

Modern monetary theory: a European perspective

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Abstract

This paper explains the basics of MMT and analyzes the current design of the Eurozone from an MMT perspective. It becomes obvious that individual member states of the Eurozone lack monetary sovereignty, which is not compensated by a fiscal authority on EMU-level. This results in the current permanent lack of aggregated demand culminating in high rates of unemployment and output gaps. Although the current QE policy of the ECB enlarges individual countries' policy space to cope with the problems at hand, the fundamental flaws in the design of the monetary union desperately need to be fixed. This is even more urgent with regards to the urgently needed socio-ecological transition that is required to tackle climate change adequately. In this light, the *Green New Deal* with the incorporation of a Job Guarantee program and the *Euro Treasury* as possible policy solutions for the Eurozone are briefly discussed.

Keywords modern monetary theory, macroeconomics, Eurozone, Green New Deal, job-guarantee

1. Introduction

Arguably, money is the most important institution in today's capitalist economies. Money essentially drives the economy as it is the central means to acquire and move resources. Consequently, the study of how the monetary system functions is of crucial relevance. modern monetary theory (MMT) puts the modern monetary arrangements at the center of its analysis. As such, MMT provides a different angle - grounded in the operational realities of the modern institutional framework - from which economic issues can be analyzed and, even more importantly, from which policy options that were not previously considered viable can be derived – most prominently, the *Green New Deal* and an incorporation of a Job Guarantee program. While those policies have been proposed recently in the US (US Congress, 2019), this paper argues – under consideration of the monetary arrangements – that those proposals are also viable options for the Eurozone.

Currently, the Eurozone is in no good shape. With an average unemployment rate of 7.5% and three of the four biggest economies of the Eurozone – France, Italy and Spain – even suffering from unemployment rates significantly higher than that, political pressure and euro-sceptic sentiments are arising (Eurostat, 2019). Clearly, unemployment numbers that high are not only an abstract indicator of economic performance but come with output gaps and harsh socio-economic consequences for those affected. Analyzing the existence of unemployment in the Eurozone through the MMT lens, it becomes obvious that due to a lack of aggregated demand member states are leaving material and non-material wealth on the table, which disproportionately affects the poorest citizens. As this paper shows, this can be attributed to major flaws in the design of the currency union. Moreover, the paper argues that a better understanding of how the government in the modern fiat currency system spends is the starting point for policy solutions that foster economic development and tackle the most prevalent issues of today: unemployment, its social consequences and climate change.

This paper is organized as follows. Section 2 introduces the theoretical foundations of MMT and sheds light on how a government in the modern fiat currency system. The focus will be

on expenditures, taxes and Treasury bonds. Section 3 applies the insights inferred from the theoretical body of MMT to the framework of the Eurozone and discusses the policy space for individual member countries operating under the rules of the monetary union. Section 4 presents the case for a European *Green New Deal* and how the Job Guarantee program as full employment policy tool fits into this context. Section 5 concludes.

2. A brief introduction to MMT

MMT acknowledges that the fiat currency is a monopoly of the federal government. The State is the only supplier of that which it demands in payment of taxes. Only the European Central Bank with the national central banks joined in the European System of Central Banks (ESCB) can create euros in the form of electronic entries in the payment system of the Eurozone (TARGET2). Consequently, the government has to spend or lend its currency into existence first, before non-government actors can use it to pay taxes or purchase bonds. It follows further – as a point of logic – that neither taxes nor bond sales finance government spending. The central bank credits the account of those banks or state institutions that receive money, as we have seen with quantitative easing. The money does not come from anywhere. The central bank marks up the account of the receiver. Only for legal and ultimately political reasons the central banks mark down the government's account, which has to be positive in order to allow the central bank to credit an account when the government makes payments. Therefore, the national central banks in the Eurozone execute the payments of the national governments.

It is then not the government that needs to collect taxes or sell bonds for its ability to make payments, but it is the taxpayer that needs to get the currency in order to be able to pay its tax liabilities and/or purchase government bonds. For the currency-issuing government, the primary means of levying tax liabilities on its citizens is not to fund government spending, but to create demand for the currency. As secondary means, taxes serve as a financial drain for the private sector thereby lowering inflationary pressure and freeing up real resources to be commanded by the government to pursue its socio-economic agenda. Additionally, taxes are a means to address inequality or (dis)incentivize certain behaviors. (Bell, 2000; Ehnts, 2016; Mitchell, Wray, & Watts, 2019; Mosler, 2012; Wray, 2014).

