $1.3 quadrillion, and the actual exposure (money at risk) at approximately $60 trillion, or just above the total global annual GDP (Durden, 2009). Because synthetic derivatives derive their value from future movements in the values of other assets (including other mortgage-backed securities, which derive their value from shares in the expected value of future mortgage and interest payments), they are the epitome of Marx's 'fictitious capital' - paper claims to future shares of expected profits or wages (Harvey, 1982; McNally, 2009). Not only were derivatives used to hedge investment risk, and to facilitate leveraged buyouts, but the accounting of these instruments as financial assets means that financial institutions holding them could lend against their value, and so the growth in derivatives has led to a rapidly expanding supply of credit throughout the global economy.

A positive-feedback (self-reinforcing) loop developed between the growth of interest rate differentials, trade deficits, consumer debt, exchange rate differentials, government budget deficits, and the decline of the manufacturing sectors across the developed world (see Crotty, 2005). A flood of investment into the productive sectors of emerging economies with low labour costs only intensified the deindustrialization of the core developed world as this process continued, spurred on by trade liberalization and the deregulation of banking and capital controls which became part of the bible of the neoclassical economists, who took a blind eye to growing debt. Anglo-American nations lost approximately one third of their manufacturing jobs through this process (Table 1), putting significant pressure on working class wages and dampening the power of unions (see Breau and Rigby, 2010). Real median earnings thus hardly moved from where they were in the late 1980s, particularly in North America and Japan. Yet at the same time, the banking and financial services sectors boomed (based on the development of new credit instruments), making governments think this was the dawn of post-industrial, "creative" and "new" economy (Table 1).

One result is burgeoning inequality, pushing up average incomes even as median wages stagnated, and which is characterized by huge increases in the share of incomes going to the top 1 percent of the population (Atkinson and Leigh, 2007; Conway, 2009; McKenzie, 2007; Saez and Veall, 2005). By reducing welfare state supports and services, while simultaneously liberating the financial sector, neoliberal governments compelled vulnerable low-income

[1] For instance, while the main intent behind the development of CDS may have been to hedge one's investments, it is possible to take out a CDS, for any amount, on the default of a company with whom one does not even have a relationship. This is effectively a bet that the company will fail, and provides an incentive for financial sabotage (akin to "buying fire insurance on someone's house and then committing arson", Morgenson and Story, 2009, B4).

families, as well as university students and many others in the middle class, to rely on credit to offset the relative fall in their standard of living (Montgomerie, 2009). Crouch (2009) calls this a system of “privatized Keynesianism”, in that it was no longer the state taking on debt to pay for services required to support the population and to stimulate the economy, but individuals and households themselves. However, the burden of debt is not distributed evenly, but skewed heavily toward low-income households (CGAAC, 2009; Montgomerie, 2009).

[Table 1 about here]

The Real Estate Connection

David Harvey (1982, 1989) explains that when the returns to investment in the primary circuit of capital (manufacturing and other productive sectors) falls below those in the secondary circuit (generally, real estate and land development), capital switches from the former to the latter. Global economic imbalances in trade and capital flows, exchange rates and interest rates (all encouraged by neoliberal policies), placed the manufacturing sectors of the core of the developed world perpetually at a competitive disadvantage, making core capital investment disproportionately prone to move into this secondary circuit. The build-up to the first stock market crash of the neoliberal era, in 1987 (culminating in the recession of the early 1990s, and the beginning of a long slow debt deflation in Japan), was due to over-investment in office/ commercial development as well as residential real estate. Innovations in financial derivatives bolstered a significant growth in credit, which also fuelled leveraged buyouts, mergers and acquisitions. After that bubble popped, causing a severe recession in some parts of the world, capital switched into the primary circuits of newly emerging Asian economies. Over-investment in East Asia ended with the 1997 Asian currency crisis, enticing capital investment back into the United States and into technology stocks, only to see that end with the dot.com bubble (leading to the US recession of the early 2000s). In each case from the late 1980s onwards, the recessions were caused by the popping of debt-induced over-investment, leading to financial crises. The (US) state response increasingly was to bail out the financial institutions (savings and loan institutions, etc), and employ loose monetary policy to entice consumers to borrow and spend again. In response to the popping of the 2000 dot.com bubble and the 9/11 terrorism, the US Federal Reserve slowly brought interest rates down to 1%, and kept them there for an extended period, while the Bank of England, under a new politicized monetary policy, altered its inflation targets allowing it to also significantly lower its interest rate (Hay, 2009). With a moribund and increasingly uncompetitive domestic manufacturing sector, and with active subsidies and guarantees by the US federal government and explicit policy encouragement in other countries (Finlayson, 2009; Hay, 2009), capital switched back into the secondary circuit, in particular residential real estate.

From the beginning, the growth of securitization has been tightly linked to the development of mortgage markets. The first mortgage-backed securities (MBS) were issued by Federal Home Loan Bank in the 1930s, and then taken up by the two main US government sponsored enterprises (GSE), the Federal National Mortgage Association (FNMA, or ‘Fannie Mae’) and the Federal Home Loan Mortgage Corporation (FHLMC, or ‘Freddie Mac’), respectively. The US Congress under the Reagan administration sought to use mortgage-backed securities as a way of bringing “greater liquidity, rationalization, and standardization” to bear upon what are essentially very localized and idiosyncratic mortgage markets. It was a way of “creating liquidity out of spatial fixity” in otherwise fixed and illiquid assets (homes), and as the

1980s wore on, pools of mortgages were divided into 'tranches' based on their level of default risk, and packaged into CMOs and CDOs (collateralized debt obligations) (Gotham, 2009, 363; Tett, 2010). From the mid-1990s onwards, private lenders began bundling subprime and other mortgages into "synthetic" MBS, CMOs and CDOs, and selling them on the secondary mortgage market, while often insuring them or hedging their risk (and when it was clear the bubble was ready to pop, actively betting against their values rising) using CDS (Morgenson and Story, 2009). Asset-backed commercial paper (ABCP) was sold in order to provide short-term financing for securities bought on margin (for an explanation of how the various derivate products described here work, see Christophers, 2009; Hull, 2008). Neoclassical economists, including FED chairs Alan Greenspan and Ben Bernanke, mistakenly argued that securitization would reduce systemic risk because they distributed and priced it (see Ashton, 2009; Dodd, 2005; Whitney, 2008). Once the practice of securitizing real estate was worked out and shown to be profitable in the US, it became adopted and embraced by governments and financial sectors across the world. For instance, the Canadian government began, through the Canada Mortgage and Housing Corporation (CMHC), guaranteeing mortgage-backed securities issued by Canadian banks in 1986, although the practice of securitizing mortgages in Canada would not boom until well into 2000s. Securitization was also extended to other loans, including car loans and credit card debt, not only in the United States but elsewhere.

The growth of securitization practices, and the derivatives linked to them, rapidly increased the amount of credit available throughout the global economy over the 1990s and into the 2000s. As capital switched back into real estate after the dot.com bust it found a secondary mortgage market already well developed. with real estate values now growing from their post-1990 recession lows. Predatory mortgage lending became the new instrument of "accumulation by dispossession" (Harvey, 2005), as lenders were happy to receive back the collateral (the real estate) and resell it for profit if the borrower could not pay. The subprime mortgage and other debt products being securitized had since the mid 1990s been used as tools for extracting profit (class monopoly rents) from marginalized and racialized low-income groups, with many black and Hispanic neighbourhoods now "greenlined" for predatory loans, ushering in new waves of dispossession, displacement and gentrification (see Crump et al., 2008; Kaplan and Sommers, 2009; Newman, 2009; Wyly and Holloway, 1999; Wyly et al., 2006, 2009). Negative real interest rates stemming from Alan Greenspan's drop in the U.S. Fed rate further enticed shadow, and shady, lenders into the breach, and the "irrational exuberance" first given over to tech stocks shifted to real estate (Shiller, 2000). The higher yields encouraged the further development of 'exotic' mortgages designed to do for the banks with the middle class what subprime mortgages had accomplished with marginalized communities (Immergluck, 2008, 2009). Similar products (interest-only mortgages, cash-back mortgages, negatively-amortizing loans, etc) likewise took root in other countries (albeit tailored to local regulations and contexts) in order to cash in on the easy profits. The synthetic derivatives based on these new debt instruments had built into their values assumptions concerning the ability of the working class to cut back on necessary expenditures (like food) to continue serving their debts and their relation to expected default rates.

Despite evidence of predatory lending, lax lending standards, irresponsible and fraudulent practices, and warnings of growing delinquencies, the US Department of Housing and Urban Development (HUD) under the Bush administration in 2004 decided to compel Fannie and Freddie to buy subprime mortgage-backed securities and the higher-risk tranches of CMOs from private lenders, in the name of further encouraging homeownerhip among low-income households (Gotham, 2009; Immergluck, 2009). With taxpayers footing the bill, and the increasing dominance of synthetic CDOs and other derivates that eliminated the mutual interest associated with avoiding defaults, lending standards dropped further, and whole hosts of private lenders increased their output to take advantage of the huge and guaranteed profits to be made from GSE purchases of such securities (Ibid.). Because the private lenders were not holding the mortgages themselves but bundling and selling them on the secondary market, they had little interest in their level of risk, the quality of the loans, or in having accurate risk ratings provided by the ratings agencies (Elliott and Atkinson, 2008; Sassen, 2009). Instead, lenders wanted the highest ratings they could attain, as this enhanced their ability to sell and profit from the sales of the securities. The agencies obliged by meeting the demand for higher ratings, which was in their short term (conflicting) interest since they earned fees for this service (Elliott and Atkinson, 2008: Herring and Kane, 2009). State guarantees and high ratings provided further credibility cover for the securities, which were then sold on global markets, coming to rest on the balance sheets (and in many cases off-balance sheet) of a large number of international banks, other financial institutions, pensions funds and various other investment funds. In this way, the spatial fixity of urban place as expressed in houses, land, real estate and mortgages can be said to have become the new exploitable "widgets" of the global post-industrial economy, from which the elites (bankers, etc) extracted significant profits (Newman, 2009). When housing prices began to soften and interest rates began to rise, this imperiled the rate of extraction and made it difficult to estimate the future value of the various securities and synthetic derivatives held by the banks and other investors (the 'toxic waste' on their books), leading to a classic crisis of value realization.

The connection between credit expansion and real estate is important for understanding the contours of the GFC, and city building plays a central role in financial crises. As Harvey long ago explained (1982, following Marx, 1887/2003) over-accumulation leads to declining rates of profit, forcing surplus capital to seek higher returns through speculation lest it be devalued. Crises of accumulation induce capital to switch between the primary and secondary circuits in search of higher returns, and to resolve problems related to local over-investment in fixed capital through "spatial fixes" (of which deindustrialization, globalization and suburbanization are but examples). However, this often leads to greater levels of uneven development, fuelling even greater dependence on credit to temporarily paper over losses while capital attempts new switches and spatial fixes. In the face of falling rates of profit in production, "industrialists look desperately for ways to innovate their way out of their difficulties. In this they are aided and abetted by a credit system that is by now fuelling both production and realization. But this it can do only at the price of creating vast quantities of fictitious capital, making room for 'the most colossal form of gambling and swindling'" (Harvey, 1982, 304).

Investor behaviour shifts ever more toward the more risky but higher returns. Each new wave of investment is thus more speculative and more leveraged than what predates it, as current waves of investors base their expectations regarding current levels of risk on their experience during previous more conservative waves (this is Minsky's Financial Instability Hypothesis, 1982 a,b). This is not to say that credit is not functional to the system, indeed it is often necessary to smooth over accumulation crises and fund the capital switches necessary to resolving them. Nonetheless, "the potentiality for over-speculation under such circumstances is enormous. Fictitious values (credit moneys) are thrown into circulation as capital and converted into fictitious forms of capital. As a result, 'the greater portion of banker's capital is purely fictitious and consists of claims (bills of exchange), government securities (which represent spent capital) and stocks (drafts of future revenues)'" (Harvey, 1982, 280). Minsky (1982a,b) argued that this encourages money to flow out of productive investments (those that depreciate but provide a stream of income/ profits), and into investments which seek to profit not from income flowing from the production of commodities, but from speculation in capital gains which eventually causes asset prices to rise beyond the carrying capacity of the income flows they generate. First, capital moves into "speculative finance", in which revenue flows only cover the interest payments, and then "ponzi finance" dependent solely upon profits from capital gains. New loans need to be taken out merely to pay the interest on the old ones until the assets can be sold, and asset values can only be maintained by drawing in ever more speculative investors. Fischer (1933) argued that too-low real interest rates encouraged capital to over-speculate in such assets. What Marx calls speculative fever, and Minsky calls euphoria (and what has recently been labeled "irrational exuberance") sets in and "a larger and larger group of people seeks to become rich without understanding the processes involved" (Kindleberger, 1989, 20). When the bubble bursts, speculators cannot make their payments, and a financial crisis ensues.

