MMT-Critique, (rev.1/'17) in reference to: L. Randall Wray's Working Paper* on money.
*) http://www.levyinstitute.org/pubs/wp_656.pdf

A major problem I'm having with Wray's thoughts on money, as set out in the above referenced paper, is that no logical progression from a set of premises is detectable in it[1]; which, imho, is a first requirement when trying to convince anyone new to one's particular point of view. To me, as it stands, it's just a collection of assertions, based on what seems – empirical evidence. A "reasoning" from within the economic structure we find ourselves in, where money is obviously an established part and parcel of. But is the latter really? And how did it get to be so? Sure, I don't disagree that the concept of money is most confounding. Being the numeraire in terms of which all the system's input and output components are measured, it forces one to grope to some extent for what we think is the truth; until systemic edges become reached, where the entire theory finally comes together. So, as long as there are still open economic questions that are in need of evaluation, the nature of money cannot be fully known.

All fair enough, but "flat-earth" empiricism cannot possibly lead to a closure. One has to have at least the rudiments of a theory in order to close it eventually. The result, at least from my own perspective, is a paper with lots of ambiguities if not outright self-contradictions. At the very start, Wray mentions "defining". But defining requires stating the terms under which the definition is true. Without those, the

1 Apparently this is its feature and not a bug, as: "The ideas [of MMT] are not theoretical, and they aren't particularly modern. What we're doing is simply describing, operationally, the way government finance works. It's not a theory; we do not make assumptions, although we are economists. What we've been describing to you today is not dependent upon any ceteris paribus condition or any set of assumptions about perfect competition or rational agents or anything else that you get exposed to when you study economics, but rather an attempt to simply describe the way in which the institutional arrangements are set up, and the accounting identities and what happens in a balance sheet framework; when one side of the equation moves, what happens on the other side of the equation? That's really all we're up to..."

Stephanie Kelton, Session 2 – 1st Fiscal Sustainability Teach-In and Counter-Conference.
George Washington University, Washington DC, April 28, 2010

definition at best becomes just another assumption; in other words, an article of faith. But the effect is usually even worse... Since all the elements of a theory are only to have meaning in terms of its axioms, no theoretical element can exist prior to the existence of those axioms[2]; so, without there as yet being a system to draw from, axioms are always to be obtained exogenously. This implies that a definition as an assumption, typically, not only won't be valid as an axiom, but its very existence prevents the very closure of the theory under consideration. What, e.g., allows him to assert that "all [money things] can be used as stores of value"? If it rolls out of a certain theory, then state its premises. Empirical "proof" not only doesn't cut it, but since his [money things] and a "store of value" are obviously systemic, and thus disqualified as being valid assumptions (axioms), all such identities are quasi-axiomatic and meaningless as guidance providing to boot.

Unless being the luckiest person alive, divining the attributes of money without having a *theory* of what money actually is, cannot help but be disastrous for any theoretician. And once the "money-things" prejudice becomes established, indeed a whole slew of false corollaries makes its appearance. Trying to refute them all individually however would be too massive a task to accomplish herein. Especially since the terms under which this would be true need to be expounded as well. Thus the limit of this critique being – a rebuke of the ideas that: "money self-destructs with the redemption of loans" and "money is a store of value".

As far as an endeavour toward economic growth is concerned, the creation of new money at the time of a loan is just an accounting procedure by an issuing institution, chartered to do so under legislated guidelines in an existing denomination; whereby the assumed debt of the borrower, as being the distribution capacity for prospective, additionally to be produced economic output, becomes integrated into

2. In this regard, it probably would be helpful to take note and compare what Schumpeter had to say about pre-analytical cognition or axioms. To wit: “In every scientific venture, the thing that comes first is Vision. That is to say, before embarking upon analytic work of any kind we must first single out the set of phenomena we wish to investigate, and acquire ‘intuitively’ a preliminary notion of how they hang together or, in other words, of what appear from our standpoint to be their fundamental properties.” (Schumpeter, 1954, *History of economic analysis.* pp. 561–2)

the whole economy on par with the previously existing, with a built-in temporary share (that is to say – interest) accruing to the issuer. Nothing substantial is thereby being supplied by a bank, and whether or not a return is in the offing is beyond its direct control too. Indirectly however, under a reigning dynamic equilibrium, the redemption of the loan depends on a widened macro circuit that will have to endure until a final resolution at the retail level occurs. So that the to be paid interest charges, as part of the debit expenditures of borrowers, can become realized *only through the direct spending of interest income earners*, as, ceteris paribus, no other income is available.

