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Why not Sovereign Money AND Job Guarantee?

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Abstract
The sovereign money system, a radical proposal for the de-privatization of money creation, has been put forward as an alternative to the inherently unstable current monetary that is the root cause of credit and debt bubbles and the consequent recessions. This article argues that a job guarantee program would help policy makers in a sovereign money system determine how much money to create and where to supply it in a counter-cyclical, disciplined, targeted, less inflationary, and less discretionary manner. The core claim of this article is that the combination of a sovereign money system with a job guarantee program supports the earned income of consumers (especially, those most in need), and thus their spending and welfare, without causing concern about issues related to public debt accumulation. In addition, it not only mitigates against excessive private debt,—considered one of the major causes of financial crisis—but also provides "loose" full employment and necessary public goods and services.

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1. Introduction

The vast majority of money creation is currently carried out by the private sector, causing and/or exacerbating a host of issues that stretch from an overshooting money supply, the asset price bubble, and the ensuing financial crises to environmental degradation. The current macroeconomic policy framework and financial regulation does not seem to prevent or ameliorate the problem of deeper and more frequent recessions driven by the financial cycle. In response, the sovereign money system, a radical proposal for the de-privatization of money creation, has been gaining more traction in the academic and policy-making arenas. The proposal of a sovereign money system rests on the argument that the inherently unstable current monetary system is the root cause of credit and debt bubbles. Contributions in support of a sovereign money system include Werner (2012), Anderson and Morrison (2014), Yamaguchi (2014), Mellor (2016), Zarlenga (2014), Striner (2015), Huber and Robertson (2000) and the various publications by the research organization Positive Money.[1]

[1] These proposals have been presented under various labels, such as chartal money (derived from chartalism), state money (Werner, 2012), constitutional money (Anderson and Morrison, 2014), public money (Yamaguchi, 2014; Mellor, 2016), US money, meaning US Treasury money, as distinct from corporate Federal Reserve money (Zarlenga, 2014), pure money (Striner, 2015) and plain money (Huber

While sovereign money provides a new alternative monetary system to the current bank credit-driven economy, the proposals do not identify which specific program(s), through which new money is injected, could produce the best macroeconomic results. This article discusses how a job guarantee program can help policy makers in a sovereign money system determine how much money to create and where to supply it in a counter-cyclical, disciplined, targeted, less inflationary, and less discretionary manner. The core claim of this article is that the combination of a sovereign money system with a job guarantee program would support the earned income of consumers *(especially, those most in need)*, and thus their spending and welfare, without causing concern about issues related to public debt accumulation. In addition, it would not only help mitigate against excessive private debt—considered one of the causes of the 2007-2008 global financial crisis—but also provide full-employment and necessary public goods and services that are not produced by the profit-seeking private sector.

The paper is organized as follows: first, we briefly explain the sovereign money system as a viable way to address the problems of the current monetary system; in section three, we present the problems that could arise if the sovereign money system were adopted; in section four, we discuss what a job guarantee system is and how it could address the issues put forward in the previous section; in section five, we argue that a job guarantee program is superior in benefits to both universal basic income and demand management policies, both of which are commonly presented as supplements to the sovereign money initiative; in section six, we address the remaining arguments against the viability of a job guarantee system; section seven sets out our conclusions.

2. Sovereign Money System

The sovereign money system has been proposed to address the problems that fundamentally stem from excessive bank money creation. In the current system, most of the money circulating in the USA and many other developed economies is created by private commercial banks. Banks create money when they grant a loan, and the amount generated is precisely equivalent to the value of the loan. Banks do not need savers' deposits or reserves for the lending process, but simply credit (issue) their clients' accounts at the banks (their liabilities).[2] These newly-created bank deposits (credit) should be considered money because they are universally accepted within national borders, supported by the state and thus free of credit risk to some extent.[3] This form of money creation is the result of the evolution of the banking sector in a largely anti-regulatory environment that adheres to the belief in self-regulating markets, especially after the gold-dollar standard in the Bretton Woods era. Since then, private banks have taken a dominant role in money creation, while the central banks reacted and refinanced fractionally, thereby supporting the excessive creation of bank money (Huber, 2020). In such a

and Robertson, 2000). The term sovereign money (the Positive Money group and Huber) will be used in this paper because it best encapsulates the core idea.

[2] Banks need reserves for providing payment services to their clients but not for credit services. They first grant a loan and then use or look for reserves to provide payment services or to possess required reserves. Bank money creation is therefore not constrained by reserves or savers' deposits.

[3] Deposit insurance (the government guarantee on bank deposits) is currently capped at £75,000 per customer in the UK, €100,000 in the Eurozone and $250,000 in the USA. The government can enhance the liquidity of other monetary instruments by ensuring par convertibility into the national currency and par convertibility among instruments at the same level of the monetary hierarchy (Tymoigne, 2020).

system, a majority of the money supply is determined by the ability and willingness of profit-seeking banks to lend, and of households and firms to borrow, whereas the central bank has a limited and uncertain impact on the money supply.