First financial liberalization, and then real estate speculation and over-investment, typically precede financial crises (Reinhart and Rogoff, 2009). Gaffney (2009a,b) shows that while it is in lenders' *collective* interests that they remain liquid by lending against depreciating assets with short-term maturities, it is in each *individual* bank's competitive interest to keep their own transaction costs down (and thus profits up) by holding stable assets with long maturities, including mortgages and long-dated government treasuries. In times of falling rates of profit elsewhere in the economy, banks will shift to lending against real estate collateral, since land itself is not seen to depreciate and thus is considered a more stable asset, and banks will increase the proportion of their balance sheets given to mortgages (and government debt) as real estate values increase. However, when financial crises hit they render mortgages and real estate assets illiquid, and distress sales drive down values, making many of the banks holding them insolvent. Gaffney, following Simpson (1933), argues that while the Great Depression in the US originated in a stock market bubble, it was real estate speculation that was the primary cause of the lack of liquidity that hobbled the banks. It might be noted that in volume 3 of Capital, Marx pinpointed these very two forms of capital – mortgage debt and government debt - as the two most fictitious forms of capital (Harvey, 1982, 268).

Ponzi Neoliberalism

The neoliberal era that began roughly with the inflation crisis of the late 1970s and that corresponds with the rise of Thatcher in the UK and Reagan in the US can be broken into two periods. The first period, ending with the East Asian currency crisis of 1997, is associated with overall rising profitability, the extension of productive capital, and an increase in exploitation (Brenner, 2002; McNally, 2009). In this period, which we might call the era of post-fordist neoliberal globalism, rising rates of profit were maintained through the squeezing of labour and the 'roll-back' of the welfare state, and through the ability of capital to employ growing levels of credit to fund capital switching between primary and secondary circuits and the new spatial fixes related to the globalization of production (see Peck and Tickell, 2002; Harvey, 2005). Access to expanding personal credit was able to bolster consumption in the face of stagnant real wages, particularly during the recessionary early 1990s during which capital switched to emerging economies (Crouch, 2009; Montgomerie, 2009). In this early phase of "privatized Keynesianism", the system was maintained by an overall global rise in the rate of profit, at least until 1995-1997 when asset values started to dislodge from profit levels (Brenner, 2002).

Then, after the Asian currency crisis of 1997, the avenues for continued accumulation narrowed and the rate of profitability began to fall again, which compelled the expansion of hedge, speculator, and predatory finance, and in turn the ponzi tendencies already present within capitalism. An unsustainable self-reinforcing system of imbalances and indebtedness then emerged that required constant increases in the growth of credit, the shift of productive capacity out of the developed world, and the recycling of developing world export earnings into debt vehicles to maintain consumption (Harvey, 2005). This system I term "ponzi neoliberalism", in that it increasingly depended not only on continued neoliberal restructuring of the welfare state (via the imposition of every more workfare, privatization, and gentrification, which disciplined labour, provided new forms of flexibility and new avenues for dispossession, see Harvey, 2005; Peck, 2001; Peck and Tickell, 2002; Peck and Theodore, 2007), but as well the continuous ratcheting-up of credit expansion, debt-fuelled consumption, and asset appreciation (first in tech stocks, then in real estate), AND the bail-outs of lenders and large businesses to maintain employment levels, the profitability of firms, and the appearance of economic growth. As Harvey has noted (2005, 2006), one of the key differences between old-fashioned liberalism and neo-liberalism is that in the former the lenders and investors take the losses, whereas in the latter they are bailed out while the borrowers are forced to make good on all the losses. Thus, from the beginning neoliberalism has contained the potential for the emergence of ponzi dynamics which is then enforced through state power. These two aspects of the system (neoliberalism and ponzi finance) have been self-reinforcing (as per Crouch, 2009) and, in dialectic fashion, two interlocking sides of the system through which new rounds of accumulation by dispossession have been instigated, both within the developed and developing nations. Ominously, in the UK this system has been officially referred to as "asset-based welfare" (Finlayson, 2009).

Note that in relation to the term 'ponzi' I do not mean to say that there was necessarily a conscious agenda to defraud and dispossess, although the existence of predatory lending and fraudulent behaviour demonstrates this was indeed present among a number of participants, and it would seem that nation states and respected financial institutions were complicit (e.g. see Toronto Star, 2009; Whittington, 2009). Regardless of the extent of fraudulent intention, the important issue is that the system rested upon ponzi dynamics and these continued to expand under their own weight through the 2000s with many private and public sector agents not fully understanding the underlying processes at work or heeding the feedback it provided (particularly, and glaringly, neoclassical economists such as Alan Greenspan or Ben Bernanke, see Bezemer, 2009; Keen, 2009c,d). Posner (2009) is almost certainly correct to argue that the majority of bank CEOs and other financial managers were neither incompetent nor intentionally fraudulent, but instead that their overly-risky behaviour was compelled by the incentive structures at the heart of the system. In a situation in which higher returns can only be attained by ever-more risky and leveraged activity, shareholders will punish individual financial managers who would even think of imperiling the relative profits of the firm by reducing its exposure based merely on the slight (it seemed to them) chance of a future system-wide crisis (Posner, 2009). And when the plight of all financial institutions are tied together due to their collective exposure to each others' derivatives, the impetus for any one institution to break from the program is reduced, knowing the state will have to bail out an entire system that is "too big to fail".

The financialization of the economy, and the rapid rise and seeming profitability of the financial sector became justification for the extraction of ever larger amounts of wealth by elites and connected entrepreneurs, and with it growing inequality. This occurred with the explicit support of the neoliberal state and even labour, for whom the system appeared to be 'working' by supplying both growing revenues and employment. However, this was an unsustainable mirage. At the height of every speculative bubble “unemployment almost disappears and wage rates begin to soar – the condition of labour, Marx observes, is always at its best on the eve of a crisis” (Harvey, 1982, 303). In reality, the appearance of growth was dependent on the creation of ever greater flows of *fictitious* capital(s). Instead of expanding the pie, the real-estate-derivative-fuelled credit bubble(s) merely gave the impression of a bigger pie, while issuing a pyramid of numerous overlapping claims to essentially the same pieces of what was effectively a static or declining pie. Financial elites in the core nations were in turn able to continue extracting ever greater shares of wealth by compelling ever more newcomers (both locally and globally) to enter the game via leveraged speculation of various sorts, while the redistribution of income upwards in favour the wealthy through neoliberal policies of privatization, tax cuts, and attacks on universal welfare state programs compelled the working class to resort to debt financing. As Harvey (1982, 287, paraphrasing and quoting Marx) argues, at the height of a credit boom “the bankers and other ‘gentlemen of high finance… appropriate ‘a good deal of the real accumulation’ at the expense of industrial capital’...the ‘enormous centralization’ possible via the credit system gives to ‘this class of parasites the fabulous power, not only to periodically despoil industrial capitalists, but also to interfere in actual production in a most dangerous manner’”. In the current crisis, this would not have been possible without the neoliberal deregulation of financial markets and the reform of bankruptcy laws in favour of lenders, which has encouraged new layers of rentiers to use the financial system for the expropriation of wealth from both the working class and industrial capital (Lapavitsas, 2009).

The entire globalized and neoliberalized economy has evolved into a giant ponzi system, in that flows of new investment are increasingly not used for technological innovation or new production facilities, but to pay off earlier speculators. Financial elites dependent upon ponzi finance are not likely to support systemic reforms that reduce their power in the name of investments in the productive economy, but instead to advocate for extension of the system in order to maintain their positions and access remaining sources of potential profit. Indeed, this produces huge inducement for the ‘institutional capture’ of the state, i.e. for the wolves to take over the watching the henhouse. Such would appear to be the case in the US where most presidential advisors had previously played key roles in pushing deregulation and/or earned their stripes through success in speculative finance working for the Wall Street investment banks. Ponzi neoliberalism is a system controlled by financial elites that thrived only through the continued liberation of finance, as evidenced by the power of Wall Street in the US to prevent the regulation of derivatives and to reverse the Glass-Steagall act and other legislation originally designed to prevent another great depression (see Igan et al., 2009; Whitney, 2008, 199). Once traditional investors had been mined, the game moved to the mortgage markets, home-equity refinancing, and other credit markets to tap everyday people, and once the supply of domestic borrowers had been largely tapped, securities were marketed globally to mine any remaining institutional and overseas investors and to tap homebuyers and working-class consumers in emerging/developing nations. A similar game was played throughout Europe, with investors both large and small in Eastern Europe particularly targeted. The requirement for ever greater flows of new funds at the bottom of the ponzi pyramid forced the system to increasingly globalize in search of new investors, while it is the elites and the Wall Street players who lobbied for regulatory reforms that have benefitted. The result has been burgeoning inequality, a rapid and massive run up in consumer debt (Figure 1), and an ever tighter entwining of the global financial system. Massive contradictions are thus at the core of ponzi neoliberalism, as it paradoxically depends on extracting ever greater amounts of cash inputs from the general population whose wages are simultaneously being squeezed and whose places of work are rapidly being displaced. This is the economic system that current government policies have been actively attempting to re-ignite.

[Figure 1 about here]

DOOM LOOPING: RE-IGNITING PONZI NEOLIBERALISM

In accounts of economic crises that assume a monetary base attached to a commodity like gold (including those of Marx, Kondratiev, and Schumpeter), financial crises always eventually result in deflation, and the central bank has few options to prevent this from occurring. Furthermore, as argued by all three, deflation and devaluation are necessary to resolve crises of accumulation and bring the forces of capitalism back in line for sustained production. However, under the regime of floating exchange rates that developed in the 1970s in which the convertibility of paper money is suspended, central banks have a lot more leeway. Harvey (1982) foresaw that in such a case, central banks have the option to crash their interest rates, become a lender of last resort, and print money in an attempt to re-inflate asset values. Indeed, with variation, this is what both monetarists and many Keynesians advocate in response to financial crises (including Minsky, 1982b). Such a solution effectively spreads the impact of the devaluation of capital across the entire of society, protecting asset values of wealthy speculators and saving the system from immediate collapse, but expropriating the remaining wealth of working-class savers. As the working class has limited access to high return investment vehicles and because unemployment still has a deflationary effect on working class wages, the results lead to burgeoning inequality.

As the GFC exploded into view, governments the world over faced a range of choices. A number of the economists who had predicted the crisis advocated radically over-hauling the system, and at least temporarily nationalizing the large financial institutions (see Galbraith, 2009; Richardson and Roubini, 2009; Taleb, 2009). This would have wiped out the shareholders and bondholders, but would have provided numerous options for the state to write-off accumulated debts, fairly and appropriately investigate and punish fraudulent and/or incompetent activities, secure the savings of depositors, and redirect capital to more productive uses. Of course, strong resistance to this response among various fractions of capital emerged right away. The only plan that policy makers seriously considered was to restart the system as it existed before the crash, albeit with (talk of) some reforms to dampen the most egregious excesses. As the pre-crash system seemed to provide healthy revenues for the state, low unemployment rates, and strong profits in the ‘new economy’ (mainly, finance) sectors, the benefits of such a strategy appeared self-evident (Hay, 2009).

And so central banks have followed the strategy that Harvey predicted. Interest rates have been brought down to as close to zero as possible, in order to nurse the banks back to health (by raising the profits they attain from interest rate spreads), to re-inflate the economy in the face of deflation pressures, and encourage consumers to borrow and spend. Governments are incurring record deficits in order to bail out the financial institutions at the heart of the crisis to get them lending (as well as bailing out imperiled automakers and other non-financial firms who got caught up in derivatives trading, see Ferguson and Van Alphen, 2009), to stimulate the economy through tax cuts and some infrastructure spending, and to buy up devalued securities in order to bolster the housing market. The suspension of “mark-to-market” accounting rules in North America and most of Europe has allowed the large banks to place any value they like on the “level-three” securities and other derivatives they hold in their vaults, and thus to (temporarily) claim healthy balance sheets (Katz, 2009). “Quantitative easing” has seen central banks print money to buy securities, bonds and other collateral from the banks and public debt, as well as government treasuries and gilts.