As Wray (2015, p. 2) puts it: “[...] all of this was obvious 200 years ago when kings literally stamped coins in order to spend and then received their own coins in tax payment.” In today's world, in which the central bank makes and receives payments for the Treasury, the complexity of the operational processes has increased, however, the underlying logic of how the government spends remains the same. Instead of printing or stamping coins, the government spends (taxes) by instructing its central bank to credit (debit) the reserve account of the recipient's (paying) bank, which in turn credits (debits) its customers bank account accordingly. If the central bank aims for a certain interest rate target, it usually uses debt instruments, such as government bonds, to drain the excess reserves resulting from government spending of the interbank market – otherwise the excess reserves would put downward pressure on the interest rate. This demonstrates clearly that bond sales for currency-issuing governments are only a monetary policy tool and no means to raise funds. While across countries there are different operational and institutional procedures in place for the horizontal relationship between the treasury and its central bank – which are beyond the scope of this paper – in most cases these are largely irrelevant for the vertical relationship between the consolidated government (government plus its central bank) and the private

sector. Any voluntary, self-imposed procedural regulations that constrain the government in its ability to spend are to be considered as economically unnecessary in the context of currency-issuing governments and can only be grounded in political reasons (Ehnts, 2016; Fullwiler, 2008; Mitchell et al., 2019). Modern central banks have over the years switched to the corridor model, flooding banks with reserves and thus pushing the interbank market rate down to the deposit rate.

As currency issuer, the federal government operates under a completely different logic than currency users such as local governments, corporations and households, which have to fund their spending by either income, asset sales or borrowing (limited by their creditworthiness), do. As monopoly issuer of the currency, the government can make all payments denominated in its own currency as they come due and has no solvency risk on debt denominated in the currency it issues. It cannot finance its spending if financing is defined as securing income in order to later spend it. The numbers in the central bank accounts are marked up and down in computer software. The central bank cannot and does not use income to mark up one of its accounts. Hence, the Treasury is able to purchase everything that is for sale in its own currency – including all idle labor offered by its citizens. Essentially, the currency issuing government faces no purely financial constraints. The only constraints a monetarily sovereign government faces are the availability and quality of its real resources as well as the risk of inducing inflation if total spending exceeds the productive capacity of the economy in some significant sector. Nevertheless, even currency issuers can tie their own hands. For example, this occurs when the government promises to exchange its currency into a foreign currency at a certain rate or even offer precious metal at a fixed rate. While such a government cannot run out of its own money, it surely can run out of foreign reserves or precious metal forcing it into default on its promises. Essentially, the degree of monetary sovereignty depends on four conditions: firstly, the government of a nation issues its own fiat currency, secondly, it is able to enforce its tax liabilities denominated in its own currency, thirdly, it does not issue any (significant amount of) debt instruments not denominated in its own currency and, lastly, it does not promise to exchange its own currency into anything else at a fixed rate (Bell, 2001; S. Kelton, 2011; Mitchell et al., 2019).

The bottom line is that financial affordability is not a valid argument for a monetarily sovereign government to not pursue its socio-economic mandate. Moreover, such a government never needs to pursue any specific fiscal balance but rather should let the fiscal balance adjust to whatever magnitude is required to achieve its socio-economic mandate, e.g. full employment. A currency issuing government can impossibly “save” money in its own currency in order to spend later. Functionally, the central bank credits the banks’ account when government spends. A fiscal surplus does not provide the government with any greater financial capacity to realize future spending plans. The constraints are not in financial but in real terms (Ehnts, 2016; Mitchell et al., 2019).