The downside of the current system is that it entails a myriad of problematic economic, social and environmental consequences. These problems include, but are not limited to the following: procyclical and irresponsible credit creation by banks, which leads to inflation and asset bubble and bust cycles that cause recurrent panics and crises (Del Mar, 1895; Shaw, 1896; Zarlenga, 2002; Benes and Kumhof, 2012; Kindleberger and Aliber, 2015); an allocation of newly-created money towards non-productive and speculative uses, since commercial banks are profit-seeking entities unconcerned with the wider consequences of their decisions (Werner, 2012; Turner, 2015); and finally, the inexorable link between GDP growth and disproportionate increases in debt, which causes an arbitrary and inequitable distribution of wealth and environmental despoliation (Hickel, 2016). Such unrestrained creation of debt and money does not show any signs of being self-limiting, and it demonstrates the failure of attempts by monetary authorities to exert control over bank money creation and the increasing use of money substitutes.

These serious and damaging issues call for a change in the structure of the monetary and financial system, and, in response, the sovereign money system has been put forward as a radical way of preventing the financial crises inherent in the current system. The main proposal is that the power of money creation should be taken out of the hands of private commercial banks and placed solely into the hands of the public sector.[4] A sovereign money system can be defined summarily as the full nationalization of money and 100% reserve banking.[5] The central bank would be the only economic entity endowed with the power of money creation. It would determine the proper timing and quantity of money to be injected into the economy, based on monetary policy goals set by the legislative body (i.e., the US Congress or the British Parliament). The treasury would determine where and how this money would make its way into the real economy. The treasury would usually have to decide to whom this money would be allocated and inform the central bank of this in advance so that the latter can make a better decision on the amount of money needed based on an estimation of its likely impact on aggregate demand.[6] The central bank, with the treasury's help, would ensure that sufficient

[4] A sovereign money system is, in this sense, a monetary reform rather than a financial reform or policy (or fiscal) reform. This monetary reform is not a one-size-fits-all solution to a variety of economic issues, but makes reform measures in banking, financial market, policy more effective, much leaner and less bureaucratic under a stable well-managed monetary system than they currently are (Huber, 2017).

[5] Huber (2014) states that a sovereign money system is sometimes mistakenly viewed as a Chicago plan with 100% reserve banking (e.g. Soddy, 1934; Fisher, 1935; Benes and Kumhof, 2012). Although both approaches share the same goal of bringing money creation under public control, the full reserve system is a double-circuit system in which demand deposits (bank money) circulate in the non-bank private sector and reserves (central bank money) are used among banks (account holders at the central bank), whereas the sovereign money system is a single circuit system on the basis of sovereign money only, issued by the central bank. It should also be noted that a sovereign money system nationalizes money, not banking.

[6] The central bank and the treasury are politically independent in the sense that the former has independence of tools (sovereign money creation) and goals (inflation, etc.) and the latter has no control over when and how much money is created, that is, the sovereign money system separates the monetary power of the central bank from the fiscal power of the treasury (Huber, 2017). However, the treasury and the central bank must work extensively together for monetary and fiscal operations to work properly in order to achieve price stability. The central bank, for example, must take the treasury's preferred methods of distributing money into account in order to decide the optimal amount of any new money injection.

sovereign money is created and circulated in the real economy for the financing needed for the economy's capital development, thus preventing the tendency towards the outgrowth of non-GDP finance over GDP-contributing activities.[7] This is because when money is used for anything that increases the productive capacity of the economy it maintains its economic value, or the purchasing power, which is, in turn, determined by the overall productivity of the economy with a given amount of money.

In the sovereign money system, commercial banks would be purely financial intermediaries without any power to create money. They would be able to lend money already created (or temporarily lent at an interest rate) by the central bank and/or deposited (or funded) by their clients (creditors).[8] In this way, the central bank would restrain the banks' ability to create additional money. Since banks are 100% backed by reserves, they do not need publicly-funded deposit insurance, which automatically prevents a bank run. In addition, the deposit-taking/payment services would be completely separate from investment and merchant banking services, and hence there could be no problem of using customers deposits for speculation or "bailing out" speculative activities to save the payment system. This would minimize lender-of-last-resort facility support and its associated moral hazard, and further encourage prudent lending practices. The proposal for a sovereign money system fundamentally rests on the argument that financial instability caused by excessive bank money growth can be avoided by giving the central bank full, direct control of (not merely influence over) money supply and the sufficient and appropriate allocation of money for public purposes.

Under this new monetary system, the central bank would agree to hold a portion of government debt permanently in the treasury account. However, in issuing perpetual zero-coupon bonds (also known as, non-interest-bearing credit with unspecified maturity), the treasury would be creating liabilities that are unlike conventional government debt. These bonds would not incur any financial obligation on the part of the government and thus would remove the need for continuously refinancing public debt. There would be no need for bond insurance or even tax collections to finance government spending.[9] Newly-created sovereign money would be simply credited to the treasury account at the central bank and distributed into the economy through treasury spending.[10] In this way, the central bank would be allowed to contribute directly to funding the public budget.

[7] In the same spirit, Huber (2017, p. 167) explains ""Even though debt-free sovereign money is not in itself a promise to repay, it is a promise to be productive, and a promise to keep control of the money supply, excluding overextension as well as shortages, in correspondence with actual levels of economic output."

[8] Sovereign money does not appear as a liability of banks. When sovereign money is obtained by issuing debt, that debt is a liability, but the money obtained is an asset of the banks. Without such money-creating power, banks would still provide account management and payment services (transferring existing sovereign money into and out of accounts).

