

Monetary Policy for Full Employment and Price Stability

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Abstract

It is frequently assumed in political discourse that the pursuit of full employment is a fiscal policy matter. However, as the 40th anniversary of the Humphrey-Hawkins Act approaches, an alternative monetary policy approach is proposed that is guided by two seemingly incompatible schools of macroeconomic thought: Post-Keynesianism and the New Monetary Consensus. The proposal is constructed through a critique of the orthodox understanding of money, a historical and institutional appraisal of monetary policy actions during and after the financial crisis, and a geographically grounded approach to understanding systemic economic problems and policy. The objective is to expand the full employment discussion into the monetary sphere and advocate for spatial analysis over abstract economic modeling as a primary tool for public policy design.

Keywords: Nonstandard monetary operations, collateral, Geographic Information Systems, balance sheet transactions

JEL codes: E5, E6, H1, O2, O3

Introduction

Five years after the collapse of Lehman Brothers and the start of the 2008 financial crisis, the “great stagnation” characterized a weak and jobless economic recovery (Palley 2013). Today, nearly ten years post crisis, the civilian labor force participation rate and employment-population ratio remain lower than pre-crisis levels. Additionally, part-time workers as a percentage of the employed, duration of unemployment, and long-term unemployed as a percentage of total unemployed remain higher than the pre-crisis figures (BLS July 2017). So while jobs have been created in the subsequent five years, these are not the quality of jobs the American workforce once enjoyed. To address the less than satisfactory state of the economy, this paper describes an alternative monetary policy approach guided by two seemingly incompatible schools of macroeconomic thought: Post-Keynesianism and the New Monetary Consensus. The proposal is developed through a critique of the orthodox understanding of money, an historical and institutional appraisal of monetary policy actions during and after the financial crisis, and a geographically grounded approach to understanding systemic economic problems and policy.

An essential aspect of the critique of the orthodox economics, concerns the fiscal and monetary policy implications that follow from a conception of money based upon a series of fictional stories about barter (Graeber 2011). This mythology includes Locke’s use of gold to relieve the spoilage and prejudice constraints, Adam Smith’s savage truckers and barterers, the Treasury View’s loanable funds model of savings and investment, Milton Friedman’s helicopter drops of cash, and the all too common meme that the federal budget should be managed as if it is a household budget¹. The result of this barter narrative is the continued restriction of our most powerful “social technology” (Ingham 2000). Commodity money economics places unnecessary limits on the sovereign currency issuer’s ability to fully apply the policy space available to enhance the lives of its citizens.

Ideological rigidity is not new in economics and extends from money to methodology. Marx and Engels warn in *The German Ideology* that abstract and universal “ideas of the ruling class are in every epoch the ruling ideas.” The ruling ideas of the current epoch are largely derived from orthodox economics and its meta-theoretical foundations that prioritize abstract modeling over critical, historical, and institutional analyses of social relations. One hundred and ten years ago, Alfred Marshall lamented the difficulties that result from too heavy a reliance in economics on abstractions divorced from the real world:

¹ The literature on the persistence of the barter economy story and the Metallist-Chartalist debate is extensive, but see the references in Innes (1914), Goodhart (1998), Bell (2001), and Bell, Henry and Wray (2004), and Wray (2012).

[...] we have suffered much from schemes that claim to be practical, and yet are based on no thorough study of economic realities; that lack the subtle beauty of a delicate imagination; and that even propose to tear up by the roots the family life, the tree whose fruits and flowers contribute much more than half to the sum total of all that is known of beauty and happiness by the people in general, and especially the working class (Marshall 1907, 13).

A lack of economic imagination and the sacrificing of reality in favor of elegant modeling contribute to a polarized political environment and the greatest gaps in wealth and income in the United States since the Great Depression. The restraint of monetary policy to maintaining stable prices and the controls placed on fiscal policy makers by the Federal budget debate expose vital social programs—including the Affordable Care Act, Medicare and Medicaid, disability payments, social security, and veterans' benefits—to constant threat of repeal, funding cuts, or privatization.

The uncertainty produced by these political battles places individuals and families in danger – foreclosures, a jobless recovery, and general employment insecurity tear up established roots and stable lifestyles in communities and neighborhoods across both red and blue states. While it is commonplace in the popular discourse to blame the crisis on the reckless behavior of individuals, this explanation is unsatisfactory. Equally insufficient are claims that exogenous forces or a lack of data quality for their DGSE models prevented economists from predicting the crisis. To overcome both of these faulty claims, an alternative methodological approach is established qua an historical and institutional appraisal of the actions taken by the Federal Reserve. These actions include the response to the crisis and the policies pursued once the financial sector stabilized. Several of these monetary actions are defined as non-standard operations.

The first of these non-standard operations include the 'extraordinary' measures taken by the Federal Reserve to prevent a complete financial meltdown and the unraveling of the U.S. and global economies. Included in this discussion is a description of the institutional devices utilized in these efforts. Of primary importance is Federal Reserve Act 13(3). It is argued that this law affords significant flexibility to the Federal Reserve to conduct its Lender of Last Resort operations (LOLR). This flexibility and the actions of the Fed, during and after the crisis, demonstrate the policy space open to a sovereign currency issuer from the perspective of monetary policy. Taxes did not need to be collected in rapid fashion, there was no large scale borrowing from the public, but the Federal Reserve acted swiftly with set of nonstandard operations, including balance sheet transfers. These transfers were executed with several types of financial institutions and even individuals on an unprecedented scale to supply liquidity in order to protect key markets and prevent chosen institutions from insolvency and closure. Afforded an expanded freedom to define collateral and to conduct these nonstandard operations at unparalleled scale and speed, the monetary authorities have continued to leverage this power and to implement a series of bond purchasing transactions known as quantitative easing (QE).

QE is conventionally understood as expansionary monetary policy (Bernanke *et al.* 2004), but this monetary operation has experienced limited success in creating quality jobs or initiating growth in the real sectors of the economy. A brief description of financial operations and endogenous money theory outline a framework for understanding the problems with QE that prevent the policy from generating the hypothesized macroeconomic outcomes. However, instead of using these problems as justification to abandon monetary policy and its toolbox as a viable option for creating real economic growth and job creation, it is useful to exercise a little “delicate imagination” and reorganize the powers of Federal Reserve Act 13(3). By applying the lessons of endogenous money with the Federal Reserve’s freedom to define collateral, the plasticity of the Fed’s balance sheet is examined and an alternative application of nonstandard operations is outlined. One benefit of this proposal is its capability to successfully allow the Federal Reserve to pursue the dual outcomes outlined in its Federal mandate of price stability *and* to maximize employment under the Humphrey-Hawkins Act of 1978.

The reorganization of the nonstandard operations is presented within the policy space that was utilized by the Federal Reserve during its response to the crisis. Rather than continuing to pursue QE in its current form, the alternative policy prescription is a call for the actions taken during the crisis to become available on a broader scale and to address micro crises in geographically targeted spaces before such crises become overwhelming. From an institutional perspective this broader approach fits nicely within the language of the Dodd-Frank laws, and alleviates the current trend towards “too big to fail” by placing less emphasis on the balance sheets of financial institutions for economic stability, and redirecting these activities towards geographically identified imbalances. This analysis differs from previous work that explores the policy space available to a sovereign currency issuer, such as jobs guarantee and employer of last resort programs, in that it does not require a change to fiscal policy—only the reorientation of the nonstandard policy tools of the Federal Reserve. In taking the Federal Reserve’s dual mandate seriously, the development of a jobs guarantee program is introduced without needing to overcome the enormous institutional and political constraints, such as the debt/deficit debate, which currently seems unlikely to find traction² in Congress.