3. Applying MMT to the Eurozone

While the landscape of currency arrangements is dominated by the *one country, one currency* rule, the Eurozone and the African CFA franc zone are the biggest exceptions. All Eurozone member states share the Euro as common currency, which is only issued by the European Central Bank (ECB). Essentially, this means that the member states are using a foreign currency, which they are unable to issue themselves and face a solvency risk for debt denominated in Euro. The same applies to the issuance of debt instruments as all member

states issue government bonds denominated in Euro. Referring to the conditions for monetary sovereignty outlined in section 2, individual member states, consequently, are not to be considered as monetarily sovereign. Monetary sovereignty only exists on the level of the Eurozone as a whole as the ECB cannot run out of Euros and the Euro is floating against other currencies. Before considering the nuances of the Euro framework, it can be concluded that the design of the Eurozone makes individual countries operating as currency users facing financial constraints – similar to individual US states. In comparison with the monetary arrangements of the US, there is one major difference though. The US government represents the fiscal authority that is able to utilize the policy space it derives from being monetarily sovereign, while the current design of the Eurozone is lacking such fiscal authority. Moreover, while the sovereign US government is in control of the interest rate they offer in bond sales, the Eurozone members have to pay rates determined by the demand of primary dealers in the bond market, which is a function of the default risk and the yield offered (Ehnts, 2016; S. A. Kelton & Wray, 2009; Wray, 2015).

This leads to the question of how national governments in the Eurozone make expenditures. Taking Germany as an example, the German Treasury has an account at the Bundesbank, which, as agent of the ECB, is responsible for Germany's fiscal operations. If the Treasury spends, it instructs the Bundesbank to credit the reserve account of the recipient's bank. Simultaneously, the Bundesbank debits the Treasury's reserve account, which is not allowed to be in deficit. Next to tax revenues, the German Treasury has the option to replenish its reserve account by issuing and selling bonds via the German Finance Agency at Frankfurt, which is owned by the Treasury. Since the ECB and its agents are prohibited to purchase those bonds on the primary market, the bonds can only be purchased by primary dealers, mostly commercial banks. Normally, those commercial banks borrow reserves (against collateral) from the ECB and use the borrowed reserves to purchase the newly issued bonds. Once the Treasury then spends, the reserves are subtracted from the Treasury's account and are added to the reserve account of the recipient's bank, which in turn uses those reserves to pay off its loans from the ECB. Two inferences can be made: firstly, the primary dealer's demand determines the interest rate of the bonds, and, secondly, it might happen that there is no demand at all as the bonds carry a default risk. However, the current expansionary policy of the ECB decreases the risk that bond issuances bounce since the ECB is – as part of their quantitative easing program – actively purchasing government bonds on the secondary market, which effectively erases the solvency risk for primary dealers in the primary market, with the notable exception of Greece (Ehnts, 2016).¹

Conclusively, the individual member states of the Eurozone are a hybrid between monetarily sovereign federal government, like the US government, and currency-using local government, like the individual US states. While they Eurozone countries are lacking the policy space that they could potentially derive from issuing their own fiat currency, the fact that the ECB is actively buying their national bonds as part of the announced “whatever it takes” approach is providing them with more financial space than local governments typically have. Clearly, if the ECB would announce to unconditionally buy up all government bonds in the secondary market, or the prohibition of direct financing would be abandoned, national government would always have access to the funds required to make the payments as they come due – much like a monetarily sovereign government.

¹ On a side note: just recently all German bond yields have turned negative, i.e. the treasury is in nominal terms getting more reserves than they promise to pay once the bond expires (Reuters, 2019).

Ultimately, however, it is the lack of fiscal authority on the Eurozone level combined with the financial constraints individual member states face that is the major cause for the permanent lack in aggregated demand in the Eurozone resulting in high rates of unemployment of up to double digit numbers – with all its social consequences (Eurostat, 2019). Combining the inference from section 2 – the currency issuer faces no purely financial constraints and no solvency risk while the currency user, on the contrary, does face financial constraints and is subject to default risk – with the logic of sectoral balances offers an insightful perspective on the fiscal deficit rules applied in the Eurozone. Since income equals expenditure, any surplus of income over expenditure by one sector of the economy – private, public or external – must be balanced by deficits (expenditure > income) elsewhere (see also equation 3.1. below).

$$(S_p - I) = (G - T) + CAB \quad (3.1)$$

S_p = private saving; I = private investment; G = government spending; T = taxes; CAB = current account balance