[9] Under the sovereign money system, outstanding government bonds disappear as they mature. Moreover, the purpose of tax would be: 1) to create a demand for sovereign money and 2) to adjust aggregate demand to a desired level, but not to fund government spending.

[10] Balance sheet operations for central bank money creation and treasury spending are found in van Lerven (2016, p.50). Other proponents of the sovereign money system suggest that new money on a central bank balance sheet should be treated as government equity not as a government debt, in the same way that treasury coins are currently treated (Benes and Kumhof, 2012; Mayer, 2013; Gudehus, 2015)

The Sovereign money system is designed to stimulate spending in the real economy by increasing the disposable income levels in the private sector without a corresponding increase in the balance of private debt or marketable, interest-bearing public debt. Sovereign money creation will always increase the net financial assets of the private sector (van Lerven, 2016). This implies that the frequency and depth of recessions that come as a result of excessive private debt could decrease. This function is imperative in the current economy that is heavily dependent on leverage for growth. Having less existing debt would create less need to resort to the kind of aggressive growth promotion measures that are implemented at the cost of the environment. Moreover, the need for an austerity policy associated with the accumulation of public debt would diminish. This is why some call sovereign money "debt-free" money inasmuch as it is issued without a matching sale of government bonds.[11] Likewise, sovereign-money-funded government expenditure is not defined as deficit spending since the government is not indebted, and thus not liable, to anyone. Attempts to run a balanced (or even surplus) budget to decrease otherwise escalating public debt would not be necessary. The system would thus avoid potential issues related to fiscal deterioration, such as crowding out, Ricardian equivalence effects, and the heightened risks associated with future interest rates, sovereign default, and monetization-driven depreciation and inflation (Kim, 2020). In a nutshell, sovereign money is expected to reduce private and public debt in the economy and minimize their potential adverse impacts on the economy.

Under a sovereign money system, once the central bank decides the adequate amount of new money to be created, the treasury would distribute it through following four channels, according to Dyson, Hodgson, and van Lerven (2016, p.4) from the Positive Money organisation in the UK:

1. *Citizen's Dividends (equal grants paid to every citizen)*
2. *Increased government spending*
3. *Reduced taxes (through tax reductions or rebates, using the newly-created money to compensate the government for the lower tax revenue)*
4. *Indirectly financing lending to businesses (via banks and non-bank lenders)*

To accommodate the needs of the real economy in the sovereign money system, Dyson, Hodgson, and Jackson (2015) propose a hybrid system in which central bank officials, with their best judgement and discretion, determine the amount of most of the money supply based on its goals, such as reaching a specific inflation rate according to the "target-based" regime, while a smaller amount would be injected "on-demand" to finance lending to businesses outside the FIRE sector (finance, insurance, real estate) to add responsiveness and flexibility to sovereign money creation. Although such a scheme seems better than the current monetary system in which overshooting and undershooting of the money supply frequently has destabilizing impacts on the financial system and the real economy, it is not without potential problems, as will be discussed in the next section.

[11] Wray (2019) considers this an "oxymoron" since non-interest-bearing, non-marketable sovereign money is still recorded on the liability side of the government. He claims that money is always debt and sovereign money is fundamentally debt issued by the government with different characteristics.

3. Potential Problems in the Sovereign Money System

One of the critical features of the sovereign money system is its counter-cyclicality. In a recession, demand stimulus through increased sovereign money supply is required to combat the deflationary environment caused by a decline in private sector spending (borrowing) and in the velocity of money. On the other hand, when private sector spending increases, as is characteristic of a boom, money creation must slow down (or even money destruction may be needed). The issue is, while it could operate countercyclically, how could it ensure that the money creation is appropriately modest and disciplined rather than inflationary, and at the same time sufficient rather than deflationary. In the same spirit, Adair Turner (2015), in his book *Between Debt and the Devil: Money, Credit, and Fixing Global Finance*, recognizes that there is no technical limit to such "overt money finance"—a term he uses as somewhat congruent with sovereign money creation—and, as such, there would be great temptation for excessive use. Consequently, he calls for the design of institutional mechanisms to guide the disciplined use of sovereign money when needed.

Another potential problem with money creation in the sovereign money system is one of speed. While sovereign money creation should be countercyclical, it would not do so automatically. Even if policy makers have perfect information and immediately respond to an ever-changing economy, there is a time lag between when policy makers identify problems, such as deflationary pressures, and when an implemented policy (injection of more sovereign money) has real effects on the economy, given that it takes 12 months for a change in aggregate demand to have an impact on inflation (Bank of England, 1999a and Dow, 2004). Moreover, negotiation or disagreement as to optimal policy within the central bank and the treasury in a given circumstance could add more time to the implementation of the policy. As a consequence, it could be difficult for the public sector, with lagging policy response and impact, to address in a timely manner the pressing issues in an inflationary or deflationary environment. Even if the money supply could be made more responsive and flexible through treasury lending programs, such money creation is fundamentally endogenous with no capacity to boost (dampen) a struggling (overheating) economy. For instance, in a balance sheet recession, where households and businesses are focused on de-leveraging, and thus are not incentivized by a lower interest rate to borrow more, this lending program would be ineffective or could even aggravate the situation (Koo, 2011). This implies that the primary method of sovereign money creation (depletion) by central bank officials is more needed, especially in critical times.

