1. Macroeconomics, fiscal policy and public debt: conflating myth and reality

In a well-received and widely cited pamphlet, Leonard Read (1946) elaborated on the simple recognition that no person has the ability to list in detail all of the instructions someone would have to follow from start to finish to produce a pencil. Yet pencils are universally available, and we take for granted our ability to obtain a pencil whenever we wish. It is impossible for anyone truly to describe all of the myriad actions scattered over decades and even centuries that must fit together for pencils to be produced. The production of pencils is a systemic quality of particular patterns of interaction among people planting trees, harvesting and milling wood, mining graphite, manufacturing glue and building ships, among countless other activities that are necessary for pencils to appear in retail stores. What enables all of those activities distributed over centuries is what economists denote as a market system of economic interaction.

By market system, economists do not mean some kind of inanimate object that operates in clockwork fashion. Rather, they mean that human interactions are governed by some system of institutionally governed rules that tend to promote coordination among the economizing activities of individuals scattered across time and place. Primacy among those rules belong to private property and freedom of contract. For instance, someone might plant land with oak trees that will mature in 50 years, intending to harvest those trees upon their reaching maturity. Before those trees reach maturity, the person contracts a fatal disease. Without private property and freedom of contract, a person in that condition might be tempted to harvest those trees prematurely to make some use of the wealth represented by those trees. In the presence of private property and freedom of contract, however, the owner can improve his situation by selling the trees to someone else. Hence, the institution we know as private property can promote coordination over a duration of time that extends beyond the lifetime of people who initiated the particular action in question.

So economics is the study of how locally initiated economic activities can generate global networks of economic interaction when those interactions
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are governed by the institutional arrangements we characterize as private property and freedom of contract. To be sure, not all property is held privately and freedom of contract is incomplete. Still, those institutions have predominate standing within contemporary economic life, and the central task of economic theory has always been to understand how these institutions operate to promote and secure complex patterns of economic interaction that are well beyond the scope of any intentional action. Yes, someone can intend to mine graphite. Someone else can intentionally plant trees and later harvest them. And someone else can intentionally construct a lumber mill with the capacity to cut wood into various configurations. But it is beyond human ability truly to plan the production of a pencil from start to finish. True, individual intentionally goes into the production of pencils. But that person would proceed by buying the inputs from the producers of other ingredients who, in turn, do the same things in their productive activities. In other words, a system of productive relationships is an emergent product of interaction among people within a nexus of market interactions that themselves are governed by an institutional framework grounded in private property and freedom of contract. This idea describes what economists mean when they describe a market economy as denoting a spontaneously ordered network of generally coordinated economic activity.

What accounts for the generally coordinated quality of economic activity is also the institutional framework of private property and freedom of contract. Someone who establishes a lumber mill, for instance, will want to design it so as to produce the kinds of products that people will want to buy. Otherwise, the owner of the mill will lose money and go out of business. What results from this system governed by profit and loss is that commercial success is governed by the ability efficiently to serve the desires of customers. In the days of Soviet economic planning, it was often noted that a steel mill that was given a quota to produce 100 tons of nails would produce bolts for fastening railroad tracks but would not produce finishing nails for carpentry. This would not happen when governance was provided through private ordering rather than communist-style public ordering. The theory of economic coordination within a market economy comprises the subject matter of what economists now describe as microeconomics. The idea of a separate field of macroeconomics did not enter the theoretical imagery of economists until after publication of John Maynard Keynes's (1936) *General Theory of Employment, Interest and Money*. 
1.1 MACROECONOMICS AND ECONOMIC COORDINATION

Only after Keynes did the notion of a separate object of inquiry known as macroeconomics come into play. In the fifth edition of his *Economic Theory in Retrospect*, the eminent historian of economic theory, Mark Blaug, described what became known as the Keynesian Revolution as:

one of the most remarkable episodes in the entire history of economic thought; never before had the economics profession been won over so rapidly and so massively to a new economic theory, and nor has it been since. (1996, p. 642)

This winning over took place within a decade. The 1936 publication of the *General Theory* was greeted by unfavorable reviews by many of the premier economic theorists of the time. Yet by 1946, the Keynesian Revolution had captured even the American federal government, as illustrated by the creation of the Employment Act of 1946 wherein the Council of Economic Advisers was established to bring economic expertise to bear on the task of maintaining full employment.