One explanation for the perpetuation of the barter economy story and the continued misunderstandings it creates about the tools available to a sovereign currency issuer is “because it is central to the entire discourse in economics” (Graeber 2011, 44). Orthodox economics is a powerful institutional force that continues to ignore the historical and institutional realities of money at great cost to society. This separation from history allows a great deal of economic analysis to begin from an imaginary world where money emerges from market transactions and is thus a private phenomenon which is then inefficiently redistributed by fiscal authorities. The monetary policy analysis described from this imaginary world is one in which, “the whole discussion now takes place

² This is an important discussion that is beyond the scope of this article, because even in its current form, QE and the Federal Reserve’s crisis response are being questioned as potentially being fiscal policy actions, under the current legal frameworks guiding fiscal and monetary policy matters.

without requiring the mention of the word money,” and this unnecessary commitment to real analysis is considered “intellectual progress” in the field (Friedman 2004, 83).

Meanwhile, the participants of the real world face the harsh realities perpetuated by disembedding our economy from social structures. These difficulties are displayed in a spatial quantitative qualitative sQ^2 method by utilizing geographic information system (GIS) maps. These maps will demonstrate some of the realities ignored by abstract economic analysis and provide the locations for which an alternative monetary policy can prevent and potentially heal the allostatic processes occurring in both the cities and rural areas across the United States. The combination of historical, institutional, and geographic analysis of the economic system is offered to shed new light on the value of expanding the policy discourse and how advances can be made by grounding economies and policy spatially, rather than in the abstract.

I. The Bailout and Federal Reserve’s Nonstandard Operations

In the fall of 2008, the credit markets in the United States and the world froze, and a global financial crisis was on the verge of melting down the global economy. To understand the size, scope, and danger the world economy was in, it is useful to review the steps taken by the Federal Reserve to stop the economy from sliding into the abyss. Thanks to the extensive research directed by Dr. L. Randall Wray and supported by the Ford Foundation there is a detailed timeline of the Federal Reserve’s actions that outlines the tools and measures utilized to save the financial world from ruin.

These actions are described as ‘extraordinary’ and have been debated as potentially illegal in their extremity (Wray 2012). It is argued here that rather than being illegal, these extraordinary and unprecedented actions by the Federal Reserve open the door for new and imaginative monetary policy. This section critiques the ineffective and outdated monetarist’s policies and exposes the potential of section 13(3) of the Federal Reserve Act (FRA) and the new ‘broad based’ criteria in Dodd-Frank to redirect policy towards the full employment mandate. In order to understand the power that has been shown through the utilization of section 13(3) of the FRA, a quick summary of the three stages of “unconventional facilities and programs aimed at stabilizing (or “saving”) the existing financial structure” (Felkerson 2012, 4), as well as the total magnitude of the response is carried out.

It is well-established Keynesian economics that during a crisis, there is a rush to liquidity. As the global credit markets seized up, there was a scramble for an evaporating supply of short-term liquidity. With an objective of preventing solvent banks and other depository institutions from failing, the Federal Reserve created facilities to distribute liquidity to the financial system. The goals of these facilities were “consistent with the intent of the Federal Reserve’s traditional lender of last resort mandate” (Felkerson 2012: 4). In addition to creating facilities to provide liquidity in home and foreign markets, the Maiden Lane I, II, and III facilities were opened to provide liquidity to individual institutions, Bear Sterns and AIG (Felkerson 2012). These actions were all taken at what

might be considered the peak of the crisis with “amounts outstanding and lent in this stage [...] reaching just under \$1.6 trillion” (Felkerson 2012, 12).

The second stage of the Federal Reserve’s stabilization plan was aimed at restarting credit flows and the continuation of liquidity provisioning to key markets. The Term Asset-backed Securities Loan Facility (TALF) is one of the facilities operated to conduct stage 2, lending billions of dollars, from March 25, 2009 to March 29, 2010 to institutions such as Morgan Stanley, State Street, PIMCO, and other household names, because, these institutions were viewed as being important parts of key markets (Felkerson 2012). While the overall dollar amounts lent during this stage were quite a bit smaller than stage 1, these facilities pushed the boundaries of section 13(3) of the Federal Reserve Act much further than had been executed in stage 1, because key markets were being selected by policy makers.

In stage 3, the Federal Reserve hoped to stabilize the housing industry through the purchase of government-sponsored entities (GSEs) and mortgage backed securities (MBSs) as well as to continue expanding liquidity and encouraging lending through quantitative easing (Felkerson 2012). By purchasing the ‘toxic’ assets from the market, the Federal Reserve hoped to alleviate uncertainty about the balance sheets of those financial institutions. During this stage, “the Federal Reserve’s MBS holdings peaked at \$1,128.67 billion on June 23, 2010 (Felkerson 2012, 18). MBSs remain a substantial contributor to the Fed’s balance sheet, as seen in Figure 2 below.

As this abbreviated description of the stabilization plan of the Federal Reserve hopefully suggests, the actions are indeed *unprecedented* and *extraordinary*. After summing all of the individual transactions and unconventional LOLR facilities, Felkerson (2012) totals the response at \$29,616.3 billion. While this number is large, the efforts the Federal Reserve made to save individual institutions while simultaneously allowing others to fail appears to be a significant finding, because these actions display a power to choose winners and losers in policy. In their current application, these choices are too narrow, and suffer from the same limitations that interest rate manipulation has in delivering desired macroeconomic outcomes. Instead, the Fed can broaden the definition of key markets to execute these non-standard operations and better achieve its dual mandate of full employment and price stability.

II. Limitations to Quantitative Easing

Since the stabilization of the financial industry, fiscal policy has largely played a negative role in recovery as a general political climate of austerity characterized by debt ceiling debates and government shutdowns create instability in households and markets. In this unstable fiscal environment, the Federal Reserve attempts to prevent recession and to stimulate economic activity by maintaining a near zero Fed Funds rate through QE purchases. A graphical display of the dramatic changes to the Federal Reserve’s balance sheet can be seen below in Figure 1. By purchasing “treasury bonds and mortgaged backed securities (MBS) issued by government sponsored entities, Fannie Mae and

Freddie Mac” (Palley 2013, 4) the Federal Reserve is attempting to promote recovery through a strategy of credit easing.

Despite arguments that “credit easing will undoubtedly play a leading role in promoting a full recovery of the economy and financial markets” (Carlson *et al.* 2009), the economy remains hampered by long-term unemployment, part-time employment and a general economic insecurity despite 10 years of historically low interest rates. An explanatory factor for the failure of credit easing to expand productive economic activity is the conventional understanding of money and the operations of banks. These policies originate from the mistaken description of money’s evolution promoted by the barter myth. This false evolution claims that barter precedes coinage and coinage leads to credit and concludes that banks require deposits to make loans (Graeber 2011). An improper ordering of events hinders the viability of QE to operate properly. As Basil Moore (1990) points out loans create deposits and deposits create reserves, this is endogenous money creation. Banks generate loans to credit worthy borrowers; they do not need to wait for deposits before extending credit. In this process, the Federal Reserve, as LOLR, accommodates banks in need of reserves that they are unable to obtain in the Fed Funds market. Thus, removing treasury bonds and MBSs from bank balance sheets in favor of cash reserves has not been able to generate new lending as banks do not lend reserves to customers. Consequently, this program cannot deliver the desired “full recovery of the economy and financial markets.”

In fact, this process may actually be contractionary. First, QE is taking treasuries and the MBSs off the balance sheets of the banks. In addition to the removal of these assets, the Federal Reserve also removes the interest returns of those assets. In 2012, the Federal Reserve’s net interest income was \$90.6 billion (Palley 2013). Moving those interest earnings out of the private sector generates a “fiscal drag” on economic activity as “QE redistributes interest payments on debt to the monetary authority, and thereby back to the fiscal authority” (Palley 2013, 2).