Over the time the loan will be active, the booked debit entries by the borrower that return back to the lender as interest payments, concern a relatively minor portion of the overall production account process that establishes the entrepreneur as a valid economic producer; whereby the latter is engaged putting purchasing power into the hands of employees and the employees of suppliers alike. That same process of debit entries establishing themselves into the economy will continue unabated long after the loan is paid off, with the minor distinction that bank-income earners no longer are able to share in derivative retail output. But as a whole, the economy has no reason at all to shrink credits (in trade, or other enterprising acquired debts) from returning to our former borrower, and thus enabling the latter to continue keeping those debit entries flowing out of the firm. So what exactly does self-destruct??! I'm afraid it's a question that cannot be answered in the absence of a theory of money; and whatever insights MMT may well be able to provide, a theory it isn't. Instead, it's all inductively based thinking (or a reasoning that proceeds from particular facts in an attempt to reach a general conclusion); philosophically impossible to attain, within a limited time frame.

What happened was that the lender's expectation of the borrower being able to make good, became fully assumed by the trading partners of the borrower on the up side. The Minsky quote he provides is apt, but the subject goes a bit deeper. Confidence in trade takes a bit of time to develop; but once it exists, it doesn't die off when the involvement of banks having issued money comes to an end. Credit in trade doesn't have to be formalized in commercial paper to systematically be money either. Debits are commercially entered systemic debts, without there necessarily being a third party (i.e. a money lender) involved. If these debits aren't offset by subsequent credits rolling in, production will cease, just as if some lender pulls the plug. When the debit outlays of a production unit give rise to new output that is sold at its price on credit, money becomes created anew. This money, like all money, is an as yet to be resolved debt. If the agreed-upon price includes a profit, as it most likely does, the potential realization of this profit, just like the aforementioned interest charges is built-in. But earning it at the point of sale, still doesn't determine its value; since, for the system to remain functioning in a dynamic equilibrium, a systemic determination depends on what eventually happens to those profits; again, just like interest. So the only[3] way whereby money, in its capacity to integrate a new production unit into the whole, would disappear – is by infringing on the realization of the newly founded apportioning of final output, leading to a default of some producer somewhere[4].

If the above mentioned loan is taken out at the retail level, the process is a round-about but relatively routine expansion of output with the means to pay for it. But things take a surprising turn of events when it occurs higher up in the economy, where means of production is created. Now the new personal income being made available for making purchases at the retail level, exceeds the retail output embodied (or better said: the on its behalf currently made available personal income to reproduce it) income. This means that every time a capital expansion is attempted, those who did have a hand in producing currently available retail output occur a loss of purchasing power, because of having to share it with those recently having taken personal possession of newly created money, who had no hand in producing the currently available final output. If this yet[5] surplus income is captured by retailers in profits, through initiating a price rise, the deprivation of general purchasing power is direct; otherwise, in spite of appearing to be valid savings in the aggregate, they are just

3. Given an adequate supply of natural resources.
4. Yet with such infringement to a large extent being the result of cash flushing to the multinationals as well as to the proverbial 1%, all not in the least bit interested in indirectly causing direct spending to happen within the region the income was obtained, money doesn't even disappear for them either.
5. New derivative final output, eventually making its way to the retail level, will nullify the surplus distinction; but by that time, entirely new surplus income will have made its appearance.

hidden losses. For at any time in the future, the exact same conditions apply; so as made "savings", by those who at varying degrees are empowered to do so, it will remain a surplus to any then current production process forever. Thus, no matter how you look at it, forced economic growth through investment in additional means of production, however this is defined, can only come about thanks to the vast majority unwittingly putting up with a small *loss*[6]. And a factual step backward cannot simultaneously also be a *cause* of advance!

From the above laid-out reasoning a number of further aspects follow, whereby putting economic theory in quite a disparate realm from accepted conventional thought. But I won't do much more than just mention a few, as this is primarily meant as a critique, positive as well as negative, justified by minimal alternative thesis construct. First, since there is no causal link between investments and economic growth, a bit more on this later, something else altogether must be at the root of society's progression; to wit: the material application of previously gathered *having learned by doing,* i.e., experience. Second, getting an understanding of what inflation is all about, cannot be accomplished by confining the notion to a price-level rise; so a very different definition for inflation is required. Third, since it always is the general population sharing the currently available final output anyway[7], with those who eventually will affect a rising affluence, there is nothing that distinguishes private sector investors

6. Looks vaguely familiar? Perhaps it should, because it's Sismondi's theory of growth, advanced almost two centuries ago; and modified only slightly by me.