The level of intervention by the states at the core of the crisis is unprecedented. By February of 2009 in the US alone, the costs of the various bailouts and liquidity injections were estimated reach at least US $11.6 trillion (Pittman and Ivry, 2009).[2] The ₤850 billion bank bailouts in the United Kingdom were joined by another ₤200 billion for quantitative easing and monetary stimulus, and Bank of England swaps of poorly-performing mortgages, that bring the total to approximately ₤1.5 trillion (Elliott, 2009; Grice, 2009; Watson, 2009). While much smaller in total amounts, the C$40 billion and A$42 billion stimulus packages reflect sizeable proportions of the budgets of the Canadian and Australian federal governments, respectively. The Australian and UK governments have also provided unlimited guarantees for all bank deposits, while the UK has subsidized a two-year mortgage interest payment holiday for laid-off ‘responsible borrowers’ (Watson, 2009). In total, Alessandri and Haldane (2009) estimate that that state bail outs and supports of the financial sector amount to almost 75 percent of the GDP of the UK and the USA. Canada, similarly, has used a number of crown corporations as well as the Bank of Canada to swap, insure, and/or purchase various assets and equity from the financial institutions. In tandem, these strategies have put a halt to the initial deleveraging that began in 2008 across the globe. Even in countries such as the US and UK, the slight reductions in household lending have been more than offset by the growth in public sector debt leading to overall re-leveraging (Warburton, 2009; Roxburgh et al., 2010). By “socializing capitalist bankruptcy” in this way (Meszaros, 2010), nation states have determined that it is the capital of the working and middle classes that should be devalued, while the asset values of the bourgeoisie that are to be preserved.

Harvey predicted that while such a strategy may prevent the system from collapsing into a deflationary depression, it simultaneously prevents the restructuring of the economy that is necessary for capitalism to renew itself, and risks accentuating the distortions and contradictions that gave rise to the GFC:

> “If, for example, there has been considerable speculative activity in land titles, then expanding the effective demand for housing keeps that speculation very much alive at the same time as it increases the demand for commodities such as bricks, timber, etc. Support of this sort for fictitious capital implies, in effect, that the state substitutes its own fictitious capital…for the mass of privately held fictitious capital floating around in the credit system (Harvey, 1982, 310)… If individual capitalists and other private agents continue to extend credit to each other in the face of burgeoning overaccumulation and spiralling quantities of fictitious capital, and if they continue to be backed up by the printing of money by the central bank, then the insane aspects of the credit system can run amok. State-backed money breaks free from any pretence of acting as a firm measure of socially necessary labour…[but] the printing of money cannot cure the problem.

[2] This includes the original $700 billion Troubled-Asset Relief Program (TARP) program initiated by the Bush administration, the Obama administration follow up $787 stimulus program, FDIC (Federal Deposit Insurance Corporation) bailouts and guarantees of GE, Citigroup and Bank of America, the $300 billion HUD anti-foreclosure program, $400 billion in guarantees for Fannie and Freddie (this cap was subsequently lifted, providing unlimited guarantees, on December 24, 2009, see Timaros, 2009), an additional $600 billion for the purchase of GSE debt, and approximately $7 trillion for various quantitative easing-based swaps, securities purchases, liquidity injections, and other credit facilities on the part of the US Fed.

> Indeed, the distortion of price signals makes the disequilibrium worse. The full force of the shake-out, which would bring the system back into an equilibrium position as measured by the value composition of capital, is held back. Further technological innovations that de-stabilize the system are encouraged. The trend towards overaccumulation will likely be increased rather than curbed" (Ibid., 311).

However, the system that is being re-started is not merely one characterized by contradictions, imbalances, and de-stabilizing feedback loops: ponzi neoliberalism is at its core premised on irresponsible (if not outright fraudulent) behaviour on the part of financial institutions, borrowers and consumers. Propping up this system implies that nation states consider such irresponsibility as a "collective good", and that all of society is now complicit in a broad "moral hazard" (Crouch, 2009). Meszaros (2010, 33), likewise, refers to the symbiosis between the U.S. state legislative framework and financial profits "institutionalized fraudulence". The specific ways that ponzi neoliberalism is being re-ignited, and the contradictions and implications of such a strategy in the current context, are discussed below.

Carry Trades and Deindustrialization

The quantitative easing (QE) strategy involves swaps and purchases by the central banks of federal government debt issues and 'toxic' banks assets. This is being pursued in order to 1) fund and monetize the very large amounts of government debt that need to be issued in the face of huge declines in revenues, and lax international demand in the face of huge simultaneous issues of debt from around the globe and 2) force interest rates low to encourage domestic borrowing and lending, which in turns helps bolster the housing market. QE has the added benefit of potentially lowering foreign exchange values and thus encouraging inflation through a de-facto 'beggar-thy-neighbour' currency devaluation. The rapid increase in the money supply has been breathtaking, although questions remain about the potential breakdown of standard money multipliers and the velocity of money, signaling that even this approach may not work to re-inflate the economy for long (Keen, 2009e).

However, lower interest rates only reduce the relative return to government bonds, driving down international demand for the currency and forcing central banks to monetize an even greater amount of the debt issues. While artificially low interest rates increases the relative returns on bank equity, potentially helping the banks re-capitalize, this benefit is countered by the even wider spreads in the more risky derivatives and carry trades which shift investment into the latter. Indeed by the fall of 2009, the crashing of central bank rates coupled with depreciating currency exchange values had already led to the "mother of all carry trades", with real interest rate differentials greater than (negative) 10% between the developed and developing world (Roubini, 2009). These carry trades lead to new bubbles in commodities and housing markets in emerging economies, and speed up the movement of productive capacity (manufacturing etc) out from the debtor nations. This guarantees even weaker domestic rates of growth and accumulation, and thus declines in living standards and working class wages, into the future. As well, it increases the amount of risk in the system. The longer the carry trades continue the greater the amount of highly leveraged assets that are exposed to potential interest rate corrections, which could cause another flight to the safety of government bonds and lead to new asset devaluations and debt deflation (Ibid.).

Un-Real Estate Markets

The irony is not lost on observers that real estate speculation and debt-fuelled consumption are being promoted as the solution to losses stemming from real estate speculation and over-indebtedness. One way nation states are responding to the crisis is to use the central banks, and the crown corporations like the CMHC in Canada, and the Federal Housing Corporation (FHA) and Ginnie Mae (Government National Mortgage Association – GNMA) as well as the GSEs in the US, to insure, or purchase outright, the majority of new pools of mortgage-backed securities issued by lenders. Fannie and Freddie already guarantee approximately half of the $11 trillion in outstanding residential mortgages in the US, and the lifting of the $400 billion cap has given them the green light to make direct purchases endlessly into the future even though the fed has plans to wind down the purchases (Timiraos, 2009). Both Ginnie Mae in the US, and CMHC in Canada, who insure the principal and interest of all mortgage-backed securities issued by qualifying financial institutions, have had their limits raised on the amount of mortgage-backed securities they are allowed to guarantee. These securities are being marketed to foreign investors "as a new source of off-balance sheet financing" (CMHC, 2009a) with the additional selling point that they are the only securities (other than treasury bonds) fully guaranteed by their respective governments (see Ginnie Mae, 2009; CMHC, 2009a). In Canada, CMHC's purchase MBS through the Insured Mortgage Purchase Program has led to a situation in which banks originating mortgages are no longer requiring proof of income (like the US 'ninja' or liar loans – in Canada they are called 'self-employment recognition mortgages') as they can sell the mortgages on, and more than 100% of all mortgage debt issued across the country in 2009 was bundled into MBS and purchased or guaranteed by the Canadian taxpayer (see Carmichael, 2009; CMHC, 2009b,c; Erman and Perkins, 2009).

A related but different approach has been to offer temporary grants to first time homebuyers, as were offered in the United States and Australia. Like the Canadian program, these employ public subsidies to attract purchasers into the market who otherwise would not be able to access that level of mortgage credit. With a minimum downpayment of 3.5% the US$8,000 grant allows American purchasers to potentially leverage an additional $228,571 toward the purchase price of a house, and at 5% down Australian purchasers at the height of the $21,000 grant could leverage a whopping extra $420,000.[3] The flow-through effect on prices is obvious, since these amounts by themselves are greater than the national average single-family detached house prices in each country.

Regardless of the form that public subsidy has taken (and in the United States, this includes a number of different forms), in consort with negative real interest rates the result has been to entice many new young households to take on far more debt than they otherwise would (see Marinis, 2009; Zappone, 2009), and in turn to prevent the housing stock from becoming more affordable. Housing prices in Canada by December were up a whopping 19 percent year-over-year, while sales were up 24 percent (Wong, 2009c), and analysts began warning of the presence of a dangerous housing bubble (Rosenberg, 2009; Wong, 2009d). However, while the effect on real estate prices is only sustained as long as the subsidies continue and new entrants can be found, the debts remain with the homebuyers until they are paid off, or written off, producing a growing pool of over-indebted and vulnerable households. Because most mortgages

[3] $8,000 / 0.035 = $228,571, while $21,000 / 0.05 = $420,000. This assumes buyers can already cover closing costs, and that they have the incomes required to qualify. However, with the return of the self-reporting of income among mortgage originators who then bundle and sell the mortgages to the state, the latter points is moot.

in Canada (and Britain and Australia, and many other places) are recourse loans, homeowners who find themselves underwater cannot just walk away from their debts (unlike in some, but not all, US states).

Socializing Losses and Gaming the State

Contradictions likewise characterize the bailouts of financial institutions. The necessity for low interest rates and bailouts is driven by the weak balance sheets of the banks, many of whom are over-weighted in mortgage assets and various derivatives whose value ultimately depends on the housing and equity markets. The degree to which banks were over-leveraged at the beginning of the crisis is instructive. In 2007, the largest 10 US banks had an average leverage ratio (of tangible assets/loans to tangible common equity) of 37:1, which meant that if the value of tangible common equity held on their books fell by only 3 percent, this would wipe out their entire equity and make them effectively insolvent (Sprott and Franklin, 2009, 3). With real estate values falling over 19 percent in 2008, it is understandable why the US banks would find themselves requiring bailouts. The 2007 leverage ratio of 32:1 for the five largest Canadian banks, which are considered some of the 'safest in the world', is not that much different (Ibid.), hence the need for a bailout, in this case through Canada's Insured Mortgage Purchase Program.

The policies and programs that have been initiated to save the financial system depend on socializing the losses while subsidizing bubble asset values on banks' balance sheets. The US public-private investment program is a good example. Intended to restart the market in risky securities, it provides state-subsidized leverage of 6 to 1 allowing private investors to purchase discounted mortgage-backed securities and other derivative products from financial institutions with as little as 3.5% as collateral. In this scheme the private sector investors keep 100 percent of any future gains, while taxpayers cover any losses greater than 7 percent (thus, 93 percent of the losses are socialized, effectively putting the FDIC and US Treasury at risk) (see Heisler, 2009; US Department of the Treasury, 2009; Wearden, 2009). The scheme, however, has had difficulty encouraging trading because the banks remain desperate to avoid any price discovery for the 'toxic' assets on their books, fearing this could reduce, rather than raise, their book values and imperil their solvency (Andrews, 2009).

Policies that transfer private losses onto the state lead to the problem of 'moral hazard' in which the expectation of future government bailouts leads to more risky and socially destructive behaviour. This is related to the "too big to fail" problem (Sorkin, 2009a). The head of the Bank of England's financial stability department highlights five distinct ways in which, under the expectation of government backstops, the benefits to risky behaviour will drive financial institutions who receive state bailouts to "boost shareholder returns and, whether by accident or design, game the state" (Alessandri and Haldane, 2009, 11). These include the use of higher leverage ratios, the purchase of assets with higher default risks, increasing the share of profits derived from short-term trading, the diversification into new risky lines of business, and irresponsible gambling with CDS and other derivatives products. Each new state backstop leads to a progressive ratcheting up of risk over time: "the natural response by market participants is to double their bets. This adds to the cost of future crises. And the larger these costs, the lower the credibility of "never again" announcements. This is a doom loop" (Ibid., 11).

The appearance of profits among bailed out banks works to justify among shareholders the reinstatement of high levels of compensation among the top management, thus allowing elites and the financial sector in general to continue extracting ever higher shares of the existing pie for themselves.[4] Through 2009, bailed out financial institutions like Goldman Sachs used the bailout funds they received to leverage large amounts of capital with which they were able to purchase distressed assets at record low prices. They then profit once state efforts to re-inflate those assets succeed. The fact that the profits remain privatized obscures the role played by state support. US financial institutions, even those hobbled by 'toxic' assets, have been able to convince their shareholders to allow them to pay back their TARP loans, just so that they can pay out bonuses to their top management (Dash and Martin, 2009; Sorkin, 2009b). This also allows the debt-rating agencies to avoid new regulations or reforms of their operations, in turn supporting their continued role as a mediator facilitating the extraction of wealth from investors dependent upon the ratings to signal the level of risk (Segal, 2009). With the resumption of ponzi neoliberalism and the socializing of private losses, it is no wonder that the "gravy train shows no signs of slowing" as the wealthiest continue to see their net worth grow (Taylor, 2009), as well as the culture of leverage and entitlement (Figure 2).