Figure 1: The Federal Reserve's Balance Sheet 2008

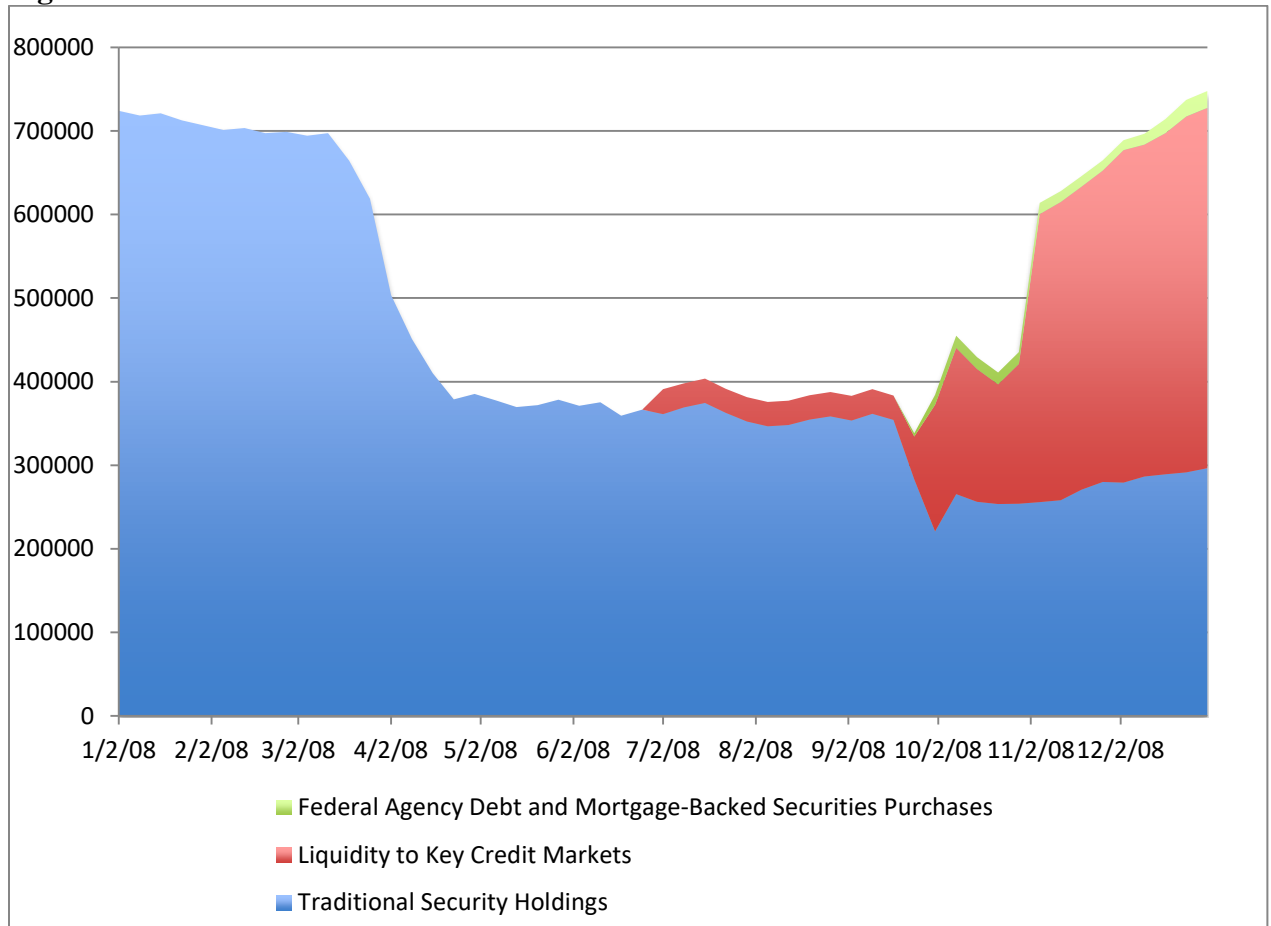
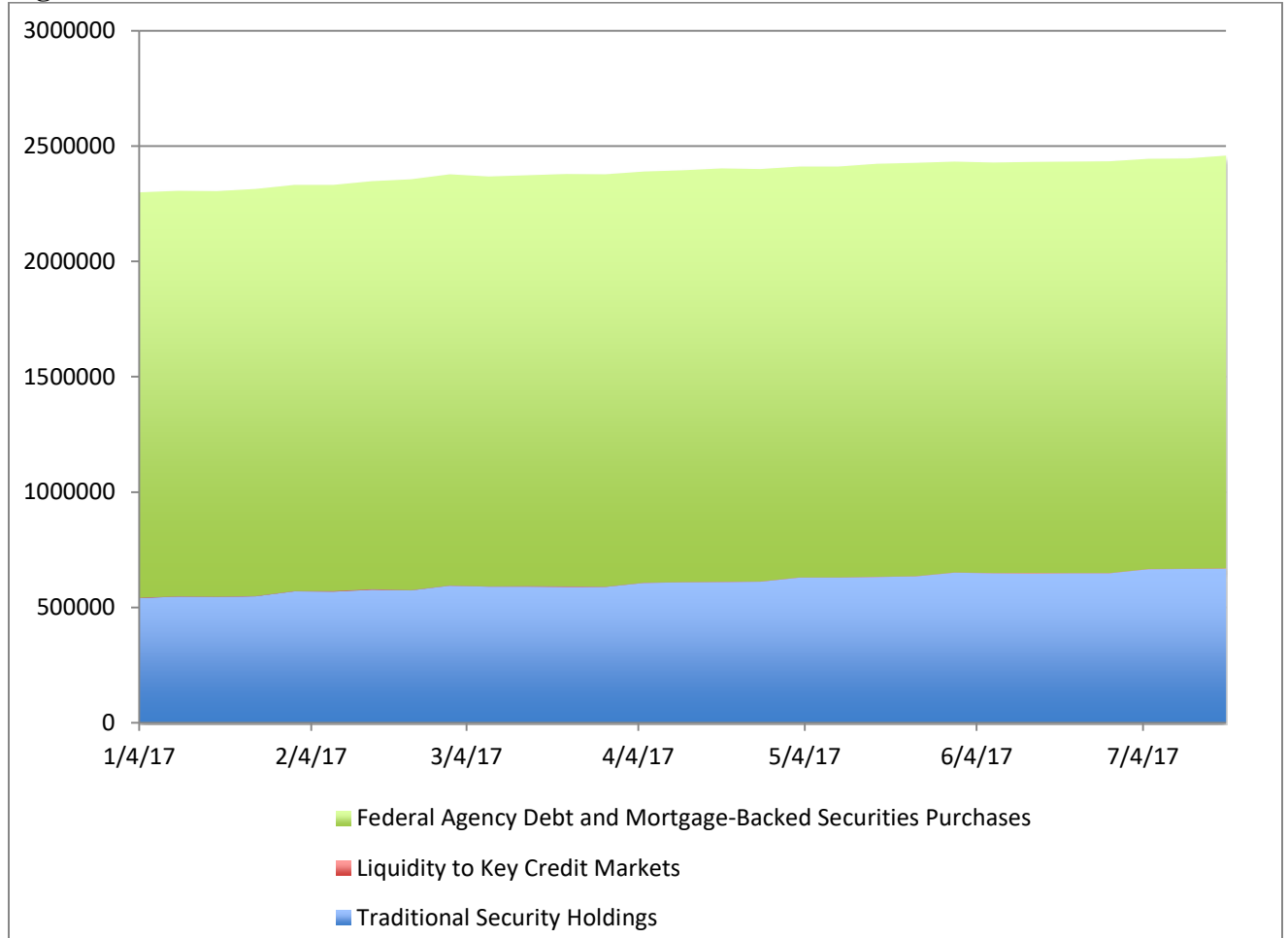


Figure 2: The Federal Reserve's Balance Sheet 2017



Figures 1 & 2 display the capacity for the Fed's Balance Sheet to undergo both extreme and rapid restructuring, and to maintain large quantities of particular assets for extended periods of time. **Source:** Cleveland Federal Reserve: Credit Easing Data.