By 1946, the Keynesian vision of macroeconomic theory had pretty much conquered the academy. Prior to the Keynesian conquest, most economists had thought of governments as pretty much ordinary participants within the societal division of labor. While Leonard Read’s story of a pencil’s production did not include governmental activity, it could have been amended to do so. In that revised story, governments would have been construed as acting in much the same fashion as private citizens and enterprises. Wise conduct for a government was much the same as wise conduct for an individual. Hence, frugality was generally superior to profligacy. This led to governments operating generally with modest budget surpluses, with those surpluses being used to reduce public debt that had been acquired during depressions or to fight wars, as Buchanan and Wagner (1977) explain. In this respect, economists distinguished between ordinary expenditure and extraordinary expenditure, with times of war and depression calling for extraordinary measures (de Viti de Marco, 1936).

With the Keynesian conquest, the longstanding presumption that governments should balance their budgets during normal times and reserve deficits to time of war and depression had vanished from any significant public presence, and with Richard Salsman (2016) providing a careful review of three centuries of theorizing about public debt. With this change in presumption came a significant elevation in the perception of government by economists. Governments were no longer seen as mostly stagehands in the human drama that is society. They came to be seen as
occupying center stage in that drama because the quality of governmental fiscal policy determined the quality of the economic life of a society. The earlier notion of a self-regulating economy gave way to the presumption that government was responsible for good economic performance at the level of the economic system, as distinct from the individual enterprises within that system.

In this chapter we review the Keynesian inspired claim that governments can and should use their budgets to promote economic balance within the economy as a whole, for with the Keynesian era within which we live budget deficits and public debt are considered by politically dominant groups to be prime tools for managing an economic system (Wagner, 2012a). This Keynesian scheme of thought created two disjunctive theoretical frameworks. One was the micro-theoretic framework of market interaction governed by private property and freedom of contract. Prior to the Keynesian Revolution, this market-based theory of economic coordination was thought to have general validity as reflecting the self-regulating quality of market interaction. Full employment and not general gluts was thought to be the normal tendency of a market economy. Movements away from full employment would set in motion market-generated forces of correction that had been the prime objects of theoretical explanation by economists. Also part of that scheme of theoretical explanation was an examination of the ways in which economic coordination could go awry. Mostly, this concerned some peculiar features regarding money and banking, but the institutional framework of a market economy was thought to operate with a strong tendency to promote full employment.1

Within the Keynesian framework, there was no presumption that market economies would operate at full employment. Economic coordination there would be, but it could be the incomplete coordination of underemployment equilibrium. In the concluding chapter of the General Theory, Keynes elaborated this disjunction between micro and macro levels of theorizing by asserting that ‘it is in determining the volume, not the direction of actual employment that the existing system has broken down’ (1936, p. 379). Within this scheme of thought, the system of market interaction can be relied upon to determine the pattern of economic activity, but not to establish the volume of activity. To maintain an appropriate volume was the task of macroeconomic theory, and with this theory being put into play through fiscal policy as conveyed through budget deficits and public debt.
1.2 KEYNESIAN CLAIMS AND FISCAL FABLES

In pre-Keynesian times, budgets were means by which governments planned their programs and financed them. Just as a provident person or family would live within its means, so would a provident government. Exceptional circumstances can always arise, both for individuals and families as well as for governments. While deficits might be used to work through those circumstances, balanced budgets would resume when normal times returned. The Keynesian Revolution brought into the foreground the fiscal policy message that the state of the budget could be a tool of economic management. Rather than passively running a budget deficit when a recession hit, the Keynesian message counseled the government actively to operate with a budget deficit to help the economy escape the recession. Indeed, the arch-Keynesian Abba Lerner (1944) claimed that the only reason for governments to tax was to avoid inflation. Otherwise, governments should finance their activities by printing money. Gone from this Keynesian formulation was any notion that a budget represented some kind of economic transaction whereby people supported some transfer of economically valuable resources from private to public use, and with taxation serving to limit that transfer. Government was now a lord of the manor with responsibility for maintaining that manor in a good state through its fiscal and other policies.