Sovereign (De)Fault Lines

As the Greek sovereign debt crisis of May 2010 highlights, there is a major contradiction between the efforts to re-stimulate the economy through deficit financing, mortgage purchases, tax cuts, and the socialization of private losses, on the one hand, and the need to maintain the stability of national currencies and ensure the smooth and continued issuance of government debt instruments on the other. Global trade has been maintained through a buildup of both public and private debt, allowing developed nations to continue consuming imports and funding current account deficits. As discussed above, this creates self-reinforcing imbalances and leads to deindustrialization. Now, stimulus packages, income tax cuts, and bailouts intended to prevent a collapse and restart the pre-crash economy have, in combination with declining corporate tax revenues, led to record government budget deficits, rapidly increasing the rate at which the ratio of government debt-to-GDP has grown.

There are a number of contradictions involved with this strategy. First there is the problem of interest rates, which governments need to keep very low not only in order to stimulate the economy but also to reduce the cost of government debt interest payments. However, the effect of bolstering demand for residential mortgages and 'hot money' with which to fund carry trades, and of course, the crowding effect from record sovereign debt issuance, puts pressure on real interest rates, which then have to rise just to clear auctions of government bonds. This forces the central banks to ramp up further their purchase of government debt in order to keep interest rates down and continue the orderly and credible operations of debt issuance. Yet, there is a limit to the ability of central banks to monetize debt without spurring significant inflation (or at least the expectation of inflation), which international bond markets translate into higher real interest rates. This is a cycle that is inherently limiting.

Secondly, there are distinct limits to the state's ability to socialize private losses and incur further deficits. In addition to the difficulties that governments will have selling bonds and the perverse incentives for bailed-out corporations to game the state, growing debt-service ratios

[4] For example, Wall Street investment banks Goldman Sachs and JP Morgan paid record (bonus) compensation of $498,246 and $378,600 per employee in 2009, respectively. This is over ten times the average income of US workers and close to the record bonuses paid in 2007 (see Eder, 2010). Morgan Stanley also increased its compensation ratio to a record 62%, and paid out $14 billion in bonuses, despite recording significant losses in 2009 (Ibid.).

crowd out necessary spending which imperils important investments in productive infrastructure, impedes economic growth and are likely to produce economic decline. Governments are now beginning to feel pressures to reduce spending, increase taxes, lay off public sectors workers, and reduce wages, and as well to privatize public infrastructure at fire sale prices, all of which will have negative flow-through effects on short-term economic growth and hit the working class particularly hard. There is of course an absolute limit to the amount of public debt that can be carried, at which point the state cannot even meet its existing commitments and is forced to default. Based on an historical cross-nation study, Reinhart and Rogoff (2009) suggest that once government debt exceeds 90 percent of GDP, there are significant adverse impacts on economic growth, infrastructure development, and the smooth functioning of the state. At the rate at which government debt has increased during the crisis, including both federal/national and sub-national (state and provincial) debt, the United States is estimated to have surpassed this 90 percent threshold by the end of 2010, while the UK and Canada are likely to reach it in 2011 or 2012 (Figure 3).

The socializing of private sector debts and their recoup through the state taxation apparatus, coupled with the state-instigated inflation, represents the last remaining avenue for accessing cash from new entrants to maintain the flow of profits up the ponzi neoliberal pyramid. Like all ponzi dynamics, a strategy of using government deficits to absorb the costs associated with restarting consumer spending through trade deficits and growing household debt is untenable in the long run, as there is an eventual limit to the number of new entrants that can be compelled to join the pyramid, even through state coercion, taxation and force, although the latter can be extended for quite some time and may have to be. Yet, the more that the profits of the financial sectors are dependent upon state regulatory supports and ponzi taxation of the relatively powerless, the greater the incentive for politico-institutional capture of the state by finance. The greater the dependence of the state upon the appearance of growth in the financial sector for revenue flows, the greater will be the willingness of the state to acquiesce to the dictates of finance, and thus to facilitate such a capture. These dynamics form the basis for a particularly ominous and fascistic form of doom-looping. In this way, ponzi neoliberalism not only portends sovereign default and the potential destruction of the money supply, but also threatens the foundations of the democratic system and risks instigating severe political and social crises.

IMPLICATIONS FOR THE CITY: NEW URBAN SOCIAL CRISES

Regardless of whether the plan adopted by debtor nations will "work" for long in producing a reflation and recovery of their economies, the approach being taken by major developed nations in response to the financial crisis has important social implications. If allowed to continue, it portends new urban social crises.

First of all, private sector bailouts and state investments in financial and automobile corporations result in the growing power of business in relation to the state and the rights of citizens. As Klein (2008, 10) argues, the investment of significant public finances in equity positions in private corporations results in the "tethering of the public interest to private companies". Taxpayers and state officials with limited information or business expertise will be compelled to acquiesce to the dictates of business in order to safeguard their investments through future years. Because the essence of business models is entrepreneurial, the significant sums invested will be, by definition, put at risk, and this will give business leaders significant leeway to influence policy in their favour (i.e., to 'game the state'). The bailouts are a gift to big business that could therefore "keep on taking" (Ibid.). By giving finance capital even more power over public policy the public interest is further compromised, preventing the problems it produces (de-industrialization, etc) from being dealt with in a democratic way, and encouraging politico-institutional capture.

Perhaps most salient are the problems associated with increasing indebtedness of consumers and households. Marx suggested that when it could not resolve its contradictions, capitalism is forced to 'cannibalize itself' by turning members of bourgeois class fractions into new proletariat through debt slavery and bankruptcy (Harvey, 1982, 438). Mostly, this has also meant a cannibalizing of the futures of the young in order to protect the savings of older generations. Ponzi neoliberalism is a system in which new home buyers have been coerced into going deeper into debt to support the assets of mostly wealthy members of the baby-boom generation who run the financial institutions, own the condo construction firms, and even if they do not, nonetheless own the majority of the 'pre-owned' houses that need to be unloaded before they can begin to fund their retirement. By subsidizing real estate values and buying up new mortgage originations, governments the world over are running huge deficits and saddling younger taxpayers with lower future real incomes, so that the middle classes of the baby boom generation can continue to realize bubble-value windfalls from the sale of their homes. This will exacerbate class polarization as wealth is transferred from those baby boomers lucky enough to cash out at the right time, to their children. Those younger cohorts not lucky enough to have parents in such a situation will be doubly hit, as they will be forced to pay, out of declining real wages, for the health services and pensions that the baby boomers will require in their retirement. There is already evidence from the UK and Japan that high housing costs and debt levels have led to lower household formation rates, age of marriage, savings rates, and consumption levels among the young (Forrest and Hirayama, 2009).

The longer that ponzi neoliberalism artificially props up house prices, the larger will be the share of the younger cohorts that are seduced into unsustainable debt. Approximately 15 percent of the population in the Anglo-American nations moves house every year, while around 40 percent move every five years.[5] While the first-time homebuyers grants in the US and Australia have been perceived as friendly subsidies that make homeownership more affordable for young people, in fact they are a potential debt trap intended merely to prop up the housing market and by extension the large financial institutions, all the while keeping housing unaffordable. It is highly likely that these younger households will find themselves 'underwater' and/or trapped in homes they cannot sell or refinance. A number of "responsible borrowers" (Hay, 2009) will face repossession and foreclosure, in some cases not even because they have missed payments but because the small shadow lenders with whom they have dealt do not have their credit extended by the larger bailed-out financial institutions (see McArthur and McNish, 2009, for a recent example).

Of course, there are many cash-poor but equity-rich senior citizens, disproportionately but not only visible minorities and women, who have been coerced by predatory lenders into debilitating mortgage contracts or other loans, and who thus face displacement along with poor seniors. The current targeting of policy in favour of wealthy home-owning baby boomers thus has implications for demographics, race and class, and works to bolster the power of the already

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[5] These proportions have remained remarkably stable over time. The most recent values for Canada are 14.1% and 40.9%, respectively (Census of Canada, 2006).

powerful while simultaneously cannibalizing weaker members of the bourgeoisie and impoverishing the already poor.

It is highly unlikely that economic growth, wage rates and employment levels can be sustainably brought up to that required to carry the current level, never mind growth, of household indebtedness. The GFC has led to a rapid reversal of employment trends (Figure 4), particularly in the manufacturing industries, which will continue to decline as the carry trades fuel deindustrialization in many cities with previously strong industrial economies. Growing unemployment has already placed significant pressure on working class incomes, and compels labour to take major concessions as evidenced already in the auto sector (Van Alphen, 2009). Across North America, labour is having to accept wage rollbacks and benefits reductions, even as they face the loss of pensions while massive public deficits have justified attacks on public sector unions and workers (see Contenta, 2009, Walkom, 2009). It is younger workers that are bearing much of the brunt of unemployment, setting the stage for youth alienation and generational conflict (Bawden and Leroux, 2009; Wilner, 2009). The attack on the young, unemployed, and working poor, is doubled by the emergence of a politics of blaming the victims, which in turn justifies a more punitive state (see Holleman et al., 2009; Brennan, 2009a; Daw, 2009). The era of ponzi neoliberalism has been characterized by not only by the continued 'roll back' of the welfare state, but new 'roll out' technologies that re-regulate labour markets and discipline workers (Peck and Tickell, 2002). Similar social technologies are likely to be employed to discipline the over-indebted and underemployed younger workers, perhaps melding contemporary 'workfare' schemes (Peck, 2001) with some form of the debtors prisons of old. The use of local police forces, court systems, and jail time to enforce or extract payment of delinquent debts has already begun escalating in the United States (Serres and Howatt, 2010).

The re-igniting of ponzi neoliberalism has allowed wealthy investors and financial institutions to take advantage of the renewed markets to profit even further from fresh rounds of leveraged "irresponsible behaviour" (Crouch, 2009), while the bailed-out banks have used government insurance to amass for themselves pools of new capital with which to buy up distressed assets (Farell and Guerrera, 2009; Trichur, 2009b). As governments at different scales go deeper into debt to socialize private losses, they are incurring intense pressure to privatize public assets, which can then be picked up for fire-sale prices (Cartwright, 2010). This at the same time that the various insiders with real knowledge of the financial system (the CEOs, traders, etc) are cashing out their stock options "like there's no tomorrow", and thus converting the fictitious capital into real capital for themselves (Barr, 2009; Brennan, 2009b). The latter includes gold reserves and mansions in gated neighbourhoods. The sheer unfairness of such a situation is clear, and will influence populist revanchist movements, as evidenced in the backlash already emerging in the United States (Rowley and Goldman, 2010).

Within the city, ponzi neoliberalism has not only been associated with a run up in house prices, but with inner-city gentrification (Lees, Slater and Wyly, 2007). This has entailed the replacement and displacement, both direct and indirect, of the working class from the very neighbourhoods that used to provide affordable housing, and where public transportation, key services and retail amenities upon which they depend are most plentiful. Efforts to reinstate the pre-crash economy will encourage further speculation, predatory lending and equity, and displacement, expanding gentrification into new neighbourhoods including those in the more accessible working class suburbs. There will be new pressure to redevelop and privatize social housing, either on the UK Thatcher model (see Murie, 1997) or 'socially-mixed' HOPE VI projects in the US (see Crump, 2002). The removal and conversion of rental housing resulting from gentrification will spread the burden of debt-induced speculative investments in the ownership sector onto tenants, even as working class incomes decline. Displacement will increasingly isolate the working class, who will be forced to concentrate in distant suburban or exurban neighbourhoods that are less accessible to public transportation and other amenities, and lead to greater ethnic and class segregation, as has occurred in Canada (Walks and Maaranen, 2008a,b). However, at the same time, by reigniting the speculative economy, the state is encouraging investments to flow back into traditional energy sectors, inflating the price of oil (as occurred in the summer of 2008), and severely hampering the affordability of automobile-based transportation among low-income households (Nyquist and Rosenfeld, 2009). New spatial mismatches are likely to arise as the working class becomes increasingly isolated from job opportunities and public transportation, and unable to afford the costs of automotive transport, which has a large impact on economic opportunities (see Baum, 2009, regarding the typical US context).