A second fundamental problem relates to financial operations. In the Fed Funds market, treasuries are often the best collateral for banks to secure loans from one another (Fullwiler and Wray 2010). QE reduces the banks holdings of treasuries in preference of reserves. Banks, however, only lend reserves to each other, and without collateral this lending does not occur. Further, the lack of good collateral in the banking system is hypothesized as one of the catalyst for the creation of mortgage-backed securities in the first place. With the Clinton surplus, treasuries were drained from the banking system and new 'safe' assets needed to be created for use as collateral, and therefore 'financial innovation' generated MBSs and CDOs (Fullwiler and Wray 2010).

These two problems with QE are not necessarily problems with the intent behind its development. The three nonstandard tools at the Federal Reserve's disposal are communications to the public, balance sheet expansion, and balance sheet composition changes. As evidenced by Figures 1 and 2, the Federal Reserve with the goals of credit easing and macroeconomic expansion is clearly exercising balance sheet expansion and

composition changes. However, because of mythological ideas about money and the misunderstanding of the operations of the financial system created by orthodox economic thinking, these potentially good policy tools are not being effectively applied.

These three nonstandard tools can, however, be reoriented to more closely align with the initial assumptions and impacts hypothesized in Bernanke, Reinhart, and Sack (2004). In their Brookings Institute analysis they ask “can nonstandard policy measures be effective when ordinary monetary policy actions are constrained by a lower bound on short-term nominal interest rates? (Bernanke *et al.* 2004, 79). In other words, will QE work? Their conclusion, “our findings go a long way toward refuting the strong hypothesis that nonstandard policy actions, including QE and targeted asset purchases, cannot be successful in a modern industrial economy (Bernanke *et al.* 2004, 77). This paper supports this finding, but argues these tools need to be reorganized to better achieve the Fed’s dual mandate.

The reason QE has not been able to generate positive employment outcomes is that it is not purchasing the correct assets and it is failing to communicate the “objectives and outlook for the economy” (Bernanke *et al.* 2004, 77) in an effective manner. Rather than continuing the opaque process of purchasing assets from financial institutions for reserves they are not going to lend, the Federal Reserve needs to provide credit easing directly to those who need it most, Americans lacking credit and income, by lending against the strongest commodity collateral they possess, their labor power.

III. A Post Keynesian Approach to the New Monetary Consensus

As a response to the Great Depression, John Maynard Keynes wrote the *General Theory of Employment, Interest, and Money*. At this time, the Federal Reserve Bank of the United States was hardly of sufficient age to purchase an adult libation. This youth is unlikely to have been a contributing factor in Keynes’s lack of faith in the punch monetary policy could deliver to the economy in a time of crisis. However, this lack of faith and argument that there may be many “slips between the cup and the lip” led Keynes to prioritize fiscal mechanisms for managing effective demand and employment (Keynes 1964, 173). As such, it is not surprising that the literature developed in the spirit of Keynes has also tended to focus on the power and legitimacy of fiscal policy³.

In the decades following the Great Depression, the central bank and its policies have experienced structural and technological changes as it has grown alongside the globalization of the U.S. economy. Hence a reappraisal of the policy tools and lessons learned by the central bank as it has transitioned from one policy regime to the next is a worthwhile exercise. One of the most painful episodes is widely known as the monetarist experiment. The failure and “unpleasant arithmetic” experienced during the period of monetary aggregate targeting exposed the realities of endogenous money. The Federal

³ The power of fiscal policy is also related to its freedom to “spend money into existence,” whereas monetary policy is limited to balance sheet transactions. This will be discussed further below.

Reserve's role as the financial industries' accommodator has since limited the toolbox of the central bank to interest rate targeting (Wray 1993).

Interest rate targeting has also not been a terribly smooth learning process, as the Federal Reserve has implemented various theories about how best to manage the interest rate and control inflation. After periods of using several models with policy variables including gold prices, inflation surveys, and Taylor rules, Fed Chairman Alan Greenspan would plant the seeds for the new monetary consensus approach to policy making in the early 1990s. The new monetary consensus (NMC) consists of four main principles: transparency, gradualism, activism, and low inflation as the only official goals (Wray 2004)⁴. This is a critical shift in monetary thinking as it “unofficially” removes employment from monetary policy consideration, except through indirect market behaviors driven by expectations about interest rates and prices.

To reiterate: the nonstandard alternative policies are divided into “three classes: using communications policies to shape public expectations about the future course of interest rates; increasing the size of the central bank's balance sheet; and changing the composition of the central bank's balance sheet” (Bernanke *et al.* 2004, 3). Each of these policy proposals aligns nicely within the framework of the NMC. The central bank has the power to implement these alternative policy measures under section 13(3) of the FRA entitled, *Discounts for Individuals, Partnerships and, Corporations* and reads:

In *unusual and exigent circumstances*, the Board of Governors of the Federal Reserve System, by the affirmative vote of not less than five members, may authorize any Federal Reserve bank, during such periods as the said board may determine, at rates established in accordance with the provisions of section 14, subdivision (d), of this Act, to discount for *any participant in any program or facility with broad-based eligibility*, notes, drafts, and bills of exchange when such notes, drafts, and bills of exchange are indorsed or otherwise secured to the satisfaction of the Federal Reserve bank: Provided, that before discounting any such note, draft, or bill of exchange, the Federal reserve bank shall obtain evidence that such participant in any program or facility with broad-based eligibility is *unable to secure adequate credit* accommodations from other banking institutions. All such discounts for any participant in any program or facility with broad-based eligibility shall be subject to such limitations, restrictions, and regulations as the Board of Governors of the Federal Reserve System may prescribe (FRA italics added).

The liquidity measures taken by the central bank during the second stage of the stabilization including TALF are applications of nonstandard operations that are allowed under this portion of the FRA.

This liquidity provisioning to “key markets” provides a clear example of the nonstandard policy of central bank balance sheet expansion. Unfortunately, the massive immediate

⁴ Wray (2004) also outlines a number of unofficial targets resulting in the surreptitious targeting of distributional variables.

expansion of the Federal Reserve's balance sheet followed by continued asset purchases and further growth of the central bank's balance sheet has done little to improve real economic activity. The difficulty, as explained above, is in the financial order of operations. The Federal Reserve continues to swap collateral assets for cash in hopes of stimulating lending activity. Draining collateral from the banking system does not stimulate new lending activity and appears to make this process more difficult. In order to actually stimulate the economy, the Federal Reserve will need to undertake a new "monetarist experiment". Similar to the radical transition made in the 1980s, this policy change is related to changing the money supply. This proposed experiment is guided by modern money theory and a Keynesian on-the-spot work program (Tcherneva 2012), falls within existing legal constraints of the FRA, and the theoretical prescriptions of the NMC. The proposed monetary experiment includes following three steps:

1. To influence macroeconomic expectations the central bank will effectively communicate to the public that is taking its dual mandate seriously.
2. An expansion of the central bank balance sheet will be conducted through the extension of credit collateralized by labor power directed towards a neighborhood stability program.
3. The composition of the central bank's balance sheet will be permanently changed based on a commitment to purchase all available labor power at an announced price, monetizing labor power and creating a buffer stock for price stability.

At the heart of the NMC is the importance of effective communication to the public, "surely everyone today believes that expectations matter, and therefore that whatever influences the public's expectations, including communication from the central bank, matters as well" (Friedman 2004, 80). Expectations of the public will be changed when the central bank clearly communicates intentions to take its mandate as outlined in section 2A seriously:

The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates.