For Lerner’s extension of the Keynesian message, the budget was the central instrument of government’s management of the economic system. No longer was the budget something to be balanced in normal times. To the contrary, the budget was a type of balance wheel that would be tilted toward deficit or surplus, depending on what was necessary to maintain stability within the entire economy. Should a recession hit, government would offset the fall in private spending by increasing public spending. And should prices start rising, government would lower the excessive private spending by increasing taxation. In any case, the state of a government’s budget would now be set according to the general state of the economy, with deficits being created when private spending fell and with surpluses being created when inflation began.

Economic guidance in this Keynesian schema was encapsulated by the income-expenditure theory of aggregate demand. This theory started from the accounting identity between income and expenditure. In any transaction, what is income for one person is expenditure for the other party to the transaction. The Keynesian scheme aggregated all transactions within a national economy and described the resulting magnitude as national income or output. A common rendition of this framework is described by the familiar equation \( Y = C + I + G \). By this equation, \( Y \) denotes aggregate...
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income, C aggregate consumption, I aggregate investment and G government spending. A symmetrical treatment could be approached from the side of expenditure. In any case, income is identically equal to expenditure; so one formulation is as useful as the other.²

The Keynesian equational framework provided a readily intelligible illustration of how a government could influence aggregate economic performance by manipulating the state of its budget. The terms C and I pertain the market-based portion of the aggregate economy. Suppose one posits a sudden decline of private spending through a decline in investment spending on capital goods. This decline would depress aggregate income, though that decline could be offset within the Keynesian framework by a well-timed increase in public spending denoted by G. Indeed, I and G could move in an offsetting manner, thereby keeping aggregate spending unchanged. For this to happen, it would be necessary to finance that added spending by increasing the stock of money in the economy and not by increasing taxes, which would reduce private income and spending.

Long ago, this Keynesian story appeared in the textbooks. It no longer does, as it has been replaced by more complex formulations. Yet the contemporary formulations do not challenge the central core of the income-expenditure framework. They may obscure the plain core of that framework, but they do not deny it. Nor do they circumvent the stronghold the framework has on popular discussion and controversy. For instance, declines in aggregate economic activity, whether measured by increases in unemployment or by falls in output, invariably fuel proposals for increased public spending. This reflects the income-expenditure theory pure and simple, regardless of how it is articulated in the professional literature. This situation is illustrated nicely by responses to the so-called crisis of 2008. Politicians, central bankers, the financial press and ordinary people automatically think of government acting as a balance wheel that can be used to offset perceived declines in private economic activity. Left almost entirely out of play is any recognition of the possibility that a contemporary decline in private economic activity is a product of preceding governmental actions that injected turbulence into economic relationships. This alternative possibility would open into a different theory of economic activity at the systems level.

We should also note that economists have invented many versions of Keynes since his death in 1946. This situation is easy to understand, as Keynes worked with different frameworks at the same time. Most of the General Theory supports an income-expenditure framework. But not all of it does. Some of it gives much attention to uncertainty, as further illustrated by Keynes (1937). In this respect, such economists as Robert Clower and Axel Leijonhufvud (1975) and George Shackle (1974) treat Keynes...
as a theorist whose vision of the economic process is grounded in uncertainty. While this vision has much of value, as Wagner (2012b) explains, it is wholly disconnected from any version of an income-expenditure theory. In this respect, Leland Yeager (1973) chides those economists as hiding their own theoretical creativity behind a Keynesian facade. This is a point of contention that we do not pursue here because this book’s object of interest is political economy and not macroeconomic theory. We treat macroeconomics only to the extent that it is relevant for our analysis of political economy. Despite such theoretical controversy, it is doubtlessly clear that the preponderant policy response to any reduction in private economic activity is an increase in public activity. To treat political activity as a balance wheel to offset changes in private activity is overwhelmingly at work in contemporary political economy. The contrary, classical theoretical formulation shows the image of the balance wheel to be mythical and not real, and will concern us here only to the extent it is relevant for our analysis of democratic political economy. In this regard, we do maintain that the image of the balance wheel reflects the hold of myth and not the power of logic and observation.

1.3 DISTINGUISHING MYTH AND REALITY IN MACRO THINKING

Most economists deny that macroeconomics reflects more mythical than realistic thinking. It is surely our burden to explain our reversal of this common belief. How do we distinguish mythical from realistic thinking? There is a simple heuristic for doing so which resides in the distinction between postulating a condition and generating it. Standard fiscal policy claims that an increase in political spending will increase aggregate output. Is this claim mythical or real? Within the aggregative framework of the income-expenditure theory it is mythical. What makes it mythical is that the theory contains no explanation grounded in individual action that is able to generate the observed result. Aggregate variables are derivative and not primitive variables. They are derived from other, primitive variables that pertain to micro-level interactions. For a macro theory to reflect reality rather than reflecting myth, it is necessary to be able to generate macro variables from micro interactions.