The diverging fortunes of urban populations, and deteriorating transportation mobility, cannot help but be articulated within the social space of the city and lead to a more fragmented urban fabric, increasingly segregated along both class and cultural lines. This would be felt at multiple scales. Neighbourhoods become ever more important determinants of life chances, based on their access to transportation infrastructure, respected schools, and important social capital resources, as well as their relationship to evolving geographies of crime. Municipalities, likewise, would become ever more important determinants of both individual and neighbourhood fortunes, as transfers from upper levels of government decline, forcing greater unevenness in local revenue generation capacities and property tax burdens, and creating new divergences in the quality and quantity of public infrastructure and service levels, including public education.

Rising indebtedness, inequality, isolation and unemployment, on their own, lead to growing social problems related to poor states of mental health. Debt bondage and joblessness, coupled with the effects of gentrification, widening variability of rents (between isolated and accessible neighbourhoods), and higher transportation costs, combine in facilitating new rounds of accumulation by dispossession as articulated through the geography of the city. As capitalism cannibalizes itself to feed ponzi finance, we are likely to see growing poverty, loss of homes, family breakup, youth alienation and rising crime, even as the banks report new rounds of record profits and executive bonuses. Of course, it can be expected that urban social crisis will filter into the realm of politics, with the growth of strikes, protests and new social movements of various sorts. But the precise quality and ideological bent to any emerging political movements will depend on how material circumstances in different localities relate to the political frames and issues being put into question at larger scales, and it is by no means certain that the main thrust of any new political movements will be pro-labour. Indeed, as ponzi neoliberalism fuels ever greater uneven development within cities, ideological divergences rooted in real consumption and production interests (related to privatization, immigration, property taxation, employment, etc) and articulated in urban space could lead to a divisive populist politics of the local. Depending on factors such as the depth of the social crisis and how different political factions are able gain power locally, this would likely be articulated as an attack on central cities, immigrants, public sector workers and/or the unemployed, (while the alternatives will be criticized for slighting seniors, the middle class, and “responsible” homeowners). Blaming the victims is even easier when they do not understand the relations of power and debt that victimize them, and which are masked by the pervasive culture of homeownership and personal responsibility. One reason ponzi neoliberalism has become such a powerful force for dispossession is that it works through the subjectivities of the ‘consumer citizen’, who is highly invested in the system of ‘asset-based welfare’ (Finlayson, 2009). This is why the victims of predatory lending, for instance, may be more likely to support bailouts of the banks and the real estate sector, than to protest the terms of their mortgages or the power of the banks over their local politicians.

Finally, as is the outcome of all ponzi dynamics, eventually a limit will be reached regarding the ability to draw in new entrants, and the system will collapse in on itself and be forced to deleverage. As the great analysts of capitalism well understood (Marx, Schumpeter, Kondratiev, etc), economic disequilibria must eventually correct, and asset prices revert to long-run intrinsic values, usually after over-shooting them during deep transformative depressions. The longer ponzi neoliberalism is propped up, the greater the degree to which the problems of urban social crisis will have fomented, and the greater the extent of the transformation when it finally occurs. The latter will bring with it new urban problems associated with debt and deflation, which themselves will be exacerbated by the degree to which urban social dislocation, dispossession and inequality is allowed to fester beforehand. As Harvey (1982) noted, the longer that uneven development in its various forms is allowed to continue unabated, at multiple scales simultaneously, the more it sets the stage for political struggles which risk violence. This involves not only the prospect for a new global war, but also significant intra-urban conflict.

Conclusion

The response of nation states around the globe, particularly within the core Anglo-American countries, to the global financial crisis that exploded into view in 2008 is to try to resuscitate the financial-economic system that existed in the years leading up the crash. This system, which I have termed ponzi neoliberalism, is built on the disciplinary technologies of neoliberal welfare state reforms, globalization of capital flows, and contradictory and unsustainable but self-reinforcing ponzi finance dynamics bolstered by state bailouts and guarantees for creditors. It is a system that requires fresh capital from new entrants at the bottom of the pyramid to continue, and is global in reach. However, increasingly this fresh capital has not been used for investment in new production, which has the potential for expanding the economy in more sustainable directions, but instead for supporting the asset values of early investors at the top of the pyramid. An understanding of this aspect of the current system is absent from, or at least not acknowledged by, the public pronouncements of mainstream economists operating within the neoclassical-Keynesian synthesis, and would appear to be one of the reasons that they either did not predict, or alternatively thought they could manage, the financial crisis (e.g. Ben Bernanke’s claim that a helicopter drop of newly printed money could prevent the next depression, see Keen, 2009c). However, a number of those working from Marxist and Minsky-influenced perspectives had been predicting just such a crisis for a few years now (see Harvey, 2005; Foster and Magdoff, 2009; Bezemer, 2009). In fact, the crisis of 2008 was a classic crisis of value realization caused by overaccumulation and the rapid proliferation of fictitious capital. In choosing to maintain ponzi neoliberalism by bailing out the gamblers and the wealthy, nation states are choosing sides in deciding that it is the savings and labour of the working and middle classes that are to be devalued.

Instead of nationalizing the banks and using state resources to invest in the sustainable energy technologies, public transit infrastructure, and new productive capacity that must form the basis of a renewed and sustainable economy, by re-igniting ponzi neoliberalism nation states are both undercutting future economic development and exacerbating inequalities in income and wealth, The system will continue to provides significant benefits to largely non-productive elites and financial corporations at the expense of the working class, promote deindustrialization, and siphon investment away from new production. This has the potential to fuel new generational conflicts and drive dangerous social and political dynamics within cities. Proportions of the population will become increasingly impoverished, indebted, insecure in employment, and unable to compete with the growing wealth of the elite. Such polarization in turn becomes articulated in the geography of the city through the diverging fortunes of neighbourhoods and municipal governments, rising crime and social problems, and declining infrastructure and social services as governments at all levels are limited by further bailout costs and declining tax revenues (even in the face of increasing tax rates on the incomes of the majority of workers). The longer this goes on, the deeper and more extended the emerging social crisis is likely to be, and the more limited will be state capacity to respond in any fashion other than punitive. Not only would such a scenario exacerbate inequities among households and neighbourhoods, but it imperils the city further in advance of the ravages of deleveraging and debt deflation, which although it may be put off into the future, must eventually arise due to the massive amounts of leverage in the system. Furthermore, the incentives for politico-institutional capture of the machinery of the state on behalf of finance become greater over time, shifting the locus and target of state control and governance away from democratic institutions and potentially imperiling the foundations of democracy, while helping to provoke the re-emergence of a revanchist populist politics. The more that everyday households are forced into increasing debt peonage, the greater the likelihood of significant urban social crises and regressive political backlash. Without a proper understanding of the interlinked processes involved, nation states are increasing the pain of the economic corrections that must eventually ensue, bolstering an economic system that increasingly functions to merely redistribute income and wealth upward, and in turn risking the social and political sustainability of urban life.

References

Alessandri, P. & Handane, A.G. (2009) *Banking on the State*. London: Bank of England. Working Paper. Retrieved from: http://www.bankofengland.co.uk/publications/speeches/2009/speech409.pdf

Andrews, E.L. (2009) Plan to Help Banks Clear Their Books Is Halted. *New York Times*. June 4, 2009. B3

Ashton, P. (2009) An appetite for yield: The anatomy of the subprime mortgage crisis. *Environment and Planning A*. 41 (11): 1420-1441

Atkinson, A.B. & Leigh, A. (2007) The distribution of top incomes in Australia. *Economic Record*. 83 (262): 247-261

Baragar, F. (2009) Canada and the crisis. In J. Guard and W. Antony (Eds.) *Bankruptcies and Bailouts*. Halifax: Fernwood Press.77-105

Barnett, R. & Matier, C. (2010) Estimating Potential GDP and the Government's Structural Budget Balance. Canada: Ottawa. Office of the Parliamentary Budget Officer. Published online January 13, 2010. Retrieved from: http://www2.parl.gc.ca/Sites/PBO-DPB/documents/Potential_CABB_EN.pdf

Barr, C. (2009). Insiders sell like there's no tomorrow. *CNN News online*. Published online September 12, 2009. Retrieved from: http://money.cnn.com/2009/09/10/news/economy/insider.sales/index.htm?cnn=yes

Baum, C.J.. (2009) The effects of vehicle ownership on employment. *Journal of Urban Economics*. 66 (3): 151-163

Bawden, T. & Leroux, M. (2009) One in six young Britons jobless as unemployment hits 14-year high. *The Times online* (UK). Published August 13, 2009. Retrieved from: http://business.timesonline.co.uk/tol/business/economics/article6794065.ece

Bezemer, D.J. (2009) *"No one saw this coming": Understanding Financial Crisis through Accounting Models*. University of Munich: MPRA Economics Paper. June 16, 2009. Retrieved from: http://mpra.ub.uni-muenchen.de/15892/1/MPRA_paper_15892.pdf

Blecker, R.A. (2005) Financial globalization, exchange rates, and international trade. In G.A. Epstein (Ed.) *Financialization and the World Economy*. Northampton, Mass.: Edward Elgar Publishing. 183-209

Breau, S., & Rigby, D.L. (2010) International trade and wage inequality in Canada. *Journal of Economic Geography*. 10 (1): 55-86

Brennan, R. (2009a) Tory rips 'no-good jobless'. *Toronto Star*. November 25, 2009. A2.

Brennan, R. (2009b) Critics demand rollback as CPP executives cash in amid red ink. *Toronto Star*. May 29, 2009. A1

Brenner, R. (2002) *The Bubble and the Boom: The US in the World Economy*. London: Verso.

Booth, L. (2008) Subprime, market meltdown, and learning from the past. In R. Martin (Eds.) *The Finance Crisis and Rescue*. Toronto: University of Toronto Press. 35-51

Campion-Smith, B. (2009) Program for disabled favours Conservative ridings, MP says. *Toronto Star*. June 20, 2009. p A10.

Carmichael, K. (2009) New moves to ease strain of credit crisis. *Globe and Mail*. November 28, 2009. B1

Cartwright, J. (2009) War on deficit is no time for a fire sale of public assets. *Toronto Star*. January 27, 2010. A21.

Castree, N. (2010) The 2007-2009 financial crisis: Narrating and politicizing a calamity. *Human Geography*. 3 (1): 34 – 48

CGAAC (Certified General Accountants Association of Canada) (2009) Where Has the Money Gone: The State of Canadian Household Debt in a Stumbling Economy. Ottawa: CGAAC. Online report published June 2009. Retrieved from: http://www.cga-canada.org/en-ca/ResearchAndAdvocacy/AreasofInterest/DebtandConsumption/Pages/ca_debt_index.aspx

Christophers, B. (2009) Complexity, finance, and progress in human geography. *Progress in Human Geography*. 33 (6): 807-824

CIBC (Canadian Imperial Bank of Commerce). (2009) The self-employed recognition mortgage. Company website information page. Retrieved from: https://www.cibc.com/ca/mortgages/self-employ-rec-mortg.html

CMHC (Canada Mortgage and Housing Corporation). (2009a) NHA Mortgage-Backed Securities. Official website. Retrieved from: http://www.cmhc-schl.gc.ca/en/hoficlincl/mobase/mobase_001.cfm

CMHC (Canada Mortgage and Housing Corporation). (2009b). *Housing Now*. Ottawa: CMHC. Report published online December 2009. Retrieved from: http://www.cmhc-schl.gc.ca/odpub/esub/63830/63830_2009_M12.pdf?sid=7f75b596adc941e4a479f78847b3c0ab&fr=1262501631452

CMHC (Canada Mortgage and Housing Corporation). (2009c). *Housing Market Information: CHS – Mortgage lending*. Ottawa: CMHC. Report no. 64687. Published online July 2009. Retrieved from: https://www03.cmhc-schl.gc.ca/catalog/productDetail.cfm?lang=en&cat=55&itm=6&sid=16c3eef7460f4885b1b4a3138b705121&fr=1262806272406

Contenta, S. (2009) Labour Falling Down. *Toronto Star*. June 28, 2008. IN1.