Furthermore, there are three layers of uncertainty associated with the central bank's decision as to the appropriate amount of sovereign money to be injected into the economy: 1) the economy is fundamentally uncertain and unpredictable, unlike the ergodic world that is assumed in neoclassical economics (Davidson, 1991; Lawson, 1988); 2) there is no correct model of the economy for the central bank to use as the basis for policy making (Bank of England, 1999b); 3) real time macroeconomic data are not available or, if any are available, they are the product of much revision and guesswork, which provides uncertainty about the assessment of the current economy and the impact of previous policy measures (Orphanides and van Norden, 2002). Due to these uncertainties, policy makers have to use a macroeconomic model and existing data that attempt to reflect the real economy as a guide rather than as a rule. The implication is that policy decisions and their impacts are determined by policy makers' subjective interpretation and judgement of data, their preferred economic

model, and the response of the private sector to a new policy. This degree of discretion leaves the system vulnerable to policy mistakes and failures.[12]

One of the possible policy mistakes in a sovereign money system could be that the central bank/treasury's contribution to aggregate demand outpaces the productive capacity of the economy. Government counter-cyclical spending stabilizes inflation by setting a floor and a ceiling on aggregate demand and profits, but pump-priming of effective demand can induce ever higher profits and inflation (Minsky, 1975; Forstater, 2000). Since World War II, the reactions to recessions have continuously increased the relative size of the government and its primary spending on transfer payments, defense, and interest on debt, which are by nature non-targeted, unproductive, and thus inflationary.[13] In an economic contraction, a discretionary "stop-go" stimulus policy can magnify an inflationary process, especially if coupled with supply shocks, such as drought, war, and oil price spikes. Minsky (2008) diagnosed the high inflation period of the 70s and contended that inflation was initially triggered by oil shocks and strong unions, but that what prolonged it was the expansionary fiscal policy. In short, a low tolerance of the central bank/government for unemployment and its support for unproductive consumption are conducive to an upward bias regarding prices. It is noted that sovereign money creation in general Keynesian expansionary policy has a strong tendency to fuel inflation.

Another possible critical flaw in the sovereign money system, as in other forms of government expenditures, must also be addressed: political abuse. Stimulus programs designed under a downturn are typically less effective since policymakers tend to pursue political more than economic objectives when the pressure on politicians to do something mounts. As Rajan (2010, p.114) states, "*policy made in the midst of a downturn is often hurried, opportunistic, and poorly thought out. Although deep crises offer an opportunity for serious rethinking and transformation, if new policies have to be devised in response to every downturn, the result is inappropriate, unpredictable, and excessive policy making*."[14] In the name of stimulus to boost the economy, politicians may come up with new spending, tax, and lending programs, some of which may be intended to serve powerful interest groups and may not benefit the economy in the long run. Even apart from cronyism, partisan behavior would be a factor in policy making. With a limited amount of newly-produced sovereign money, the government in power is more likely to finance projects supported by their own political party. A government decision on how to spend the money and in which form would inevitably be political to some degree.

A further concern is that the discretionary nature of government spending can make households and businesses face tremendous anxiety about the possibility of a program being phased out. This uncertainty creates the very anxiety that the program was designed to avert, and minimizes the stimulative effects of the program due to increased hoarding of sovereign money (a decrease in marginal propensity to consume). The absence of universal health care or

[12] Consider how much policy makers failed in many aspects during the 2007-2008 global financial crisis and the following recession: 1) they had not predicted the crisis; 2) they were not able to correctly assess the depth and severity of the crisis; 3) their policies did not result in the desired outcomes as evidenced by the many ad hoc alternative policies that had to be added to the conventional toolkit.

[13] Minsky (2008) argues that the only time when such programs are non-inflationary is during financial crises and debt deflation, when households, firms and banks all start to deleverage.

[14] During the Covid-19 pandemic, the long lasting negotiations in the US about the second stimulus package, despite the struggling economy, exemplifies how politicians may care more about upcoming elections than economic objectives.

affordable private medical insurance, as in the United States, compounds the suffering of the unemployed and the poor. Therefore, expanding a safety net program seems more advantageous than a discretionary one.

After considering the lagging, uncertain, inflationary, policy mistake-prone, and discretionary nature of sovereign money creation with its unpredictable impacts, and liability to indiscipline and political abuse, it is hard to be optimistic about this new system. Although issues regarding the creation and allocation of state-created money are open to debate, this paper contends that a job guarantee program is a beneficial form of government spending that addresses the issues discussed in this section, and is, moreover, a more wide-rangingly effective deployment than many of the suggested alternative complements to the sovereign money system.

4. Job Guarantee Program (JG)

A job guarantee program would eliminate involuntary unemployment.[15] This program would offer a job to those who need one but cannot otherwise find work in the private sector. It would be financed by the federal government and administered locally (Wray, 1998; Mitchell and Muysken, 2008). This is because the federal government (the central bank) can create money and thus has the capability to fund the program effectively, while local governments are in a better position to assess the needs of their communities. Individuals employed in the initiative would work on a variety of projects to benefit their localities, such as environmental issues, public education, community projects, and support care for those in need, such as the elderly, disabled, sick, and children. These jobs would be specifically orchestrated so as not to compete explicitly with the private sector, minimizing crowding out. Instead, they would be designed to help the currently unemployed acquire jobs in the private sector by solving the problem of the stigma and lack of skills associated with long term unemployment.[16] For some, the job guarantee program are transitional with the expectation that public sector workers hired under the guarantee necessarily will return to the private sector for employment and should be trained to do so. Although a training component is an important aspect of the program, the objective should be to ensure that employees are highly productive in the tasks they perform under the program.