It must be made clear that by taking this law seriously the Federal Reserve acknowledges that it must actively pursue maximum employment in order to maintain growth and allow production to expand. Interest rate management relegates the central bank to the role of accommodator to the financial industry, accordingly policy must be changed to allow it to maintain monetary aggregates.

Next, employment and production is to be supported through a new *broad based eligibility* program designed to relieve those facing the most *exigent* of situations in America, poverty, unemployment, and long-term unemployment. Those in poverty, unemployed and long-term unemployed are *unable to secure credit from financial*

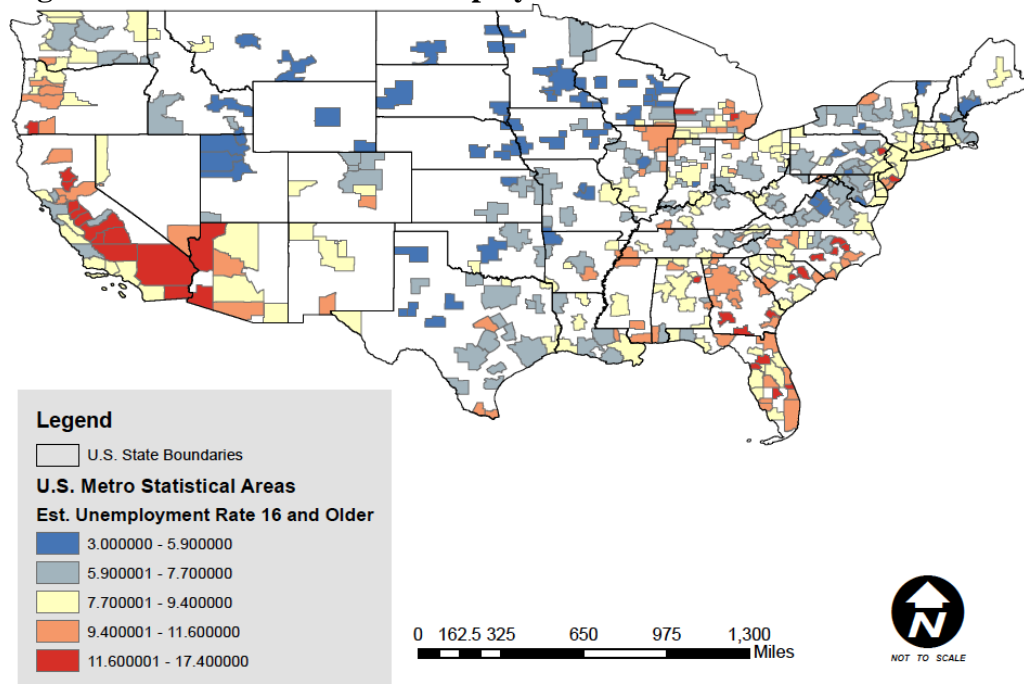
institutions. Using geographic information system technology, the Fed can target spaces in need of capital flows with underutilized labor power. Figure 3 displays unemployment across metropolitan statistical areas (MSAs). This low level resolution is an appropriate regional tool for the Federal Reserve System. Using MSAs allows for targeting of high stress areas. In addition to concerns about urban employment, tools are available to analyze the underutilized capacity in the surrounding rural spaces. This first low level examination guides analysis at finer resolutions, such as census tract, census block, neighborhood, and parcel geographies.

This new program changes the composition of the central bank's balance sheet, by extending new loans that must be collateralized, according to section 14, subdivision (d) of the FRA. Suggested collateral for these loans is two weeks of labor power applied to a nationwide Neighborhood Stabilization and Rehabilitation Plan (NSRP). At the end of two weeks, the Federal Reserve in exchange for a loan (wage) will 'collect' the collateral. If at the end of the term (two weeks) the individual is still not able to obtain credit (employment), from another source the loan (wage) is rolled over and the process continues until the individual establishes employment and the ability to borrow elsewhere. The Federal Reserve then simply retains the collateral and the debt is satisfied.

During the crisis, the Federal Reserve displayed two important policy space freedoms, first its "authority to accept a wide range of assets as collateral for loans from its discount window" (Bernanke *et al.* 2004, 21) and second the ability to create a variety of facilities to benefit specific institutions it deems systemically important. While it may be controversial to claim that labor power should be considered as collateral⁵, it does provide an answer to a problem that was discovered by orthodox economists during the monetarist experiment. The Federal Reserve cannot create money as it only operates through balance sheet transactions. Thus by using labor power as collateral, it will be issuing money onto the balance sheets of Americans directly. This balance sheet activity is advantageous as it will contribute to meaningful NSRP production and go to those workers with the greatest marginal propensity to consume (Keynes 1961).

⁵ This should not be terribly controversial from the orthodox perspective as labor regularly is considered a commodity like all other commodities in the real analysis of the economy.

Figure 3: ACS Estimates of Unemployment across U.S. Metro Statistical Areas



Sources: American Community Survey, U.S. Census Tigerline Files, Center for Economic Information University of Missouri-Kansas City

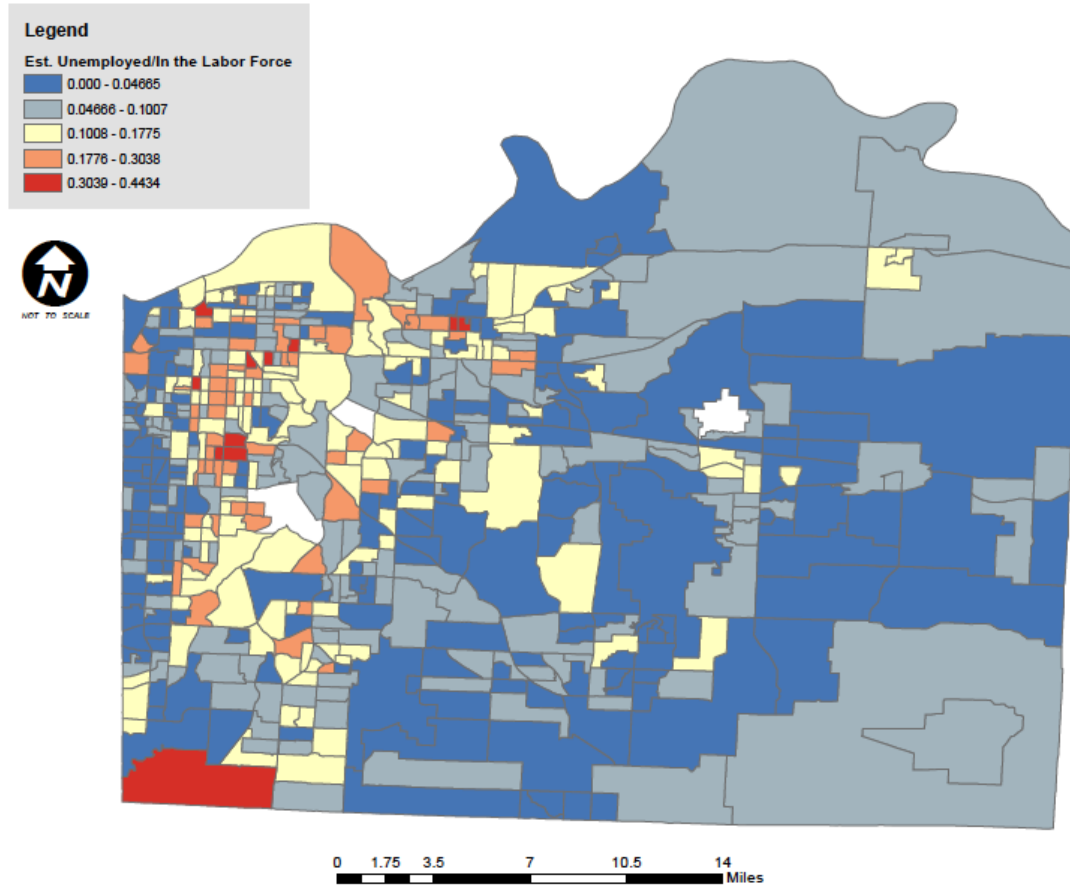
The final step in the nonstandard policy implementation is to address the changing composition of the central bank’s balance sheet. This policy will only be effective if “the private sector perceives the increase in the money supply to be *permanent*” (Bernanke 2004, 88). This can be accomplished through the announcement of a plan to purchase all labor power available for exchange on the market at a fixed price on a permanent basis. This policy would “entail an essentially unlimited commitment to purchase the targeted security at the announced price” (Bernanke *et al.* 2004, 21). By setting a price for labor power, the Federal Reserve would create a labor buffer stock, monetizing it, and insuring it would always be fully employed just as this policy would operate if gold was chosen as the buffer stock (Wray 1998). This price announcement is similar to the Fed’s commitment to be LOLR at the Fed Funds Rate in the overnight markets.