7. The logic of this point so far, can be extended into a very different direction as well, as it concerns the current battle with O.A,S.D.I. foes. So even though the subject matter falls somewhat outside the money critique at hand, it is too interesting to let it slip by. Because it means that, again given an adequate supply of natural resources, there is only a single reason why a nation could no longer "afford" to have its retirees enjoy the same standard of living, they had become accustomed to during their productive lives. And that is when the working part of the population becomes forced to increase aggregate man-hour input in order to keep retail shelves stocked *and it refuses to do so*. Money, accumulated "funds", or whatever means of accounting for it are brought to bear as arguments against so-called affordability therefore – are all simply bogus. The entire line of reasoning being exemplified by the fact that: during its inception in the mid-'30s, there wasn't any "money fund" of course to pay for it then either.

from a government stepping in, when (human) resources remain idle[8]. And last but not least, the actual source of the enormous build-up of "wealth" by a tiny minority of the population has now been identified. Although, as time and their extraction capability continues, they can circulate this "precious" money amongst themselves in the exchange for both existing chattel and realty at ever higher prices; the tangible living standard pleasure or utility to be had from such property in the aggregate can never change. There is nothing, that isn't already apportioned, to be acquired with this "wealth". That will have to do for the time being. By the way, all the above made assertions are derivable from next to be revealed premises. If a contradiction is spotted, please let me know that I'm mistaken. But also be aware that the opposite holds true too!

The economy isn't like the universe we find ourselves trapped in, and would love to be able to explain objectively. It is an all human-made system[9] instead, a means that transforms real, exogenously located material-resource inputs toward determinate ends situated in that same exogeneity[10]; while temporarily supplanting this natural reality with an internal accounting "reality", inclusive of all its associated pitfalls[11]. We therefore can indeed step outside of its structure and observe the whole with a certain objectivity. If paradoxes do show up, then either our set of premises is faulty, or our logic is defective. Since the static accounting identity Y=C+I begets paradoxes, it's wrong in the reality of a dynamic world if it’s a fact that dynamic systems cannot be understood by looking at their static equilibria; meaning: everything being expressed in its terms is deductively wrong also! Although the identity of the economy it depicts isn't quite as inane as the orthodox micro-based equilibrium one, it still is an economy in a faux static equilibrium nevertheless.

8. But while both these notes further indicate at least an affinity with, if not fully underpinning MMT policy directives; they also make clear that true reciprocity, i.e. barter in the theoretically most efficient way possible, underlies the workings of our economic system.

9. Axiomatic.

10. Axiomatic. These two axioms, of the utmost generality, together with a third that states everybody's birthright to share, are all that will be needed for the development of an alternate economic paradigm that so many progressives seem to long for.

11. Accounting being a deductive discipline, its identities cannot be absolutely true but are dependent on systematic assumptions.

Furthermore, it is erroneous to think that human mentalities can play an integral part and because of that, the system is bound to be vagarious. Those human characteristics are systemically exogenous. The very system knows only two states; either it equilibrates, following its axioms, or it doesn't. If the system equilibrates in such a way that a majority of people find offensive, it is the role of their government to alter the status quo through taxation measures. And if a disequilibrium becomes endemic because ignorant human beings, by having been afforded certain institutional powers, interfere with equilibration; then the only power overarching enough to rectify the situation, will again be the ability of government to impose correcting fiscal measures[12]. Sismondi already concluded as much too. So if the economics profession had followed in his footsteps, instead of in Ricardo's (or Malthus's), we wouldn't now be having this discussion, as in reading this critique. The world would have developed very differently. No need for Marx's revolutionary upheavals, and most wars would likely never have been fought. Woulda.., coulda.., shoulda.., whatever, it's all just water under the bridge; ...better late than never though. Sorry for this bit of a digression.