Individuals employed by the program would be paid minimum wage, along with benefits.[17] Accordingly, it would provide a base level of acceptable and legal employee treatment and pay, as workers who were illegally receiving less pay and/or worse treatment in their current jobs would transfer to the jobs provided by the state. Thus, it would not only address unemployment, but also eliminate low wage, low benefit employment from the economy at large by compelling

[15] The job guarantee program has a long history, but a modern form was developed by Minsky (1965), Harvey (1989, 2000), Wray (1998), Forstater (2003), and Mitchell and Muysken (2008), among others.

[16] The administrative foundation is already in place for such a program in many countries and the job guarantee program would simply build upon it. There is, for example, presently a network of unemployment offices in the US, known as the American Job Centers. Under the job guarantee program, they could act as employment offices through which the program could be administered (Tcherneva, 2020).

[17] Many JG proponents claim 15 dollars an hour should be the minimum wage in the US, but this paper not make such a claim. The hourly wage, for instance, could depend on a country's growth strategy, such as export-led vs. consumption-led growth.

private employers to match the minimum compensation package offered under the JG.[18] Furthermore, it would operate as a permanent employment safety net providing easy access to employment for workers in the labor force (Ormerod, 1994), since anyone who temporarily lost a job could be immediately hired in these programs without worrying about becoming unemployed again. The program ensures that even the lowest skilled, least experienced, most disadvantaged workers are able to find employment as well as skilled and experienced ones, each put into projects that suit their skills and qualifications from technical to intellectual activities. In this way, the nation would always remain at "loose" full employment (Mitchell and Wray, 2005).[19]

In addition to ensuring that every willing and able worker in the economy is employed, a job guarantee program would be self-adjusting by expanding in recessions and contracting in booms, in both cases stabilizing and stimulating the economy. This automatic component is a critical feature and one that separates it from other traditional discretionary stimulus proposals. Theoretically, sovereign money would have to be provided in correspondence to the economy's real growth potential and related finance (Dyson, Hodgson, and van Lerven, 2016). This means that central banks would have to respond to the current and forecasted GDP growth as a key indicator among others (despite its shortcomings, as mentioned in the previous section). A job guarantee program can help minimize the discretionary portion of the overall amount of sovereign money to be created, and thus minimize the difficulties in determining the exact optimum amount as well as the aforementioned problems. Instead of applying macroeconomic indicators that are uncertain and lagging by nature to imperfect models and producing policy that may lead to unexpected behavior by economic agents, a job guarantee program would respond directly to a key variable (employment) that determines the private sector's ability to spend. In this way, it would address the root cause (income) before symptoms (decline in aggregate spending or deflation) begin to appear. A job guarantee program would prevent a recession, not just act as a cure as in the Great Depression (Tcherneva, 2020). Thus, the program is both timely and efficient.

Furthermore, the program works as a tool for fiscal discipline. It automatically expands to the extent needed to ensure full employment in a recession. It sets a standard for a minimum level of sovereign money creation and can channel its spending where it is most needed, i.e., directly to the unemployed, by offering a job and earned income to anyone who needs it. Total income will go down as workers who flow into the program are most likely to earn less, but the program will nevertheless sustain their basic spending, thereby preventing further decline in GDP and the general price level. Of course, the central bank can and should create more money than just what is required to operate a job guarantee program, but the program still works as a useful benchmark as to an optimal amount of new money creation without an economic or political dispute. On the other hand, the program will shrink as more workers move to the private sector for higher pay during an economic expansion, which, in turn, necessarily slows down sovereign money creation. In such an inflationary environment, a decline in other forms of discretionary

[18] Even though the government would set fixed wages, market forces would determine the size of the job guarantee program (the ratio of JG employment to total employment) as the program defensively responds to the private sector.

[19] Some skilled workers who become unemployed may prefer to undertake full-time job searching rather than enrol in a job guarantee program as they usually have more savings or receive more generous redundancy payments. The relatively low pay will, in addition, disincentivize those workers from taking a job in the program. Therefore, there is no reason for the program to completely get rid of frictional unemployment.

spending and lending or an increase in taxes may also be necessary. A decline in the job guarantee program, however, can itself act a guide for a more disciplined use of sovereign money. This mechanism can also mitigate against policy mistakes, political abuse, and the uncertain and unpredictable nature of sovereign money creation. Additionally, unlike welfare programs that fade out in a recovery period, the job guarantee program would be a permanent employment safety net, and so make workers feel safer (because of guaranteed job opportunities) and healthier (because of health insurance made accessible by a job).