By converting the Federal Reserve’s balance sheet into a measure of underutilized labor power in the economy, and at the same time providing U.S. dollars to Americans directly there would be an increase in dollar deposits throughout the banking system. These new reserves would create demand in the banking sector for the collateral the Federal Reserve had previously drained and so those assets could move from the Federal Reserve’s balance sheet back into the financial sector so that lending can begin and the interest earnings can return to the private sector. At the same time, the Fed’s balance sheet would no longer be an opaque chart of assets, but would be a public geodatabase displaying the movement of the money supply across America’s stressed and vulnerable communities. This clarity of communication is not only beneficial to households but to the animal spirits of Wall Street.

While this institutional adjustment sounds extreme, one must remember that in a matter of hours, days, and weeks the Federal Reserve created several facilities capable of executing auctions, asset purchases, and open market operations on an international scale in the trillions of dollars to save many of the financial institutions responsible for the crisis from insolvency. In a little over three years the total was \$29 trillion. There are twelve Federal Reserve districts each with their own community affairs office, already in place, that engage with their district's real estate and non-profit sectors. These relationships will require expansion, but activities are already taking place. The Kansas City Federal Reserve, for example, has a history of working with many real estate and community organizers to address workforce needs, develop a microloan program, and hosted a workforce event in September, 2013 in partnership with the Atlanta Federal Reserve (Federal Reserve 2012).

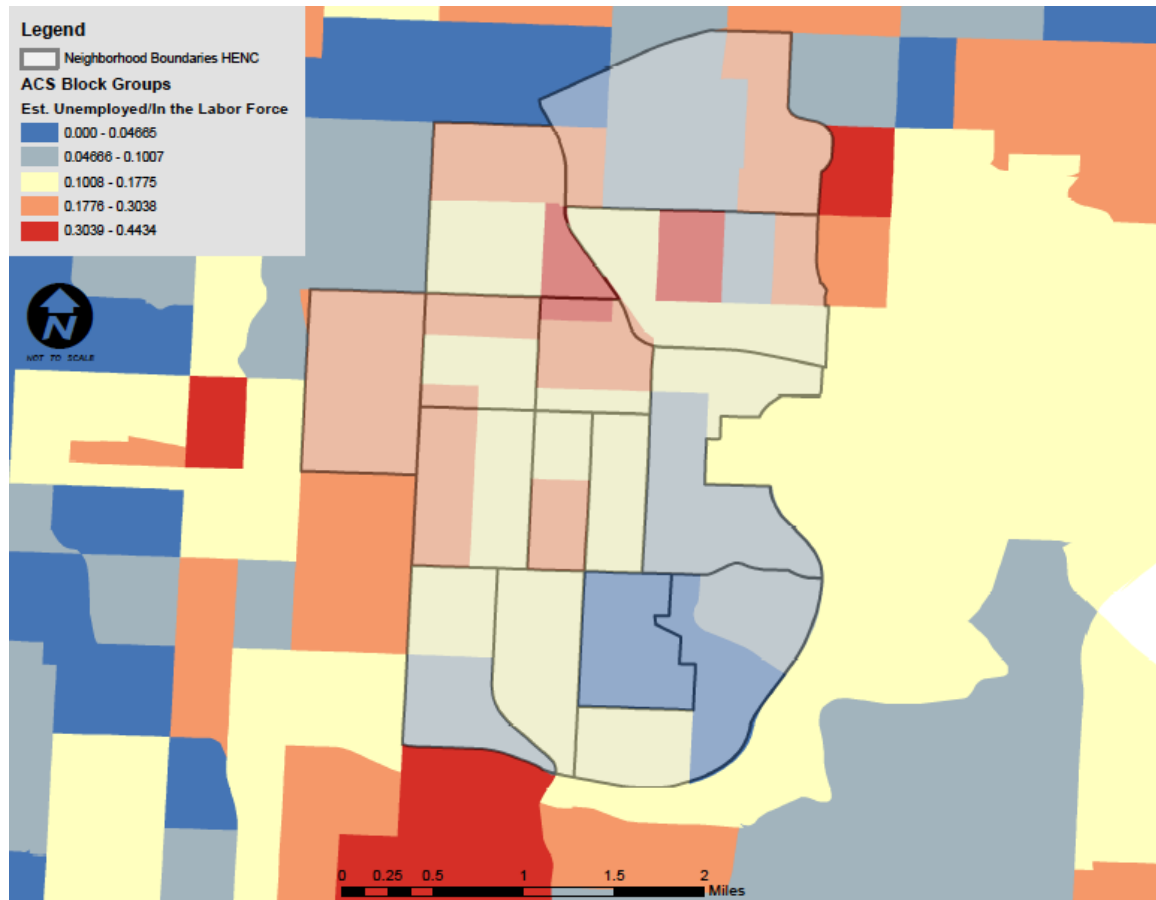
The NSRP is merely a suggestion for a social enterprise driven implementation of this monetary experiment to provide clear evidence to the American people of successes and failures that occur during the policy reorientation. As success is achieved opposition will subside. The general patterns of unemployment at the MSA level of geography in many U.S. cities are easily displayed. The use of a geographic information system (GIS) gives researchers tools to drill down to fine geographic resolutions for gaining a better understanding of the social and environmental challenges occurring in these locations. By looking at a multitude of geographic levels of aggregation, context specific labor issues and social problems can be addressed through liquidity provisioning. A simplified example of this process will be demonstrated using Kansas City as the unit of analysis. Figure 4 displays the block level aggregation of unemployment across Jackson County. This information provides potential targets for the implementation of this policy.

Figure 4: Block Group Unemployment Jackson County, Missouri



Sources: American Community Survey, U.S. Census Tigerline Files, Center for Economic Information, University of Missouri-Kansas City

Figure 5: Zoom of Unemployment to Historic East Neighborhood Coalition



Sources: American Community Survey, U.S. Census Tigerline Files, Center for Economic Information, University of Missouri-Kansas City

After analysis of population density and other demographic information, it is possible to zoom in on targets at granular levels of examination. From the neighborhood and parcel level, a particularly interesting variable to analyze for gaining an understanding of an urban space's economic geography are the land use codes. This variable helps to identify community assets and liabilities. A common liability that emerges as a spatial pattern in depressed urban areas is the prevalence of both commercial and residential vacancies. Based on population density and pattern of high unemployment in the urban core the analysis targets the Historic Eastside Neighborhoods Coalition (HENC) in Kansas City, Missouri in Figures 6, 7 and 8. In these maps, land use is the key variable utilized to analyze spaces for redevelopment and labor activities.