Confounding the two distinct realities of Nature (free of dealings) and the accounting for parts of it in terms of an economic numeraire has had fatal consequences with respect to both relevancy and logic. According to orthodoxy there is no distinction, utility and the human population are endogenous, and the accounting of it is just a veil; i.e. money is neutral. All good and well, if what is designated as capital were owned just for whatever utility it might provide; but since such capital isn't worth anything, unless providing a return on earlier made expenditures, naturally positive values become entirely irrelevant. Keynesians, while keeping the population and utility endogenous, put their faith in non-neutral money as being causal to the frequent disequilibrium they are observing. Regardless how hard they tried however, underpinning that notion with something a bit more fundamental proved impossible[13]. Why?... Could it perhaps be that

12. This is my own and very different interpretation of a government *maintaining* the value of "money" through taxation. The denomination was inaugurated historically by merchants irrespective of any historical taxation requirements; and evidently nowadays there are a few tax-free countries in existence as well. The money “circulating” there is valueless?

13. Non-neutral money thus became a quasi-axiomatic entity. "Money is as money does" became a shibboleth of the Post Keynesians. But while this

there isn't anything inherent in money that makes it causal, and that the appearance of it being causal is strictly due to some overtly established institutional influences that are able to cloak their own inherent non-causativeness with supposedly "powerful" money? And did Keynesians chose a line of reasoning against orthodoxy that made the conflict unwinnable? I hope that by the end of this critique your answer to both of these questions will be, a perhaps qualified, yes.

The quasi-axiomatic Y=C+I depicts a determinate economy that at any point in time *is*. My own set of axioms renders an economy that is in a continuous state of *becoming*, with no more than a potential to *be*. In other words: this dynamic process, while in disequilibrium *in* time, has the potential to *become* equilibrated *over* time. Its dynamics though doesn't concern a varying-width linear path with determinate activation points through[14] time, but instead resembles a "charged field", whose booked pluses and minuses will globally be netting to zero; its wealth realizing current only becoming activated through the limit of numerous final returns in the form of intended personal consumption. The mathematical formulation of the former being vastly different, to say the least, and incompatible with the latter[15]; where (C) determines the value of (I) through the circular flow of (Y), with (I)'s value[16] being indeterminate anteriorly. In other words: Demand determines *the value of* Supply ex post in a posited continuity.

When the full meaning of the above becomes clear in one's mind; the idea of a material "surplus" (value), as derivable from a determinate endogenous production process and applicable towards an extended future production, vanishes. Instead, all initiatives dedicated toward an expansion in economic output, rely on a surplus of available inputs; i.e. natural resources beyond what is required to maintain current

kind of superficial intellectualization may have served the fictional "Forrest Gump" character well enough; we, as a society, deserve better from a professional establishment upon which so much depends.

14. The dynamics of forces involved on e.g. a (falling at every moment in time) moving bicycle. My understanding of "improved" economic period analysis is that it falls into that same category; as does the non-linear/chaotic approach having a determinate starting point, with ditto values through time.

15. Implications of which, with respect to (e.g.) econometrics, are bound to be huge.

16. (I) also includes (G), but that's a story for perhaps another time.

production levels. Creating new money can't be considered as having been causal in bringing those resources about. And in terms of its unit of account, causation is uncertain too at all points of supply, since the impulses that *determine* all economic outcomes have to originate from exogeneity later on. In order to be consistent therefore, an economy cannot pertain to an accumulation[17] of positively valued capital that is depletable slowly over time; but, with money creation being equivalent to creating liabilities, concerns the acquisition and possible later redemption of incurred *debt*. The logical reason that all capital is listed on the debit side of ledgers, is because just like debit expenditures it seeks a return. A return that isn't inherent in its own nature, but in the debit expenditures of unrelated others (capitalists). So to the extent that it seeks a return and thereby remains economic: capital, in order to serve as a means to increase living standard arrangements, it is a systematically to be resolved debt.

The boundary separating the means from the ends, keeps utility firmly ensconced outside of the economy. And the benefits we reap from the system are *added* to all the readily available natural and domestic utilities; which can only happen in the same terms, that is to say – non-pecuniarily. By the same logic of entirely separate domains, there *cannot* be a utility for money. Although the accounting system with its integral units of account (money) is a necessity for an economy to exist and make it all workable[18], in no way can it be construed that the ability to keep track of all the economy's goings on and resolve who is entitled to end up with what, after a certain part of the process has run its course, is the *cause* of either an economic fulfillment or its non-fulfillment. But if, as agnostic, MMTer, or Post Keynesian, you're so inclined, don't let me stop you from trying to set up such a paradigm. All I ask, and expect an answer to before engaging in debate, is... what are your assumptions?