Conway, E. (2009). Inequality in Britain is of developing world level. *UK Telegraph*. Published online November 25, 2009. Retrieved from: http://blogs.telegraph.co.uk/finance/edmundconway/100002243/inequality-in-britain-is-of-developing-world-level/

Cox, K. (2009) The question of hegemony and capital's global crisis. *Human Geography*. 2 (2): 11-16

Crane, D. (2009) Industrial engine idling. *Toronto Star*. Sunday, October 11, 2009 A19

Crotty, J. (2005) The neoliberal paradox: The impact of destructive product market competition and 'modern' financial markets on non-financial corporation performance in the neoliberal era. In G.A. Epstein (Ed.) *Financialization and the World Economy*. Northampton, Mass.: Edward Elgar Publishing. 77-110

Crouch, C. (2009) Privatised Keynesianism: An unacknowledged policy regime. *British Journal of Politics and International Relations*. 11 (3): 382-399

Crump, J. (2002) Deconcentration by demolition: Public housing, poverty and public policy. *Environment and Planning D: Society and Space*. 20 (4): 581-596

Crump, J., Newman, K., Belsky, E.S., Ashton, P., Kaplan, D.H., Hammel, D.J. & Wyly, E. (2008) Cities Destroyed (Again) For Cash: Forum on the U.S. Foreclosure Crisis. *Urban Geography*. 29 (8): 745-784

Crutsinger, M. (2009) Good news comes in threes for global economic recovery. *Toronto Star*. December 12, 2009. B4

Das, S. (2009) Lessons of the Global Financial Crisis: 1. The End of Ponzi Prosperity. Published online at Euro Intellegence, May 4, 2009, accessed at: http://www.eurointelligence.com/Article3.1018+M5566d30cff6.0.html

Dash, E. & Martin, A. (2009) Wells Fargo to Repay U.S., a Coda to the Bailout Era. *New York Times*. December 15, 2009. B1

Daw. J. (2009) Reports says injured workers should get less. *Toronto Star*. December 8, 2009. B1

D'Arista, J. (2005) The role of the international monetary system in financialization. In G.A. Epstein (Ed.) *Financialization and the World Economy*. Northampton, Mass.: Edward Elgar Publishing. 220-242

Dobbin, M. (2009) Why Canada's Housing Bubble Will Burst: The largest sub-prime lender in the world is now the Canadian government. *The Tyee*. Published online October 22, 2009. Retrieved from: http://thetyee.ca/Opinion/2009/10/22/BubbleWillBurst/

Dodd, R. (2005) Derivatives markets: Sources of vulnerability in US financial markets. In G.A. Epstein (Ed.) *Financialization and the World Economy*. Northampton, Mass.: Edward Elgar Publishing. 149-181

Durden, T. (2009) Here There Be Big Nymbers. Zero Hedge online. Published November 8, 2009. Retrieved from: http://www.zerohedge.com/article/here-there-be-big-nymbers-sic

Dymski, G.A. (2009) Financial risk and governance in the neoliberal era, in G. Clark, A. Dixon, and A. Monk (eds.) *Managing Financial Risk, From Local to Global*. Oxford: Oxford University Press.

Eder, S. (2009) Goldman trims Q4 pay and betters its results. *National Post*. January 22, 2010. FP6.

Elliott, L. (2009) Bank of England extends quantitative easing to £200bn. *The Guardian online*. Published November 5, 2009. Retrieved from: http://www.guardian.co.uk/business/2009/nov/05/quantitative-easing-25-billion-pounds

Elliott, L. & Atkinson, D. (2008) *The Gods that Failed*. London: Bodley Head.

Epstein, G.A. (2005) Introduction: Financialization and the world economy. In G.A. Epstein (Ed.) *Financialization and the World Economy*. Northampton, Mass.: Edward Elgar Publishing. 3-16

Erman, B. & Perkins, T. (2009) CMHC's growth fuels worries over new risks. *Globe and Mail*. October 17, 2009. B1.

Evans-Pritchard, A. (2010) America slides deeper into depression as Wall Street revels December was the worst month for US unemployment since the Great Recession began. *UK Telegraph*. Published online January 10, 2010. Retrieved from: http://www.telegraph.co.uk/finance/comment/ambroseevans_pritchard/6962632/America-slides-deeper-into-depression-as-Wall-Street-revels.html

Farrell, G. & Guerrera, F. (2009) Goldman amasses $164 billion in liquid assets. *Financial Times* (London, UK). April 14, 2009. Retrieved from: http://www.ft.com/cms/s/0/fa8701b2-2916-11de-bc5e-00144feabdc0.html?nclick_check=1

Ferguson, R. & Van Alphen, T. (2009) Government Motors: Will taxpayers get their money back?. *Toronto Star*. June 2, 2009. A1

Finlayson, A, (2009) Financialisation, financial literacy, and asset-based welfare. *British Journal of Politics and International Relations*. 11 (3): 400-421.

Fischer, I. (1933) The debt-deflation theory of great depressions. *Econometrica*. 1: 337-357

Forrest, R. & Hirayama, Y. (2009) The uneven impact of neoliberalism on housing opportunities. *International Journal of Urban and Regional Research*. 33 (4): 998-1013

Foster, J.B. and Magdoff, F. (2009) *The Great Financial Crisis: Causes and Consequences*. New York: Monthly Review Press.

Gaffney, M. (2008a) The role of land markets in economic crises. *American Journal of Economics and Sociology*. 68 (4): 855-888

Gaffney, M. (2009b) Money, credit, and crisis. *American Journal of Economics and Sociology*. 68 (4): 983-1038

Galbraith, J.K. (2009) No Return to Normal: Why the economic crisis, and its solution, are bigger than you think. *Washington Monthly*. Published online March 2009. Retrieved from: http://www.washingtonmonthly.com/features/2009/0903.galbraith.html

Ginnie Mae (Government National Mortgage Association, GNMA). (2009) Official website. Retrieved from: http://www.ginniemae.gov/index.asp

Gotham, K.F. (2009) Creating liquidity out of spatial fixity: The secondary circuit of capital and the subprime mortgage crisis. *International Journal of Urban and Regional Research*. 33 (2): 355-371

Grant, T. & Torobin, J. (2009) Scenes from a recovery. *Globe and Mail*. December 16, 2009. B1

Grice, A. (2009) £850bn: Official cost of the bank bailout. *The Independent*. Published online on December 4, 2009. Retrieved from: http://www.independent.co.uk/news/uk/politics/163850bn-official-cost-of-the-bank-bailout-1833830.html

Gowan, P. (2009) Crisis in the heartland. *New Left Review*. 55 (Jan-Feb). 5-29

Gowan, P. (1999) *Global Gamble: Washington's Faustian Bid for World Dominance*. New York: Verso.

Harvey, D. (1982) *Limits to Capital*. Chicago: University of Chicago Press.

Harvey, D. (1989) *The Urban Experience*. Baltimore: Johns Hopkins University Press

Harvey, D. (2005) *A Brief History of Neoliberalism*. Oxford: Oxford University Press.

Harvey, D. (2006) *Space of Global Capitalism*. London: Verso.

Harvey, D. (2010) Organizing for the anti-capitalist transition. *Human Geography*. 3 (1): 1-17

Hay, C. (2009) Good inflation, bad inflation: The housing boom, economic growth and disaggregation of inflationary preferences in the UK and Ireland. *British Journal of Politics and International Relations*.11 (3): 461-478

Herring, R.J. & Kane, E.J. (2009) Financial economists roundtable statement on reforming the role of the rating “agencies” in the securitization process. *Journal of Applied Corporate Finance*. 21 (1): 28-33

Heisler, T. (2009) U.S. expands plan to buy banks’ troubled assets. *New York Times*. March 23, 2009. A1

Hlinka, M. (2008) Carts and horses, and horses and carts: How public policy led to the subprime disaster. In R. Martin (Eds.) *The Finance Crisis and Rescue*. Toronto: University of Toronto Press. 149 – 162

Holleman, H., McChesney, R.W., Foster, J.B., and Jonna, R.J. (2009) The penal state in an age of crisis. *Monthly Review.* June. 61 (2): 1-17

Hull, J. (2008) The GFC of 2007: Another case of irrational exuberance. *The Finance Crisis and Rescue*. In R. Martin (Eds.) *The Finance Crisis and Rescue*. Toronto: University of Toronto Press. 17 -

Igan, D., Mishra, P. & Tressel, T. (2009) A Fistful of Dollars: Lobbying and the GFC. IMF Research Department working paper presented at the 10th Jacques Polak Annual Research Conference, November 5-6, 2009. Retrieved from: http://www.imf.org/external/np/res/seminars/2009/arc/pdf/igan.pdf

Immergluck, D. (2008) From the subprime to the exotic: Excessive mortgage market risk and foreclosures. *Journal of the American Planning Association*. 74 (1): 59-76

Immergluck, D. (2009) *Foreclosed: High-Risk Lending, Deregulation, and the Undermining of America’s Mortgage Market*. Ithaca: Cornell University Press.

Kaplan, D.H. & Sommers, G.G. (2009) An analysis of the relationship between housing foreclosures, lending practices, and neighbourhood ecology: Evidence from a distressed county. *The Professional Geographer*. 61 (1): 101-120

Katz, I. (2009) FASB Eases Fair-Value Rules Amid Lawmaker Pressure. *Bloomberg News* online. Published April 2, 2009. Retrieved from: http://www.bloomberg.com/apps/news?pid=20601087&sid=agfrKseJ94jc

Keen, S. (2009a) The confidence trick. *The Australasian Accounting Business and Finance Journal*. 3 (1): 57-65

Keen, S. (2009b) Household Debt: The Final Stage in an Artificially Extended Ponzi Bubble. Australian Economic Review. 42 (3): 347-357

Keen, S. (2009c) Bernanke and expert on the Great Depression? *Steve Keen's DebtWatch, No. 30*. Published online January 2009. Retrieved from: http://cdn.debtdeflation.com/blogs/wp-content/uploads/reports/KeenDebtwatchNo30BernankeDepressionExpert.pdf

Keen, S. (2009d) The roving cavaliers of credit. *Steve Keen's DebtWatch, No. 31*. Published online February 2009. Retrieved from: http://cdn.debtdeflation.com/blogs/wp-content/uploads/reports/KeenDebtwatchNo31February2009CavaliersOfCredit.pdf

Keen, S. (2009e) Bailing out the Titanic with a thimble. *Economic Analysis and Policy*. 39 (1): 3-24

Kindleberger, C.P. (1989) *Manias, Panics, and Crashes, 2nd Ed*. New York: Basic Books.

Klein, N. (2008) The bailout: Bush's final pillage. *The Nation*. November 17, 2008. 10.

Lapavistas, C. (2009) Financialized capitalism: Crisis and financial expropriation. *Historical Materialism*. 17: 114-148

Leach, B. (2010) House prices jump 1.2 per cent after 'buoyant start' to 2010. *UK Telegraph*. Published online January 18, 2010. Retrieved from: http://www.telegraph.co.uk/property/propertynews/7009906/House-prices-jump-1.2-per-cent-after-buoyant-start-to-2010.html

Levy, D. (2010) U.S. Home Foreclosures Climb 44% to Record in May. *Bloomberg Businessweek*. June 10. Published and accessed online at http://www.businessweek.com/news/2010-06-10/u-s-home-foreclosures-climb-44-to-record-in-may-update1-.html?source=patrick.net

Loxley, J. (2009) Financial dimensions: Origins and state responses. In J. Guard and W. Antony (Eds.) *Bankruptcies and Bailouts*. Halifax: Fernwood Press.62-75

Mackenzie, H. (2007). *Timing is Everything: Comparing the Earnings of Canada's Highest-Paid CEO's and the Rest of Us*. Toronto: Canadian Centre for Policy Alternatives.

Marinis, A. (2009) Housing Boom Finds 190 Million New Customers. *Bloomberg News online*. Published July 30, 2009. Retrieved from: http://www.bloomberg.com/apps/news?pid=20601039&sid=aSxsImWdjoEg

Marx, K. (2003, org. 1887) *Capital: A Critique of Political Economy* (F. Engels, Ed.). London: Lawrence and Wishart.

Marlow, I. (2009a) V is for a narrow GDP victory. *Toronto Star*. December 1, 2009. B1.

McArthur, G. & McNish, J. (2009) 'Orphaned' homeowners face foreclosure. *Globe and Mail*. December 6, 2009. A1.

McKenna, B. (2009) U.S. Mission: Save Lenders, Woo Investors. *Globe and Mail*. July 15, 2009. B1.

McNally, D. (2009) From financial crisis to world-slump: Accumulation, financialisation, and the global slowdown. *Historical Materialism*. 17 (1): 35-83

Meszaros, I. (2010) *The Structural Crisis of Capital*. New York: Monthly Review Press.

Minsky, H.P. (1982a) The financial instability hypothesis: Capitalistic processes and the behaviour of the economy. In C.P. Kindleberger and J.P. Laffargue (Eds.) *Financial Crises: Theory, History, and Policy*. Cambridge, U.K.: Cambridge University Press. 13-29

Minsky, H.P. (1982b) *Can "It" Happen Again? Essays on Instability and Finance*. New York: M.E. Sharpe.