In some respects, the relationship we have sketched between micro and macro and whether macro claims are mythical or real is related to the research program known as micro foundations for macro, which took shape in 1970. Unfortunately, that program proceeded by replacing one myth with another (Kirman, 1992). It did this by treating economic
observations as pertaining to a single person denoted as a representative agent. In this manner, the only difference between a stylized Robinson Crusoe and a social economy of millions or billions of people is a simple matter of dividing aggregate statistics by the number of people in the economy to create a representative agent. Through this theoretical reduction, a national economy is reduced to a single individual and with that individual then analyzed in terms of a simple theory of choice rather than a complex theory of institutionally governed interaction.

For a macro theory to be realistic and not mythical, it is necessary that that theory be able to generate macro-level observations from micro-level interactions. In this regard, macro phenomena reflect a higher level of complexity than do micro phenomena. The relationship of micro to macro is one of parts-to-whole (Wagner, 2012b). Macro variables are thus inherently more complex than micro variables. If a billiard table contains a cue ball and an object ball, it is simple to explain the relationship between the cue ball's motion and the subsequent motion of the object ball. One cannot make the same claim about striking a cue ball into a rack of 15 balls because the individual balls will create complex patterns of interaction as they bounce off one another.

Billiard balls are inanimate objects, and so can be modeled according to the principles of physics. Billiard balls do not have minds of their own, but people do. The existence of minds makes a huge difference to bridging the gap between micro and macro levels of action and theory. People can talk back as it were to the actions of political officers, and in doing so inject new information into the social processes that the macro theory envisions as being under political control. To escape mysticism in social theory, it is necessary to model people and the situations they face and actions they take in ways that conform to what we know about human knowledge and capacity. Moving from myth to reality in theoretical formulation can surely be accomplished, but it is necessary to be wary of embracing mythology before this can be done.

Let's consider briefly a few of the pitfalls that lie along the macro path from myth to reality, and do so with reference to the income-expenditure framework. First, in describing how a fall in private spending can be offset by an increase in political spending, the analysis is set in a world of pure algebra. The theorist is given a problem in algebra, and is asked to solve how much G must be increased to offset a given fall in I in the income-expenditure equation. This imagined world is pure fantasy. To escape fantasy, it is necessary to explain how reality can reasonably and plausibly be reduced to the income-expenditure framework. Macro theorists have not accomplished that reduction. In this respect, the representative agent formulation evades the problem rather than resolving it.
Second, the operation of time must be taken into explicit account because all human action occupies time. This moves us out of the realm of simple algebra; however, movement into a realm of subscripted algebra would not represent improvement because the use of subscripts to represent time evades the problems that time creates for economic interaction. To use subscripted variables implies that next year’s actions are known today, which is to invoke yet another point of mythology. In reality, next year’s actions will not be known until next year when people undertake their chosen actions. Furthermore, those actions will not be entered into aggregate economic observations without allowing for a lapse of time between the action and its entry into the tables of data that become the material of aggregate accounting.

Third, an economy is an ecology of entities and not a single entity. This simple difference between an entity and an ecology of entities means that aggregate economic variables are not reasonably constructed through simple addition over their individual counterparts. Those interactions generate emergent phenomena that pertain to communities of Crusoes but not to individual Crusoes. One thousand islands, each of which has a Robinson Crusoe living there in isolation, will not be a simple scalar multiple of 1,000 people living together on the same island. Individual Robinson Crusoes do not operate with property rights, do not quarrel with one another and do not organize into business firms and governmental bodies. In other words, an isolated Robinson Crusoe exhibits few of the recognizable features of contemporary life. Stated differently, an ecology is not reasonably represented as a parade. A superior image is that of a crowd of spectators leaving a stadium. Both the crowd and the parade are orderly social configurations, but of dramatically different type with different sources of orderliness. We raise these problematics of macro theory here not to address them but to give them some presence in our effort to construct a political economy that has a realistic rather than a mythical orientation. To do this requires that we move analytically in the direction of explaining how macro-level observations emerge out of micro-level interactions, and with those interactions pertaining to pedestrian crowds and not to parades.