Figure 1 graphically expresses the framework of sectoral balances. All points above (below) the horizontal axis represent a fiscal surplus (deficit). All points to the left (right) of the vertical axis indicate external deficits (surpluses). Similarly, all points to the left (right) of the diagonal axis represent a private sector deficit (surplus). As a matter of logic, the sum of all sectoral balances is zero. Given that the private sector cannot sustain deficits permanently (it might absorb only short-time shocks) as it has to fund its flows of spending and is subject to financial constraints and default risk, the blue shaded area marks the sectoral balance outcome that is to be considered as financially sustainable (see figure 1 and 2). Dependent on the private sector's spending and saving decisions as well as the outcome of the external balance arising mainly from trade, the monetarily sovereign government can adjust its fiscal outcome to whatever is required to maintain full employment. Applying this logic to the Eurozone and the prevalent fiscal deficit rules (see figure 2) it becomes apparent, firstly, that the sustainable policy space is reduced for governments being constrained in their fiscal outcome and, secondly, that countries running external deficits operate under a much smaller sustainable policy space than export surplus countries do as the red shaded area in figure 2 indicates. As such, import surplus countries in the Eurozone are by design heavily constrained in their policy space and hence are more prone to shocks, as the examples of Greece and Italy have shown (Mitchell, Wray, & Watts, 2016; Mitchell et al., 2019). This perspective sheds also new light on Germany's internal devaluation strategy, which drives its huge export surplus and, consequently, forces other Eurozone members into external deficit positions, in which they are – given the current design of the Eurozone - heavily constrained in their ability to achieve their socio-economic mandate, e.g. full employment (Flassbeck, 2007; Flassbeck & Spiecker, 2011).

Figure 1 Policy space for sovereign governments (Mitchell et al., 2016)

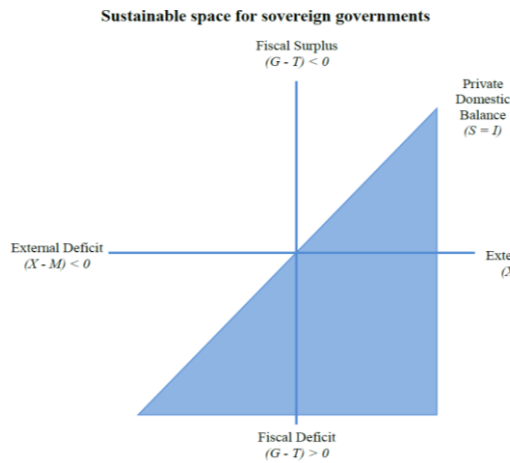
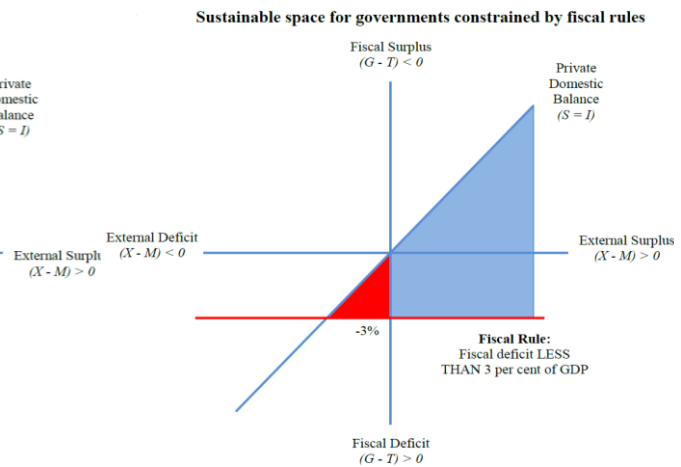


Figure 2 Policy space for constrained governments (Mitchell et al., 2016)



To summarize, the individual member states of the Eurozone are by design constrained in their financial capacity as they theoretically can run out of money and need to pay market-determined interest on their bonds. To some extent, this design flaw was overcome by Mario Draghi's announcement of doing "whatever it takes", which was interpreted to mean that the ECB would buy up government bonds so that default risk was basically zero. Moreover, the design is biased to the disadvantage of external deficit countries as the fiscal deficit rules heavily constrain their sustainable policy space. Although the currently expansionary policy of the ECB eases the financial constraints for the member states, the monetary union as is now lacking a fiscal authority to compensate for the member states' constraints. Currently, this leads to a lack in aggregated demand resulting in unreasonably high rates of unemployment and output gaps. The design of the Eurozone needs to be reformed either by installing a fiscal authority, e.g. by implementing a Eurozone Treasury, or by expanding the policy space of individual nations by easing the fiscal deficit rules. As it stands, the Eurozone as such has a current account surplus, which is the result of the policy decisions of the past. The Eurozone contributes to the global lack of demand and is hence partly responsible for any trade wars, like that between the US and China. While there are many options of how to reform the Eurozone, ultimately, a political decision needs to be made in order to cope with the present economic pressure as well as to find adequate policy measures to foster a socio-ecological transformation, which is desperately needed with regards to climate change.