If the outcome of the economists' misunderstanding of money wasn't so devastatingly tragic for scores of people, it would be a prime farce. There can be no question that economists of indeed all persuasions are transfixed by the power of capital investments, flowing from the accumulation of money. Yet they all fully realize that whenever growth is required, money can and will be freely created out of thin air. I mean, how can they keep a straight face when disseminating such

17. from a surplus.
18. My own theory of money in a nutshell.

contradicting hogwash. Keynes, in the wake of publishing his GT, made the remark (paraphrased) that the "store of money" objective is a kind of reasoning befitting only those inhabiting a lunatic asylum. Well, if economists believe that in this day and age of fiat money it has again become possible to create some storable "thing" out of nothing, a kind of trick that the universe itself hasn't been able to accomplish since the "big bang" some 14 billion years ago, then the inmates have taken over that asylum and are running it now. But that's nowhere near the worst of it. Aphorisms may be catchy, but no one is ever actually forced to live by them. That distinction comes to the fore when focusing on the profession's mainstream, as having allowed itself to become stooges to the financial establishment; and letting the policymakers of the latter run the show, all the while in command of the associated legitimacy of the former. That's what really is insidious.

And quite a show, or much better said - sham, it is. It would already be scandalous enough if this relatively tiny fraction of the population were just living high off the hock that their institutionalized power forces the rest of society into. But it isn't their direct spending habits on an ostentatious standard of living that disequilibrates the system to the point of collapse. It's the very opposite! The first would simply replicate feudal ownership, a peonage, but now based on fiat money instead. That original system thrived for centuries in many parts of the world because it wasn't beset by internal contradictions; and neither would its modern version be, *if* the "profit" income garnered through financial dealings were distributed amongst its exec's and shareholders for direct spending purposes. But what sets the system off on a course toward an inevitable crash is that all the additional systemic debt acquisition (booked debit entries) on a continual basis, has it already *falling* at every moment in time. And the only way to rectify itself again is when these system-deep, passed-on-down and retail-level-assumed oligopolistic[19] finance charges become resolved, through the purchasing of retail output by its covey of beneficiaries, for the exclusive purpose of living standard enhancement. But, given both the enormity of interest and finance fees being charged and GDP size of the financial sector, as compared to the number of people obtaining their income from that particular sector, a rectification cannot possibly

19. Institutional oligopolistic power isn't confined of course to finance, but instead creates economic havoc in an identical fashion, where and whenever it extracts income in excess of resolution possibilities. (e.g.) Amazon, Alibaba, Apple, Microsoft, Google, etc.)

be accomplished even if these financial-income earners would want to.

The result is a system set up for collapse by those who *seemingly* having caused it to grow. Although the idea that investments cause growth stems from the orthodox GE supposition, it cannot be refuted by any existing conventional theories allowing for disequilibrium; as all of these are taking it for granted that every moment in time presents a fait-accompli on the economy's chosen path. Non of the heterodox theoreticians in general, and Post Keynesians[20] in particular, realize that the firm platform they expect the economy to be on, not only isn't solid at all, but it isn't even in positive territory and the negative to be resolved only gets larger with each initiated investment. And that's not the end of it either. So far the only reference has been to commercial loans, whose costs were passed on down to the retail level; with the direct spending of personal income being the only way to resolve these economy-deep taken on debts. Consumer loans however, exacerbate the situation greatly yet; because whatever portion of personal income goes toward making interest payments may well be resolving its own micro obligations, but this leaves the macro-resolution of debt unaffected. Instead, these amounts become forthwith added to the responsibility of interest income earners to resolve. Now, with interest rates on personal debt being as high as they are, the entire system has become firmly entrenched as unresolvable debt creation. Even with best will in the world, borrowers, in the aggregate, cannot possibly redeem their debts; since their money-making employment opportunities are vanishing, when businesses fail to recuperate their outlays. The flip side of which is an accumulation of "savings"; wealth on paper, with which nothing substantial[21] can be bought anymore. All accumulated funds (including governmental ones) are bogus.