1.4 TAXATION, PUBLIC DEBT AND FISCAL POLICY

According to the income-expenditure model, a decline in private spending can be offset by an increase in political spending. This possibility requires that political spending be financed by borrowing in some fashion and not by taxation. If the increased spending were financed by taxation,
the increase in political spending would be offset by a decrease in private spending due to the increased taxation. An expansionary fiscal policy requires a base of public debt to do its work because the purchase of public debt by central banks is the modern method by which the stock of money is increased. The postulated decline in private spending means that private citizens are spending less than previously. This decline means in turn that people have increased their holdings of money. In monetarist language this means an increased demand for money by private citizens. Whichever language is used, the image of government acting as a balance wheel to the private economy is more mythology than a real facet of economic experience.

The mythical quality of fiscal policy becomes apparent once it is realized that time and human action is continuous and not segmented. To illustrate the distinction, suppose we think in terms of a ten-year slice of history, starting today and running forward. One scheme of thought could separate this period into ten annual pieces, and treat each year as independent points of observation. In this instance, the income-expenditure algebra would pertain to ten distinct intervals. This setting pertains, of course, to a world of pure fantasy because people act through time in carrying out their plans. In consequence, a change in taxation today will influence action through a sequence of periods.

In this respect, an increase in public debt today implies increased taxation in future years to amortize the debt. Those projected future tax increases are anticipated by people today, which leads them to modify their present actions. As one instance of such modification, people might reduce their current spending to enable them better to finance the future tax increases that the present increase in public debt entails. In his book from 1817 titled *On the Principles of Political Economy and Taxation*, David Ricardo articulated his principle of the equivalence of taxation and public debt. In light of this equivalence, the idea of fiscal policy is a myth and not a feature of reality. A government that borrows to increase its spending is thus not increasing the volume of spending within the economy. Rather it is only changing the composition of spending. Politically directed spending rises by virtue of debt finance, but that debt also implies increased taxation in future years. People with some modicum of providence in their conduct will incorporate into their present conduct a belief that taxes will rise in future years. This anticipated increase in future tax burdens will induce people to change their current actions to better accommodate the higher tax regime that is in the offing. For instance, someone who had been planning to pay a child’s college tuition starting in five years might increase personal saving starting now to make such tuition payment feasible in light of higher future taxation.
In recent years, Robert Barro (1974, 1979a) has been in the forefront of efforts to make Ricardo’s proposition a centerpiece for macroeconomic theorizing, and with Seater (1993) providing a valuable survey. Ricardo stated his equivalence proposition in terms of a representative individual who can choose between paying a tax of $1,000 now or paying a set of $100 taxes in perpetuity when the rate of interest is 10 percent. With the interest rate being 10 percent, a perpetual stream of 100 annual payments is equivalent in present value terms to a one-time payment of $1,000. It is straightforward to imagine that the set of perpetual annual payments represents interest payments on a loan. Rather than paying a tax of $1,000 now, an individual could borrow $1,000 that would call for annual interest payments of $100 in perpetuity. If the relevant rate of interest were 10 percent, this set of perpetual payments would be equivalent to the $1,000 tax. Among other things, the Ricardian proposition means that public debt does not enable governments to do anything that they could not accomplish through taxation, for public debt is just a particular form of taxation. If this proposition is correct, it means that public debt cannot be used as a tool for economic stabilization, contrary to Keynesian-inspired claims about fiscal policy. For a government that wanted to increase its spending, doing it through taxation would be identical with doing it through borrowing.

It should be noted that Ricardo also advanced some grounds for thinking that an individual in this position might not regard the alternatives as equivalent. To the contrary, Ricardo argued that an individual might regard the prospect of annual payments extending indefinitely into the future as being less onerous than having to make a single payment now. An individual in this position would not regard taxation and debt as equivalent, and instead would regard borrowing as less burdensome. This possibility is commonly described as ‘debt illusion.’ Claims on behalf of illusion have been controversial among economists because such claims seem to contradict the presumptions about rationality to which most economists subscribe. To the extent debt illusion is present, Ricardo’s equivalence proposition is broken and people will act differently if they can borrow than if they must pay taxes, provided they perceive borrowing as being less costly than taxation.