Montgomerie, J. (2009) The Pursuit of (Past) Happiness? Middle-class Indebtedness and American Financialisation. *New Political Economy*. 14 (1): 1-24.

Moorhouse, E. (2009) New home sales: First-timers resuscitating market. *Toronto Star*. April 18, 2009. H2

Murie, A. (1997) The social rented sector, housing and the welfare state in the UK. *Housing Studies*. 12 (4): 437-461

Murray, S. & Zimmerman, A. (2009) Bernanke: Recession 'Likely Over'. *Wall Street Journal*. September 16, 2009. A2.

Newman, K. (2009) Post-industrial widgets: Capital flows and the production of the urban. *International Journal of Urban and Regional Research*. 33 (2): 314-331

Nyquist, S.S. & Rosenfeld, J. (2009) Why energy demand will rebound. *McKinsey Global Institute*. Online report published May 2009. Retrieved from: http://www.mckinseyquarterly.com/Energy_Resources_Materials/Oil_Gas/Why_energy_demand_will_rebound_2361?gp=1

Palacios, M., Veldhuis, N. & Harischandra, K. (2008) *Canadian Government Debt 2008: A Guide to the Indebtedness of Canada and the Provinces*. Fraser Institute. Published online May 2008. Accessed December 30, 2009 at http://www.fraserinstitute.org/commerce.web/product_files/CanadianGovernmentDebt2008.pdf

OECD. (2010). OECD Harmonised Unemployment Rates. Published online 11 January 2010. Retrieved from: http://www.oecd.org/dataoecd/30/61/44367840.pdf

OECD. (2009). International Investment Activity Collapses in 2009. *OECD Investment News*, December 2009 Edition. Retrieved from: http://www.oecd.org/dataoecd/23/50/44219992.pdf

OECD. (Various Years) Statistics Tables (Stat Extracts). Retrieved from: http://stats.oecd.org/index.aspx

Quercia, R.G. & Ratcliffe, J. (2008) The preventable foreclosure crisis. *Housing Policy Debate*. 19 (4): 775-783

Peck, J. (2001) *Workfare States*. New York: Guilford Press.

Peck, J. & Theodore, N. (2007) Flexible recession: the temporary staffing industry and mediated work in the United States. *Cambridge Journal of Economics*. 31 (2): 171-192

Peck, J. & Tickell, A. (2002). Neoliberalizing space. *Antipode*. 34 (3): 380-404.

Pittman, M. & Ivry, B. (2009) U.S. Bailout, Stimulus Pledges Total $11.6 Trillion Bloomberg News online. Published February 24, 2009. Retrieved from: http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aZchK__XUF84

Posner, R.A. (2009) *A Failure of Capitalism: The Crisis of '08 and the Descent into Depression*. Cambridge, Mass.: Harvard University Press.

Lees, L., Slater, T., & Wyly, E. 2007. *Gentrification*. London: Routledge.

by Alan Rappeport, R. (2010) US housing starts tumble in May. *Financial Times*. Published online June 16, 2010 at http://www.ft.com/cms/s/cdb533a0-793f-11df-92c1-00144feabdc0,Authorised=false.html?_i_location=http%3A%2F%2Fwww.ft.com%2Fcms%2Fs%2F0%2Fcdb533a0-793f-11df-92c1-00144feabdc0.html&_i_referer=http%3A%2F%2Ftheautomaticearth.blogspot.com%2F

Reddy, S. (2009) A Look at Case-Shiller, by Metro Area (December Update). Wall Street Journal. Published online December 29, 2009. Retrieved from: http://blogs.wsj.com/economics/2009/12/29/a-look-at-case-shiller-by-metro-area-december-update/

Reinhart, C.M., & Rogoff, K.S. (2009) *This Time is Different: Eight Centuries of Financial Folly*. Princeton: Princeton University Press

Richardson, M. & Roubini, N. (2009) Nationalize the Banks! We're all Swedes Now. *Washington Post*. Published online February 15, 2009. Retrieved from: http://www.washingtonpost.com/wp-dyn/content/article/2009/02/12/AR2009021201602.html

Rosenberg, D. (2009). Floating high on a delicate housing bubble. *Globe and Mail*. Friday December 11, 2009. B1.

Rowley, J. & Goldman, J. (2010) For Obama, Message in Massachusetts Is Agenda Threat. Business Week online. Published January 20, 2010. Retrieved from: http://www.businessweek.com/news/2010-01-20/for-obama-message-in-massachusetts-is-agenda-threat-update1-.html

Roxburgh, C., Lund, S., Wimmer, T., Amar, E. Atkins, C. Kwek, J., Dobbs, R. & Manyika, J. (2010) Debt and Deleveraging: The Global Credit Bubble and Its Economic Consequences. *McKinsey Global Institute*. Online report published January 2010. Retrieved from: http://www.mckinsey.com/mgi/reports/pdfs/debt_and_deleveraging/debt_and_deleveraging_full_report.pdf

Roubini, N. (2009) Mother of all carry trades faces an inevitable bust. *Financial Times*. Published online November 1 2009. Retrieved from: http://www.ft.com/cms/s/0/9a5b3216-c70b-11de-bb6f-00144feab49a.html

Saez, E. & Veall, M.R. (2005). The evolution of high incomes in Northern America: Lessons from Canadian evidence. *The American Economic Review.* 95 (3): 831-849

Sassen, S. (2009) When local housing becomes and electronic instrument: The global circulation of mortgages – A research note. *International Journal of Urban and Regional Research*. 33 (2): 411-426

Scotiabank. (2009) Freedown and cashback mortgages. Company website information page. Retrieved from: https://intranet.cmlc.biz/2009/03/03/scotiabank-freedowncashback/

Segal, D. (2009) Debt-rating agencies avoid broad overhaul after crisis. *New York Times*. December 8, 2009. A1.

Serres, C. and Howatt, G. (2010) In jail for being in debt. Minneapolis-St.Paul Star Tribune. June 9. Published online at http://www.startribune.com/local/95692619.html?page=1&c=y

Shiller, R.J. (2000) *Irrational Exuberance.* Princeton, N.J.: Princeton University Press.

Sideri, S. (2009) The global crisis and its consequences. *Human Geography*. 2 (3): 1-17

Simpson, H.D. (1933) Real estate speculation and the depression. *American Economic Review.* 23 (1): 163-171

Smith, M.E.G. (2010) *Global Capitalism in Crisis*. Halifax: Fernwood.

Sorkin, A.R. (2009a) *Too Big to Fail*. New York: Viking.

Sorkin, A.R. (2009b) Repaying U.S. and reaping bounty in fees. *New York Times*. December 22, 2009. B1

Sprott, E. & Franklin, D. (2009) Don't Bank on the Banks. *Markets at a Glance online newsletter.* Published November 2009. Retrieved from: http://www.beearly.com/pdfFiles/Sprott%20November%202009.pdf

Statistics Canada. (2009). Canada's Employment Downturn. *Statistics Canada Canadian Economic Observer*. 22 (11). Cat. 11-010-X. Retrieved from: http://www.statcan.gc.ca/daily-quotidien/091112/dq091112a-eng.htm

Steinherr, A. (1998) *Derivatives: The Wild Beast of Finance*. New York: Wiley.

Taleb, N. (2009) Time to Nationalize US Banking System. The Market Oracle online. Published online December 13, 2009. Retrieved from: http://www.marketoracle.co.uk/Article15770.html

Taylor, L.C. (2009) Gravy train shows no sign of slowing. *Toronto Star*. November 20, 2009. B3.

TD Canada Trust (Toronto Dominion Bank). (2009) 5% cashback mortgage. Company website information page. Retrieved from: http://www.tdcanadatrust.com/mortgages/5_cashback.jsp

Tett, G. (2010) *Fool's Gold: The Inside Story of J.P. Morgan and How Wall Street Greed Corrupted its Bold Dream and Created a Financial Catastrophe*. New York: Free Press.

Timiraos, N. (2009) Questions Surround Fannie, Freddie. *Wall Street Journal*. December 30, 2009. Retrieved from: http://online.wsj.com/article/SB10001424052748704234304574626630520798314.html

Trichur, R. (2009a) Recession is bust: Carney. *Toronto Star*. July 24, 2009. B1

Trichur, R. (2009b) Banks set to go on a shopping spree". *Toronto Star*. September 17, 2009. B1.

Toronto Star (no author). (2009) Investors claim TD Bank 'complicit in ponzi fraud. *Toronto Star*. November 21, 2009. B3

Turner, G. (2008) *The Credit Crunch*. London: Pluto Press.

US Department of the Treasury. (2009) Public-Private Investment Program. Washington: Online policy statement. Retrieved from: http://www.financialstability.gov/roadtostability/publicprivatefund.html

United States Bureau of Labour Statistics. (2010) Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail. Retrieved from: http://www.bls.gov/news.release/empsit.t14.htm

United Kindom Office for National Statistics. (various years) Online National Statistics Tables. Retrieved from: http://www.statistics.gov.uk/cci/nugget.asp?id=206, http://www.statistics.gov.uk/elmr/01_10/downloads/Table5_06.xls

Van Alphen, T. (2009) Labour costs threaten CAW jobs, Ford says. *Toronto Star*. October 3, 2009. B1.

Vasek, L. (2010) Healthy home market. *The Australian*. January 1, 2010. Retrieved from: http://www.theaustralian.com.au/news/nation/healthy-home-market/story-e6frg6nf-1225815115091

Walkom, T. (2009) Next under attack: Public sector unions. *Toronto Star*. November 7, 2009. A10

Walks, R.A. & Maaranen, R. (2008a). *The Timing, Patterning, and Forms of Gentrification and Neighbourhood Upgrading in Montreal, Toronto, and Vancouver, 1961-2001*. Toronto: University of Toronto Centre for Urban and Community Studies/ Cities Centre. Research Paper 211. http://www.urbancentre.utoronto.ca/pdfs/publications/RP211Walk-Maaranen-Gentrification1960-2001.pdf

Walks, R.A. & Maaranen, R. (2008b). Gentrification, social mix, and social polarization: Testing the linkages in large Canadian cities. *Urban Geography*. 29 (4): 293-326

Warburton, P. (2009) Global Credit Perspective. *Online Newsletter of Economic Perspectives Limited* (12th Update). Published June 2009. Accessed online on December 3, 2009 at http://www.economicperspectives.co.uk/index.php?id=35

Watson, M. (2009) Headlong into the Polanyian dilemma: The impact of middle-class moral panic on the British governments response to the sub-prime crisis. *British Journal of Politics and International Relations*.11 (3): 422-437

Wearden, G. (2009) How the $1tn bank bailout will work. *The Guardian*. Monday March 23, 2009. Accessed online November 3, 2009 at http://www.guardian.co.uk/business/2009/mar/23/public-private-partnership-investment-program-explained

Wells, J. (2009) Safe as houses?. *Globe and Mail*. Originally published October 31, 2008, revised and republished March 31, 2009. Retrieved from: http://www.theglobeandmail.com/report-on-business/article720329.ece

Whittington, L. (2009) Canada called ‘haven for fraudsters’. *Toronto Star*. December 8, 2009. B5

Whitney, M. (2008) Global Train-Wreck: The Great Credit Bust of 2008. *Socialism and Democracy*. 22 (2): 193-206

Wilner, R. (2009) The dead end kids: Young, unemployed and facing tough future. New York Post. Published online September 29, 2009. Retrieved from: http://www.nypost.com/p/news/business/item_AnwaWNOGqsXMuIlGONNX1K#ixzz0dl4DIGWw

Wong, T. (2009a) Market on 'robust' rebound. *Toronto Star*. September 3, 2009. B1

Wong, T. (2009b) Red-hot real estate shatters price record. *Toronto Star*. October 6, 2009. B1

Wong, T. (2009c) Best-ever December for home sales. *Toronto Star*. January 15, 2010. B1

Wong, T. (2009d) Mortgage lender warns of housing bubble. *Toronto Star*. November 12, 2009. B1

Wyly, E., Atia, M., & Hammel, D. (2004) Has mortgage capital found an inner-city spatial fix? *Housing Policy Debate*. 15 (3): 623-684

Wyly, E., Atia, M, Foxcroft, H., & Hammel, D. (2006) American home: Predatory mortgage capital and neighbourhood spaces of race and class exploitation in the United States. *Geografiska Annaler*. 88 (B): 105-132

Wylye, E., & Holloway, S. (1999) 'The colour of money' revisited: Racial lending patterns in Atlanta's neighbourhoods. *Housing Policy Debate*. 10 (3): 555-600.