Similarly, a job guarantee program with a fixed wage provides an in-built inflation control device. In the current system, total income fluctuates by the lost (gained) income of the newly unemployed (employed) in a recession (expansion), whereas total income in a system supported by a job guarantee program varies only by the decreased (increased) total income of workers transferring jobs between the private sector with higher wages and the job guarantee program with minimum wage. Since this compositional shift in employment stabilizes total income, it would dampen demand-driven inflation and deflation. In addition, a job guarantee program would help to reduce cost-push inflation and deflation by stabilizing the price of labor (Wray, 1998; Mitchell and Muysken, 2008). This approach is contrasted with a Non-Accelerating Inflation Rate of Unemployment (NAIRU) regime in which price stability is prioritized over employment because an optimal level of the latter is believed to be achievable only after the former is established. While the NAIRU was somewhat effective in decreasing the rate of inflation in the 80s, it did so at the expense of many individuals who were forced to participate in an anti-inflationary policy that left them unemployed. Moreover, this policy has also been less effective over time (Mitchell & Muysken, 2008), leading to the dismantling of the theoretical and empirical relationship between unemployment and inflation (Arestis and Sawyer, 2003; Borio, 2017; Gordon, 2018; Solow, 2018). The Fed Chairman Powell admitted under oath that the perceived relationship no longer held, especially after the 1990–91 recession (Federal Reserve, 2019).[20] Since the method of curbing demand-led inflation by using unemployment as a tool might no longer be useful, a job guarantee program instead is a better alternative strategy for achieving price stability without incurring mass unemployment by minimizing the variance in total income and stabilizing the price of labor.

This initiative has support from across the political spectrum. The issue of unemployment resonates with the vast majority of people and therefore a job guarantee program has received overwhelming bi-partisan support. Over 70% of voters support such a policy, according to a Hill-HarrisX poll (The Hill, 2019). Civis Analytics carried out a poll that was deliberately framed in a partisan way and found that 52% of voters still supported it. David Shore, a senior data scientist involved in the project, declared it “one of the most popular issues we’ve ever polled” (McElwee et al., 2018). This strong bi-partisan support makes the program a favorable allocation of sovereign money. In addition, the program addresses the significant problem of lobbying. For example, in a scenario in which the mechanism of government fiscal policy is decreasing taxes, the paramount question is for whom will taxes be lowered. The answer to this particular question is one that lobbying could exert an enormous amount of influence over. Corporations would have an enormous incentive to take whatever actions were necessary to

[20] For instance, production recovered within three quarters in 1991 but it took 23 months from the trough of the recession to recover the jobs lost in the 1991 recession. Regarding the 2001 recession, even though output recovered in just one quarter in 2001, it took 38 months after the trough of the 2001 recession for all the lost jobs to be restored. Similarly, the 2007-2009 recession ended in June 2009 as the economy began growing again, but the unemployment rate did not recover to the pre-crisis level until late 2015 (Paul et al., 2019).

receive favorable tax breaks. By contrast, a job guarantee program is largely apolitical and immune to lobbying. Its local administration would ensure that the projects taken on would actually be beneficial for the community and lobbyists would be unable to influence those decisions on a wide scale. In essence, the job guarantee program ensures that sovereign money would be spent in the interest of the community not that of special interest groups.

A job guarantee program would effectively address two problems that plague the current economic system: unemployment and working poverty, along with a multitude of secondary negative effects. A solution is desperately needed in an economy where the inverse relationship between GDP growth and unemployment has weakened because of technological advancement. A job guarantee program is an unparalleled proposal due to its contribution to full employment, timeliness, less discretionary and political nature, less-inflationary effect, and in-built fiscal discipline (proxy)—for minimum money creation (to augment decreasing income) in a downturn and maximum (to rein in increasing income) in an upswing. Such a mandatory spending program does not imply distrust in a central bank's ability to provide an optimum amount of money and to pursue a flexible monetary policy in a complex system like the modern economy. There are, however, dangers associated with the discretionary nature of money creation, as discussed in the previous section, so minimizing these through a job guarantee program would maximize the benefits of the sovereign money system. Finally, there will be shock effect on investment and credit activity when the changeover is made from the present system to the sovereign money system. The simultaneous adoption of a job guarantee can play a role as the cushion to protect the population at large from the effects of the downturn induced by the system change.

5. Job Guarantee and Other Fiscal Programs

5.1. Universal Basic Income

Universal basic income (also known as Citizen's Dividends, but hereafter UBI) refers to the federal government's provision of an equal amount of money to every citizen regardless of income, and is often put forward as a popular policy in a sovereign money system. Geoff Crocker (2020), among others, claims that technology is the driver of economic structural change and that production increasingly requires a more limited number of highly skilled staff and far fewer low-skilled employees. He notes that this trend inevitably reduces the wage component of output, makes earned income deficient in purchasing the production of the economy. He suggests that the only solution is to pay UBI, to augment earned income in order to sustain aggregate demand. In this section, we will contrast UBI with the job guarantee program to demonstrate that the former is a poor complement to sovereign money creation.