4. The Green New Deal and the Euro Treasury

The Green New Deal is a name for a policy program that would green the economy. The "New Deal" hints at the Great Depression policies of using government to fix a broken economy. Representative Alexandria Ocasio-Cortez (2019) published her Green New Deal in February 2019. A European version was brought forward by Sozialistische Jugend Österreich (2019) in the context of the European elections in May 2019. A key component of both is taken from MMT when it comes to the macroeconomic issues of unemployment, price stability, and business cycles. The Job Guarantee program (JG) (or Employer of Last Resort)

“involves the government making an unconditional job offer to anyone who is willing to work at a socially acceptable minimum wage and who cannot find work elsewhere, It is based on the assumption that if the private sector is unable to create sufficient job opportunities then the public sector has to stand ready to provide the necessary employment. This creates a buffer stock of paid jobs that expands (declines) when private sector activity declines (expands)” (Mitchell & Fazi, 2017, pp. 230-231).

Next to the societal benefits, the JG works as an automatic stabilizer, price and wage anchor as well as a macroeconomic tool for aggregated demand management thereby stabilizing the economy at a state of full employment (Mitchell & Muysken, 2008; Mitchell et al., 2019). Clearly, the JG increases economic stability as it acts as an automatic (countercyclical) stabilizer and essentially is considered as a superior buffer stock approach to increase price stability. Additionally, the JG program is an effective and sustainable tool for aggregated demand management. While a demand expansion led by the private sector increases private indebtedness and thereby financial fragility, a government led expansion actually enhances financial stability by providing safe assets and income to the private sector (Hail, 2018; Mitchell & Muysken, 2008; Murray & Forstater, 2013a, 2013b). While the pace and size of the implementation might depend on the country's specifics (e.g. administrative capacity), the principle is that the JG is federally funded, i.e. by the monopoly issuer of the currency, but locally administered. The JG scheme basically includes all types of jobs that tend to be underproduced by the private sector, e.g. community or environmental care. However, competition with the private sector is not intended (Mitchell et al., 2019; Tcherneva, 2018; Wray, 2015). Essentially, the bottom line of the JG approach is: there is no reason for a monetarily sovereign nation to have involuntary unemployment thus suffering from its macroeconomic and societal costs, no matter how unproductive or poor the non-human resources in that country are (Mitchell & Fazi, 2017). The wage paid for jobs under the JG scheme essentially becomes the effective national minimum wage. Similarly, the working conditions and job benefits become the lower bound of national working conditions (Mitchell & Fazi, 2017; Wray, 2015). The JG scheme effectively attacks the societal costs of unemployment, such as: poverty, social isolation, crime, regional deterioration, health issues, family breakdowns, school dropouts, loss of human capital and social, political and economic instability. Simultaneously, the JG program fosters the societal benefits of full employment: poverty alleviation, community building, social networking, and intergenerational stability amongst others. Next to that, the JG increases output in terms of goods and services, offers on-the-job training as well as skill development and addresses inequality since it hires off the bottom of the income distribution by offering a fixed wage and benefits package to anyone willing and able to work (Kaboub, 2007; Tcherneva & Wray, 2005; Wray, 2015).

The Green New Deal also includes new spending proposals to mitigate climate change and construct new infrastructure as well as add public jobs. The details will have to be provided by scientist from other disciplines, but economists can and will provide policy mechanisms to ensure that the Green New Deal is pursued with a view towards full employment and price stability. As such, it will drive up aggregate demand and shift the power balance towards workers and unions, helping to balance the distribution of power that has become unsettled in the last decades and that led to the historic increases in income inequality and wealth distribution. Other social effect might be the empowerment of women (“Pink New Deal”) and of minorities, whose communities suffer relatively strongly from high rates of unemployment. Nersisyan and Wray (2019) argue that financial affordability cannot be an issue for the US

government since it is the monopoly supplier of US dollars. Monetary problems can result from rising rates of inflation, signaling a conflict over access to resources. In case of inflation the authors argue in favor of deferred consumption, but also mention well-targeted taxes, wage and price controls, rationing, and voluntary saving.