The sham is complete. Collateral, equity, whatever..., these "property" values cannot discharge debt; at least not under (dynamic) equilibrium conditions. Those notions may be evaluated by lenders for enticement purposes, but the only economic entity able to redeem debt is income; and that only under the specific set of circumstances as laid out above, where every disbursement of income is a newly to be resolved deb(i)t. So what really is the positive economic value of bought and paid for final goods, disengaged capital equipment, realty?... Exactly, zero!

20. incl. MMTers
21. i.e., items requiring real resource inputs for their reproduction.

And every time these return to the economy in the expectation of drawing out new income they become to be resolved debts once more. A "wealth effect" isn't an equilibrium condition! All this strongly suggests that in order to save us from the abyss, a very different economic setup is required. Probably something along the lines of non-capitalist free enterprise, like Mondragon cooperatives. Simply instituting a job guarantee program doesn't cut it at all. Even though certainly a step in the right direction, and as such better than the current laissez-faire attitude toward unemployment, it still isn't much more than a band-aid solution to stop the gush of a bleeding artery. For, by unaffecting the process of unresolvable debt creation, what it does is keep on replacing average wage paying jobs, jobs that should never have been lost in the first place, with minimum-wage paying jobs. But that's a topic a bit beyond this critique. Instead, let's return once more to one of the subjects chosen to rebuke.

A unit of account isn't a thing that can be accumulated. The "currency" of an account is subject to the conditions of its establishment. If the issuer of credit goes along with not needing to be paid back for the next five years, then its value is storable for at least that period. But if the first repayment is expected in 30 days, and if, because of a non-remittal, plugs are going to be pulled shortly thereafter, thereby diminishing final output reproduction, then that becomes the extent of money's net storage capability. The nature of money however had not changed one iota, it still is just a unit of account; except that now, accounts don't remain "current" as long as before. As such, money isn't even a part of the economic territory proper, but is an attribute of the economy's map; making the "money supply" a fictitious territorial interpretation and the postulation of "money things" an unwarranted systematic countenance. Whatever else there is to money, and, as mentioned before, as long as there are unsolved economic problems, the nature of money cannot be fully known, it should still be in conformance with a set of premises. So although we have hardly yet scratched the surface of an alternative explanation of economic reality, it should already be extensive enough to realize that accumulating and storing money as a value is absurd. It only seems to work okay, because of its consideration on a micro scale, where the full effect of such "savings" activity is unnoticeable. It goes without saying that all the above reasoning implies an operating system of fiat money.

Although Keynes did detect a "riddle" in his own analysis of investment being able to take up the slack of deficient consumption, his very point of departure prevented him from pursuing it. Had he listened less to his inner investor's voice, he would have had to come to the conclusion that the determinacy (reality) of all economic "stock" values at any[22] particular instant had to be abandoned. No doubt a step too far for an economist who was mentored by Marshall's "Principles". Because of that shortcoming, too many of us are still suffering needlessly in periodic downturns, while waiting for Keynesians to perhaps get a chance to treat the symptoms. And since Wray's paper too is permeated with that same material "unassailable" accounting identity, the only conclusion I can come to is that as a basis from which to garner knowledge it is most deficient; in spite of containing a number of comments, that also would hold true in a paradox-free paradigm.

So does all this mean that the modern money musings of MMTers are a dead end? Far from it, although it might serve them well to realize that in the absence of an actual theory of money, they don't have much of a leg to stand on; in the second half of Wray's particular paper, there is yet a fair bit to agree with. And MMT policy directives are amendatory too. They just have to learn to live with indeterminacy. Accountants, relying on the well-known "going-concern" assumption, implicitly do so already; and without thereby suffering any loss in professional integrity. So, competent economists should be able to do the same. Also, dropping the references to Chartalism would be a step in the right direction; as these confound deterministic printed currency and coin particulars, as material assets, for the meaning of money in general and so serve no useful purpose at all in understanding the latter. That modification should also get rid of the notion that because the State sets monetary value through the power of taxation, money can be treated as just another commodity. Given that money as a means to measure and keep track of the economic process in its entirety, can be traced back to my mind unassailable axioms, any economic theory that accommodates Chartalist value notions would require a set of premises from which it follows that the *accounting process* of governmental activity is causal not only to that specific productivity, but to production values in the general economy as well. Good luck in conjuring that up.

22. inclusive of theoretical points of departure. One cannot take an in essence unknowable and start theorizing from there expecting to arrive at valid conclusions within a finite period of time.