UBI would increase aggregate demand without an increase in aggregate supply, which would give rise to inflation. First, the policy has a negative incentive effect on labor supply because individuals are more likely to leave jobs with low wages or bad working conditions after the inception of such a program. Second, consumption would go up through wealth effects and the reduction of uncertainty (a decline in liquidity preference). Such a combination of decreased aggregate supply coupled with increased aggregate demand would undoubtedly lead to inflation. The most important issue is whether low-income households could purchase essential goods and services, such as food, housing, transportation, healthcare, childcare, at affordable prices. Such inflationary impacts, however, would not improve the situation of the poor as much as is claimed by UBI proponents, since the excess aggregate demand, if not all of it, would be

inflated away. Any attempt to restore the purchasing power of the UBI would simply fuel more inflation. Conversely, a job guarantee program injects newly created money into the lagging sectors where resources and inputs lie idle, thereby increasing the supply of below-potential industries. In other words, sovereign money is directly targeted at those in the least tight labor market and less inflationary sectors. As supply (the production of goods and services) and demand (the creation of new money) increase broadly in tandem, inflation can be avoided to some degree. Additionally, the countercyclical size of the program can stabilize the general price level by stabilizing total income, as mentioned before, whereas UBI has no such mechanism.

UBI is clearly an ineffectual means of income redistribution. It is true that UBI offers income support for households' consumption, especially in face of the loss of income resulting from automation-driven reductions in the labor force. In this way, however, the government finances profits made by businesses and thus also unearned income such as pensions, dividends, and capital gains. In fact, UBI reinforces the current capital-favoring market structure and the dominant power of shareholders (Baranes, 2020). Wealthier households would use their cash subsidy mostly to purchase income generating assets, such as stocks and real estate, thereby feeding their GDP-disproportionate accumulation of financial assets. By contrast, the impoverished parts of the population would spend most of their income on basic necessities without any surplus for acquiring assets. Such a distributional bias, would not only further exacerbate wealth inequality, but also benefit capital revenue at the expense of earned income. On the other hand, the objective of the job guarantee program is to radically restructure the system so that the issue of income inequality is directly addressed. This would be achieved through a direct increase in the income of the lowest wage earners (who would leave jobs with lower pay than the program provides), as well as the unemployed. Galbraith (1998) finds that higher employment tends to be associated with increasing relative wages for the poor and reducing poverty. Thus, regionally-based job creation programs also eliminate inequality between geographical regions by helping communities in disadvantaged areas to maintain continuity of income and labour force attachment.

Unemployment has a vast array of negative social effects, including alcoholism, depression, anxiety, violent crime, and even suicide (Linn et al., 1985; Raphael and Winter-Ebmer, 2001; Nordt et al., 2015). UBI is based upon the conjecture that simply providing individuals with money will solve these problems. This is most probably an erroneous assumption, as evidenced by the fact that individuals' desire for jobs is not purely monetary (Beveridge, 1945; Darity and Goldsmith, 1996; Sen, 1999). From this insight, the conclusion can be drawn that all of the problems connected to unemployment will be better solved through a job guarantee program that addresses the issue directly rather than by monetary measures. In addition to contributing to mental and physical health, the programs also help workers maintain their work habit and skills.

UBI relies on the market to determine the composition of output. Job guarantee initiatives not only support aggregate demand by offering an income (to those who need one most), as UBI does, but also hire workers and allocate resources in order to provide socially and environmentally desirable goods and services (ones that are not considered commercially profitable in the private sector). New Deal work programs, for instance, showed to tackle the environmental issues of the time (Salmond, 1967). A sovereign money system fundamentally solves the affordability problem, but is still subject to real constraints. As long as there are real resources and labor available but not utilized by profit-seeking businesses, employing them to

support local community development and advance environmental sustainability would maximize social value creation.[21]

In summary, job guarantee programs are superior to UBI because the former would not trigger significant levels of inflation, but would alleviate inequality, solve a host of social and unemployment-related problems, and provide public goods and services that society needs. A job guarantee program would result in true economic growth and assist those most in need without the adverse effects that would be created by UBI.

5.2. Demand Management Policies

A job guarantee program is a more effective policy than the conventional "Keynesian" demand management policies, that have been widely adopted in the post-war period. These ineffective initiatives are trickle-down programs, wherein job creation is the last step in a complex transmission mechanism. Unsurprisingly, empirical data demonstrates that these top-down policies have positively affected firms with regards to growth and profits, but have failed to effectively improve employment (Tcherneva, 2013). Moreover, these programs actually exacerbate inequitable income distribution issues since they improve the conditions of highly-paid workers first. They do so under the assumption that these workers spend more, which eventually results in increased employment for the less-skilled workers. These policies have not been successful enough to make any meaningful change in aggregate employment, and furthermore, income growth has become more inequitably distributed with nearly every post-war expansion (Tcherneva, 2014).

In addition, the effectiveness of these programs will continue to diminish as time progresses on account of technological expansion. Some of the world's largest companies, including Apple and AT&T, are experiencing increasing market capitalizations coupled with a decreasing number of employees (West, 2018). Automated systems are now practical substitutes for less-skilled workers (West, 2015; RBC, 2014). Under the post-war Keynesian expansionary policies, there is no assurance that newly-created money will not simply go towards buying machines or asset markets as opposed to hiring people. This is not to say that this program has no positive impact on the economy. However, its effect on employment and the real economy, per dollar of government spending, is far smaller than the effect of a more direct program like the job guarantee. As with UBI, it is highly likely that benefits will accrue to asset holders. The job guarantee program, on the other hand, targets those who are most in need of income and the source of aggregate demand since it "hires off the bottom" (Michell and Wray, 2006). This kind of a bottom-up approach would prioritize increased employment over corporate profit, help to ameliorate income distribution problems, since it does not rely on faulty transmission mechanisms, and provide willing and able workers with jobs in a world where certain forms of human productivity are less and less in demand.