The Euro Treasury has been outlined by Bibow (2014) and Ehnts (2016). Bibow (2014, 39) wants the Euro Treasury “to pool eurozone public investment spending and have it funded by proper eurozone treasury securities”. The idea is to have the Euro Treasury on top of everything else and make it into a political mechanism that takes over responsibility with respect to unemployment. It would have the instrument of additional spending create employment and the political process would ensure that governments that do not spend wisely – that is, use resources wisely – are losing power. Ehnts (2016) goes a bit further in making the Euro Treasury into a tool that would at least theoretically allow for government spending in all areas. This means that the Euro Treasury could also enable to create a new European welfare state at the European level, paid for by the Euro Treasury and using resources from all over the Eurozone.

Since the European Commission is not a national government, the ECB could theoretically buy up all Eurobonds. This would turn Eurobonds into a riskless asset and help the ECB in their conduct of monetary policy. It would also help those investors that wished to hold risk-free assets but could not. The Euro Treasury would give the European Commission financial firepower that is extremely powerful. Over time, it can be expected that power would shift from the nation states to Brussels, if current rules and procedures are followed. The European nation states would run budget surpluses and try to reduce their respective levels of household and corporate debt. This will continue to lead to a deflationary impulse in the Eurozone economy only that now we have a “spender of last resort”. National public debt will be replaced by Eurobonds over time, leading to a reduction of risk in European public bonds. The European institutions, following Juncker et al. (2015), have embraced the Euro Treasury. It remains to be seen whether this political project will be implemented.

5. Conclusion

The idea that the economy can be stabilized by the central bank’s interest rate and nothing else is both theoretically and empirically dead. What is needed is a new understanding of macroeconomic policy in which the central bank’s set of interest rates will not have a large and persistent effect on the level of private investment. MMT suggest that fiscal policy should be used, with a focus on government spending. In the Eurozone, this new economic policy setup is made complicated by all sorts of European and national rules concerning public deficits and public debts. From an MMT perspective, public deficits are nothing else than an increase in the nominal amount of tax credits held by the private sector, while the public debt is the total number of outstanding tax credits in the private sector. Since the government does not “pay back its debt” as private borrowers do but only promises to take back its own money in the form of tax payments, there is nothing wrong with public deficits and debts.

Currently, it seems that Germany will enter a recession in the second half of 2019. With the current rules in place, the Eurozone faces a grim future. On top of this, the repetition of austerity policies is a possible political option, which would increase the depth and length of the recessions, possibly transmitting to the whole of the Eurozone. The political consequences for both the Eurozone and European Union would be grave. Probably the

financial markets would be able to force out of the Euro first one country, then others until the Euro is chaotically dissolving. The impact would be felt most by Germany, which would see mass unemployment arise in its external sector. Using MMT, a reform of Eurozone and European Union can be implemented that would stop the deadly political dynamic that the Euro imposed on its member countries. Beyond Europe, more European demand for goods and services can help to reduce the tension in the trade wars of the global economy and facilitate global peace.

The two options for reform are a Green New Deal that tackles climate change and the Euro Treasury that tackles unemployment directly. The Green New Deal recognizes that in order to create a Green economy for all we need to employ more workers and not less. The proposal assumes that the division between labor and leisure time is not shifted. Within the context of the Euro Treasury we could imagine a European Green New Deal (see also Adler, Prakash and Wargan 2019) which also includes a shift towards working less hours. A reduction of working hours in the Eurozone would free up non-labor resources that the Euro Treasury can then use. Obviously, the net effect depends on the public goods that are to be provided and the interpretation of the public purpose when it comes to the level of additional government spending that is brought forward. Technically, the same reduction of working hours is possible with a Green New Deal.

Introducing a European Green New Deal or a Euro Treasury would shift the focus from profit-maximizing debt-fueled private institutions towards organizations that focus on public purpose and public interest, while taking into account environmental concerns and providing high-quality jobs. Other institutions of our democracy would also need to refocus. The European media will stop discussing what is financially possible and instead focus on what is possible using the available resources. Politicians will stop posing as supposedly fiscal conservatives and instead explain to their voters what their policies are doing for them, how they want to use scarce resources and why they think it will work. The socio-ecological transformation will probably also have many indirect effects which we cannot yet imagine. While some of them will surely be bad, let us hope that most of them are not.

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