Figure 6: Parcel Level Geography HENC

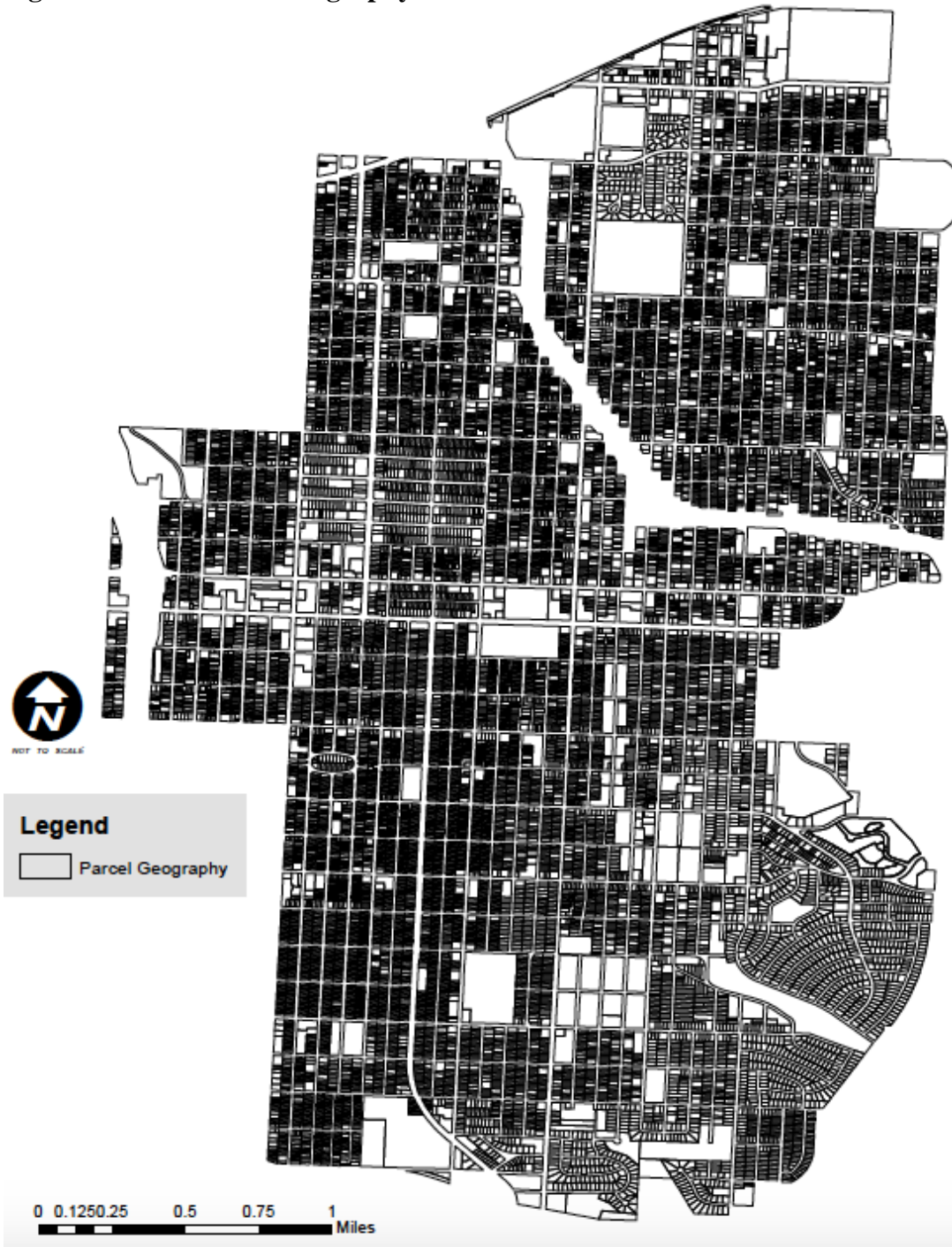


Figure 7: Parcel Level Geography Community Assets

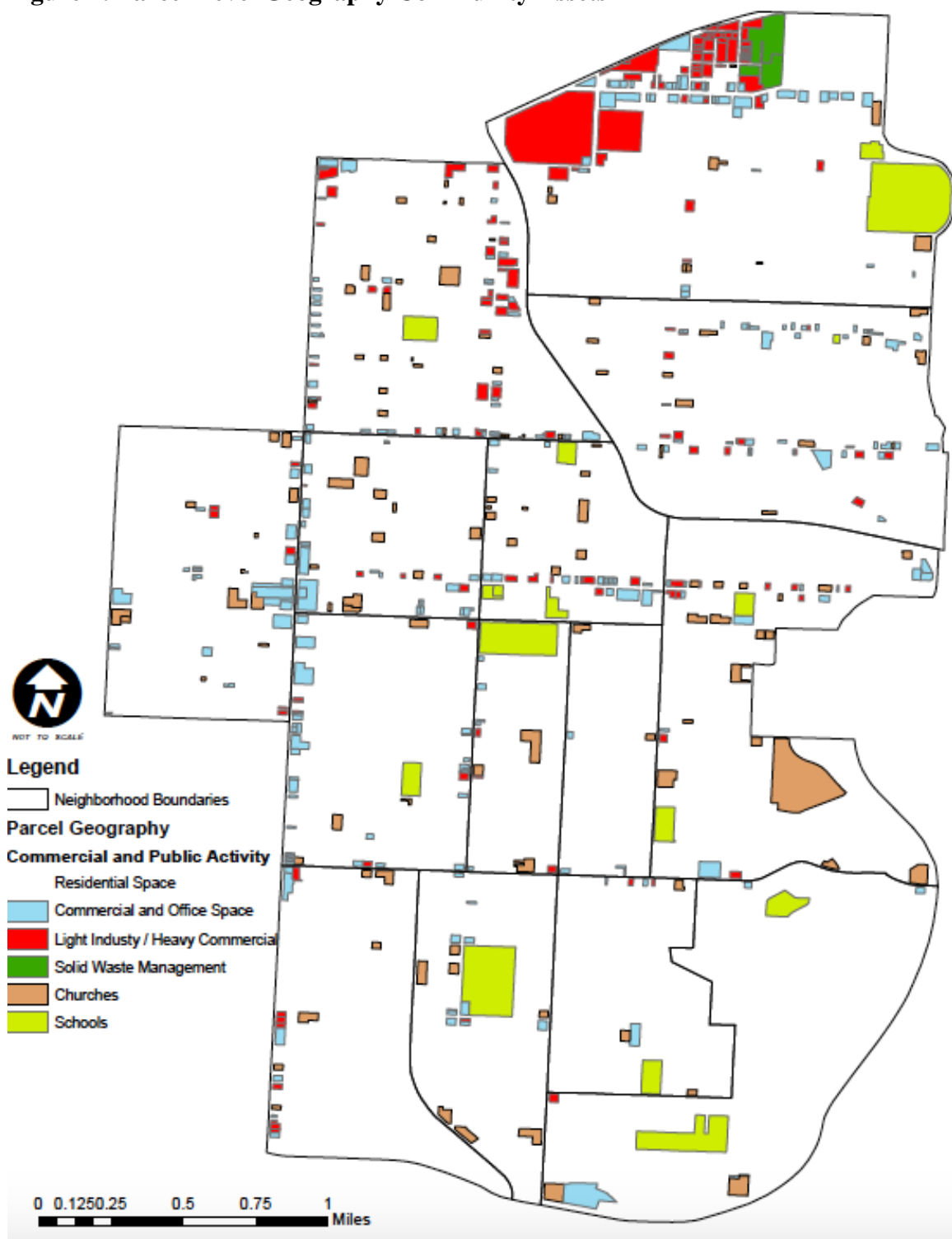
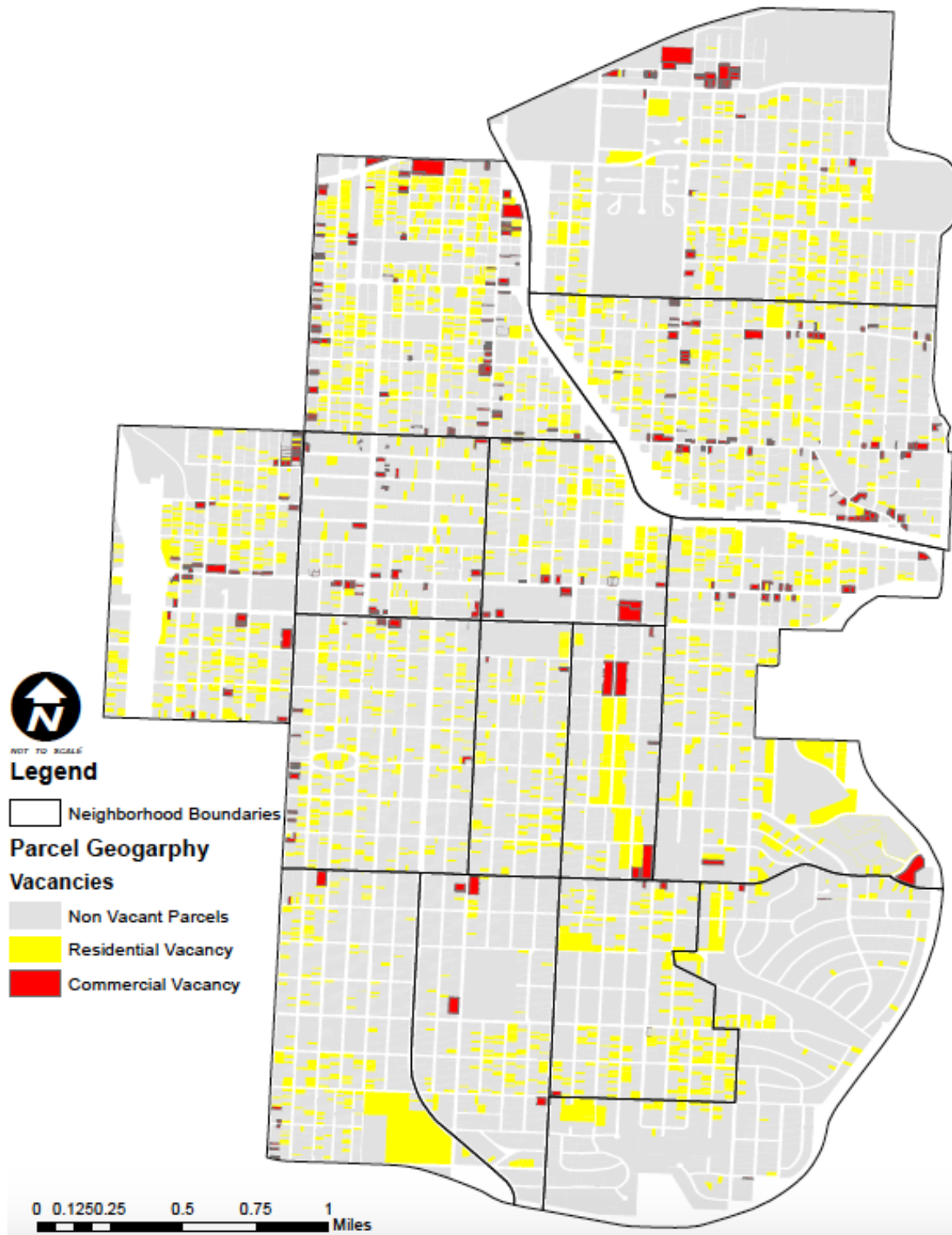