[21] "JG workers could participate in many community-based, socially beneficial activities that have intergenerational payoffs, including urban renewal projects, community and personal care, and environmental schemes such as reforestation, sand dune stabilisation, and river valley and erosion control." (Michell and Muysken, 2008, p. 242)

6. Remaining Issues for a Job Guarantee Program

If a job guarantee program is to be implemented, it must be done with precision and forethought. While this paper is strongly in favor of the initiative and considers it to be an extremely effective solution to a variety of problems, there are a few criticisms that warrant consideration. The concerns include the following: the potential disruption of private sector businesses, the possibility of job guarantee workers being stigmatized, and the inability of the program address structural unemployment.

It has been suggested that a job guarantee program would impair private enterprise (Gulker, 2018 among others). This is due to the fact that it could incentivize workers to exit the private sector, thus causing a labor shortage, and that it would inadvertently increase the minimum wage, which some believe would be harmful, particularly to small businesses. First of all, a certain degree of disruption is assumed under this policy. If businesses cannot remain viable without underpaying their workers, they are inefficient and will be replaced by more efficient businesses. The job guarantee program seeks to upgrade the wage and treatment standards of the labor market, and businesses that are unable to function in this new paradigm will become insolvent. The program does not intend to replace effective, equitable private sector businesses and, if properly carried out, it will not do so. Rather, the job guarantee program will increase aggregate demand on account of increased employment, benefiting firms considerably. A simulation carried out by the Levy Economics Institute found that such a program would actually increase private sector employment by 3 to 4 million jobs (Nersisyan and Wray, 2019). Analyses of the work programs implemented under the New Deal in the 1930s have found that they had no adverse influence on private sector employment (Bernanke, 1986; Wallis and Benjamin, 1981). Finally, the Fiscal Policy Institute (2004) found that states with high minimum wages are better for small businesses; to be specific, small businesses actually grow twice as fast in such an environment.

Another concern about this program is the possible stigmatization of workers, rendering them unable to move to private sector employment later (National Resources Planning Board 1942: 221; Salmond 1967; Jensen 1989). The job guarantee is unique in the sense that it has wide support across the political spectrum. This makes it far less likely to create any stigma, as compared to a highly politicized program like welfare. Moreover, the stigma around the workers involved in the program would undoubtedly be less than the stigma around unemployment, which is, of course, the alternative. A well planned, implemented, administered, and audited program would definitely improve the utilization and training of workers' skills and the productivity of the program. A statement from the National Resources Planning Board regarding this issue in the context of the New Deal programs explains that stigmatization was not a significant problem and it decreased over time:

> "Yet despite the fact that prejudice against the hiring of WPA workers is known to exist among some private employers, there appears to have been a distinct enhancement of the social status of the project worker. This change of attitude has been in no small measure due to an increased appreciation of the value of the work performed, which in turn has reflected a more mature experience of administration and a more careful planning of projects" (National Resources Planning Board, 1942, p. 250).

Finally, some opponents of the job guarantee program assert that it would not address unemployment brought about by structural changes (Sawyer, 2003; Seccareccia, 2004). Contrary to the critics, a job guarantee is the perfect initiative to solve structural unemployment in a dynamic economy, as the job guarantee program can promote training initiatives (see Mitchell, 1998). Although not all training and education tackle structural unemployment, they improve labor productivity by helping workers in the program attain and use work-related knowledge and skills through on-the-job training. Therefore, projects that job guarantee workers participate in should be designed with technological advancements in mind, so that when individuals are hired out of the program into the private sector they are equipped with relevant skills. It is the case, however, that most of the projects envisioned in a job guarantee program are deliberately labor-intensive and require very little capital equipment and training (Mitchell, 1998) in order to accommodate the least-skilled or a labor segment that experiences the highest unemployment. As such, the public sector can adopt more labor dependent forms of production, with social as well as macroeconomic concerns in mind, freeing up capital that private sector firms can then utilize.

The job guarantee program must be executed carefully. If it is done in such a manner, the benefits will far outweigh the costs. Through proper implementation, it will minimize the damage to private enterprise, serve as an effective stepping stone toward employment in the private sector without stigma, and it will tackle structural unemployment through training and education.

7. Conclusion

Through the course of this paper we have: 1) defined the sovereign money system and the job guarantee program, 2) outlined the ways in which both of these initiatives can solve many of the problems inherent in our current economic system, 3) demonstrated how the job guarantee program is a more effective form of policy than UBI and demand management under a sovereign money system, and 4) addressed possible criticisms of the program. In the evaluation of theoretical proposals, it is important not to lose sight of the real lives at stake and the fact that government policy can exert an enormous degree of influence over the everyday lives of each and every citizen. The paper firmly contends that, through the combination of the sovereign money system and a job guarantee program, the environmental, societal and economic maladies associated with both excessive bank lending and unemployment would be effectively addressed and even remedied. This view is far from illusory, but rather represents a concrete and pragmatic means of moving towards a better future for everyone.

Although there are many remaining issues to be addressed

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