Wyly, E., Moos, M., Kabahizi, E., & Hammel, D. (2009) Cartographies of race and class: Mapping the class-monopoly rents of American subprime mortgage capital. *International Journal of Urban and Regional Research*. 33 (2): 343-364

Yew, M.A. (2010) Economy airborne, but fasten those seatbelts. *Toronto Star*. February 4, 2010. B4.

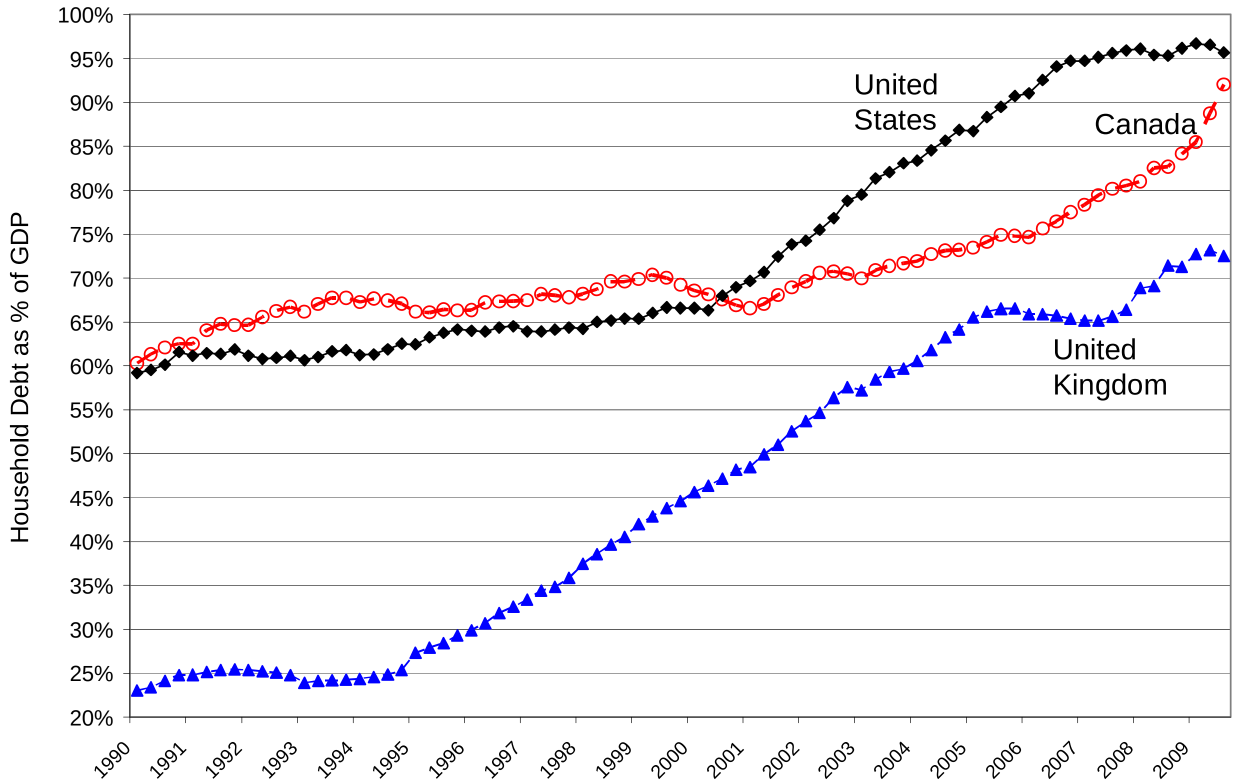
Zappone, C. (2009) House prices jump – again. *The Age*. Published online November 2, 2009. Retrieved from: http://www.theage.com.au/business/house-prices-jump--again-20091102-hsfy.html

Table 1: Changes in Manufacturing and FIRE (Finance, Insurance, and Real Estate) Employment, Selected Countries

	#, Start of the Decade (in '000s) (year)	#, Late in the Decade (in '000s) (year)	Change (%)
MANUFACTURING			
Canada	2,334 (2002)	1,761 (2009)	-24.60
United Kingdom	4,043 (1997)	2,870 (2007)	-29.01
United States	17,260 (2000)	11,690 (2009)	-32.27
FINANCE, INSURANCE, REAL ESTATE			
Canada	895 (2001)	1,099 (2009)	22.79
United Kingdom	4,905 (1997)	6,680 (2007)	36.19
United States	8,526 (2002)	8,644 (2008)	1.38

SOURCES: United States Bureau of Labour Statistics, various years; Census of Canada 2001; Statistics Canada, 2009; UK Office of National Statistics, Statistical Tables, various years; Turner, 2008

Figure 1: Consumer Debt as Proportion of GDP (%)



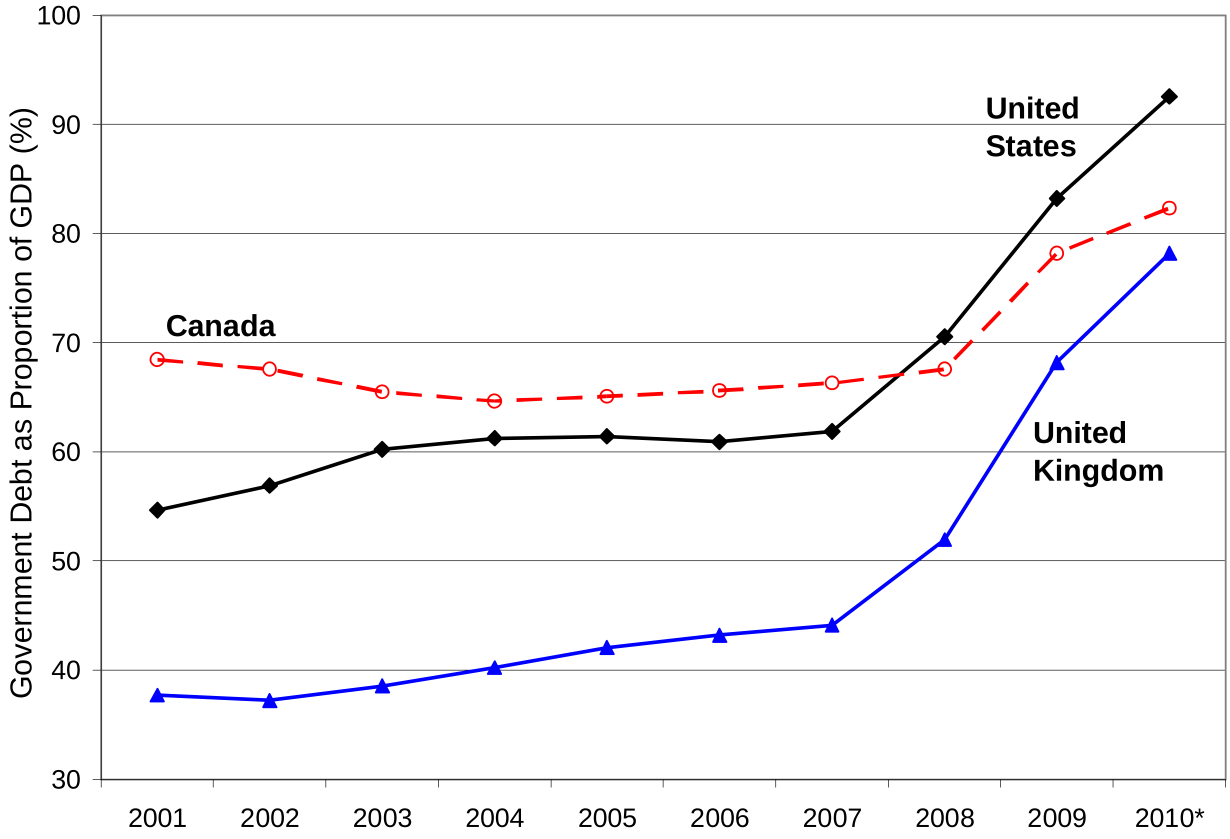
SOURCES: US Federal Reserve's Flow of Funds, Debt Growth, Borrowing and Debt Outstanding Table Z.1; Statistics Canada CANSIM II Database Table 378-0012; UK Office for National Statistics Tables 5 and 6

NOTES: Data for the United States only includes outstanding household debt, while the data for the other countries includes all consumer debt. Corporate debt is not included in any of the data.

Figure 2: Helping over-leveraged 'market participants' avoid taxation in Toronto

Source: Photo by author, Toronto downtown, January 2010

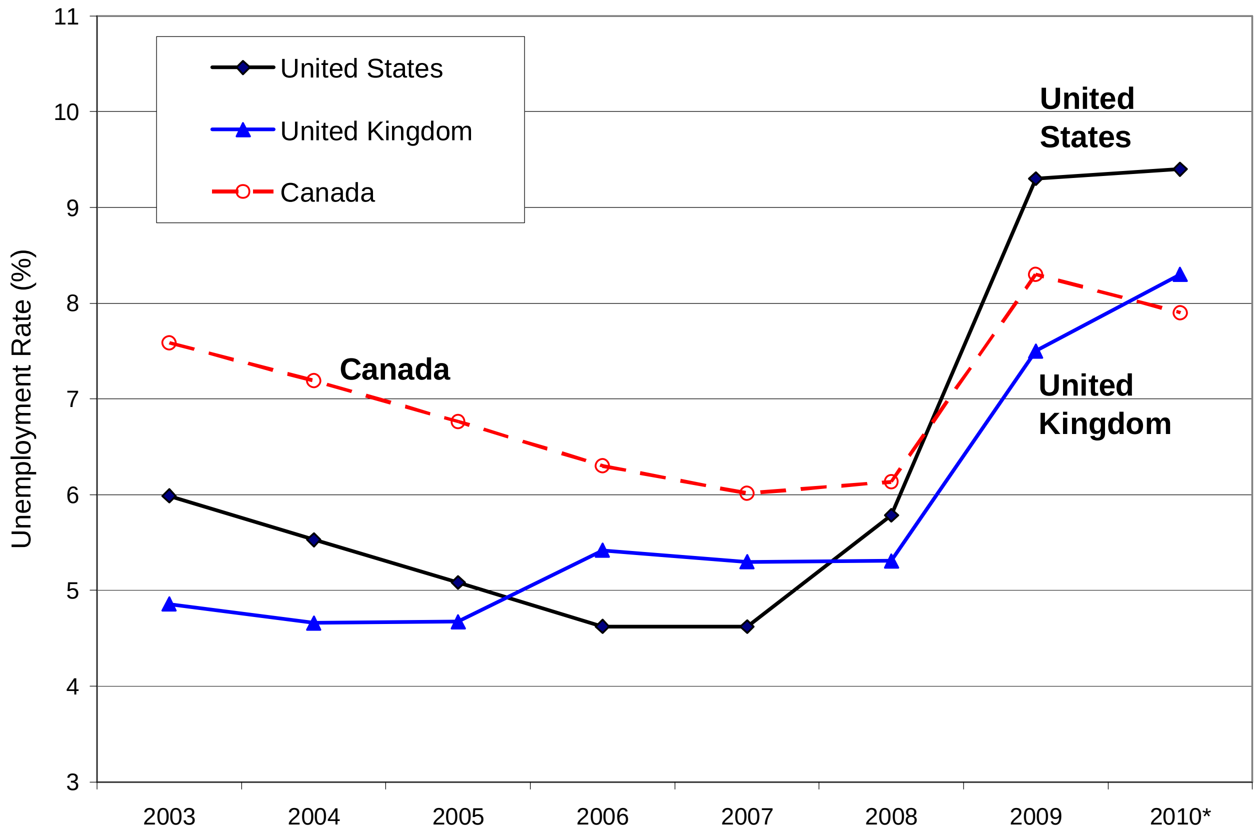
Figure 4: Estimated total Government Debt as a Proportion of GDP (%), 2001 - 2010



SOURCES: IMF World Outlook Database; OECD Statistical Extract Tables; US Federal Reserve's Flow of Funds, Debt Growth, Borrowing and Debt Outstanding Table Z.1; UK Office of National Statistics Tables; Statistics Canada CANSIM II database Tables 385-0010, 385-0026, 380-0030; 2009; Palacios et al., 2008

NOTES: (*) 2010 is an estimate made by the IMF, based on changes in gross direct debt. Data for the United States includes Federal, State and Municipal government debt. Data for Canada includes both Federal and Provincial Government debt. Note that the budgetary year for Canada runs April 1 to March 31 of the following year.

Figure 4: Unemployment Rate, Anglo-American Nations, 2003-2009, with 2010 Estimate



SOURCES: IMF World Outlook Database; OECD Statistical Extract Tables. (http://stats.oecd.org/index.aspx). (*) Estimate for 2010.