Figure 8: Parcel Level of Geography Vacant Residential and Commercial Spaces



The granular resolution of the parcel geography equips central bank economists with a powerful tool for analyzing the existing community assets and liabilities. Schools, churches, commercial activity versus vacancies and infrastructural decay can be assessed and labor distributed in a maintenance capacity or towards efforts to support neighborhood initiatives. Neighborhood and community organizations, such as the HENC, must be consulted to add the qualitative aspect of the analysis. In this case, an environment dominated by vacancy is not likely to attract investments from traditional lines of financing as many related social and environmental problems emerge such as crime, poor healthcare service, closed school buildings, and food deserts. As such, each community needs to apply grass roots, community organized strategies to create and enhance relationships with Federal Reserve Regional banks. These relationships insure that labor power is being directed where it is needed most. Applied properly, there are tremendous growth opportunities in social investment. It is not enough to simply display the growth of the balance sheet and its changing composition to effectively communicate to the American people that the program is operating properly. To adhere to its commitment to transparency and activism, under NMC, a critical component of the policy will be the development of publically available data resources that provides thematic maps displaying the types of labor power and the locations where liquidity is being provided.

Unlike the current QE policy communications that are, for the most part, only interpreted by central bankers and members of the financial industry, these communications are to be distributed in a format that is easily understood by a significant portion of the population. Much like a weather map, Americans need tools to assess the liquidity flowing into their communities and gather information about how the winds of economic change are bringing life to urban and rural spaces across the country. These tools represent a dramatic advance in the central bank's ability to directly stimulate employment and productivity without waiting for the uncertainty of interest rate changes to influence the animal spirits of the market. The benefit of the bluntness of the interest rate policy tool is that it provides the Federal Reserve with the appearance that it is not choosing winners and losers in the economy. However, the actions taken during stage two (in particular) identifying "key markets" and individual balance sheets of specific financial institutions clearly exposed that winners and losers were and are routinely selected. Reorienting this policy towards the labor market, is a more broad based approach that supports arguably the most important key market in a modern economy and all economies populated by human beings, the labor market.

For a long time, discussions regarding full employment policy have been centered around fiscal policy, but given the changing structure of our economy and technological advancement, this discussion adds monetary policy's nonstandard operations to the discourse. By announcing labor as the new buffer stock, the Federal Reserve sets the monopoly money production power of the United States free for a new and diverse client base, one that resides outside of Wall Street. The full freedoms available to the United States and its citizens are not being realized as our policy makers refuse to explore alternative policy proposals that violate the institutional constraints constructed from a misinformed ideology of money. It is time for a technological advance in money policy.

Much like going off the gold standard ‘freed up the money supply’ (Friedman 2004, 95) the Federal Reserve needs to be “going on” labor power to free up the money supply and millions of Americans from unemployment and poverty.

IV. Conclusion

This paper demonstrates the damaging effects that the continued use of a barter economy framework generates economically and politically at the national, neighborhood and community levels of geography. At the same time, it displays the freedom exercised by the Federal Reserve Bank of the United States through nonstandard monetary policy actions. It shows money is not a scarce commodity. By presenting an argument as to how these policy tools can be reorganized to benefit workers directly, it is hoped that an expanded conversation in the economics community and beyond about the power of money as a social technology will move the field and society forward in a productive manner. GIS is also shown to provide a useful tool for “grounding” economic policies and communicating the areas of need as well as the progress possible through alternative policy actions.

These policy changes have been suggested to change the structure of our monetary system, the financial industry, and the economy as a whole. The unnecessary uncertainty created by the fiscal authority holding payments such as disability hostage for political gain must be removed. Giving citizens the freedom to monetize their own labor power is emancipatory and provides new democratic power for determining how Americans want their neighborhood and community to operate. Furthermore, monetary policy would now have the ability to provide “steady but moderate growth in the quantity of money... [which] would make a major contribution to the avoidance of either inflation or deflation... [and] would provide a monetary climate favorable to the effective operation of those basic forces of enterprise, ingenuity, invention, hard work, and thrift that are the true springs of economic growth” (Friedman 1968, 17). Thus, to complete the metaphor, the utilization of a ‘delicate imagination’ as called for by Alfred Marshall, to reorient monetary policy delivers the needed liquidity springs to the thirsty roots of family life allowing Americans to experience the true freedoms available to them as citizens of a nation with sovereign currency issuing authority.

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