With public debt treated as a macro magnitude, it would seem as though the ability of a government to use budget deficits and surpluses as tools to promote economic stability depends on the extent to which debt illusion is present within a population. The more fully people exhibit debt illusion, the stronger will be the ability of a government to use fiscal policy to influence the volume of spending within an economy. At this point many economists would seem to face a dilemma. Many of them, probably most of them,
believe that economic theories should be based on claims that individuals are rational. Many of them also believe that governments should use its budgetary powers to promote economic stability. Yet one cannot hold both beliefs at the same time. It is possible to theorize about public debt in a manner that debt arises through institutionally governed processes of interaction among individuals. This approach to public debt was sketched by Antonio de Viti de Marco (1936), and we carry that approach forward in this book, though while also incorporating conceptual formulations that were not available when de Viti set forth his approach to collective activity.

1.5 THE ILLUSORY COGENCY OF DEBT-ILLUSION CLAIMS

Within the framework of orthodox macroeconomic theory, to claim that a budget deficit can increase aggregate spending entails the presumption that people are subject to debt illusion. If they are afflicted by debt illusion, people will treat the substitution of borrowing for taxing as an increase in their net worth. What makes this proposition seem sensible, indeed inescapable for macro theorists, is the presumption that a macro economy is an economizing unit in its own right and not simply an aggregation over a set of economizing agents. The fiction of the representative agent seeks to cover over the otherwise embarrassing quality of this analytical construction. Our point is that public debt is not a result of a single transaction made by an economizing agent. To the contrary, it is an emergent quality of interactions among numerous economizing agents. This difference in analytical orientations matters hugely for notions of debt illusion, as well as for aggregate phenomena more generally.

With respect to debt illusion, it is possible to imagine data that would seem to show that some people have debt illusion while others do not. One could imagine an experiment where a set of people are assigned some particular liability and are given the option of discharging it now or over some duration where the amount discharged is of equivalent present value. In this setting it would be plausible to think that some people would choose to discharge the liability now while others chose to discharge it over some interval of time with interest. One could even invoke some rudimentary public choice theory to suggest that the collective outcome in this setting depends on the number of people who exhibit debt illusion relative to the total population. One simple model of majority voting holds that collective outcomes are determined by the preference that is median within the collectivity. In this case, whether a budget deficit increased aggregate spending would depend on whether the median voter possessed debt illusion.
This fuss about debt illusion, however, is a response to an imaginary setting that has nothing to do with reality. It is an illusion that is created by the aggregation of individual data, and with theorists then seeking to develop models to explain that aggregate data without generating that data through interaction among economizing agents. In other words, the substance that forms the subject of an economic theory depends upon and is not separate from the methods that theorists use to assemble their theories. In this regard, Friedrich Nietzsche made famous the expression of the need to look through multiple analytical windows to acquire a clearer apprehension of complex phenomena. We note simply that the substance that emerges from some line of analysis depends on the method used to analyse that material. Method and substance are interdependent, despite many presumptions that they are independent, in which case there would be one unique method from which truth follows from proper analytical procedure. This most certainly is not the case. In large measure in the social sciences, what one sees depends on the method one uses. There is a well-recited joke about an economist caught looking under a lamppost for his car key. When asked if he was sure that was where he dropped his key, he answered that no it was not, but no light was shining where he dropped it. The joke always brings chuckles at meetings of economists, undoubtedly because it speaks an uneasy truth. A particular analytical technique or data set might be easy to work with even if it has but modest relevance for any questions of interest. To address questions of interest, however, would require construction of a different analytical framework. A model that is easily tractable might generate answers to questions of relatively little interest or value, while addressing questions of high interest or value might require willingness to work with a lower level of tractability.

For instance, the theory of perfect competition is highly tractable and easy to work with. This is the world of universal price-taking where all prices equal their marginal costs of production. All firms earn just normal rates of profit, which is the lowest rate necessary to attract owners of capital to invest in the firm. The law of one price holds everywhere, and it is impossible to inject any change into the economic system without leaving at least one person worse off than before the change. This is a scheme of thought that has proven useful in generating a wide range of observations that fit reasonably well with observations found in real experience.

This theory, however, is an incomplete theory and is thus inadequate as a stand-alone theory. If price-taking is a universal phenomenon, it is impossible for prices ever to change. And yet they change all the time. To explain the continual changing of prices requires that price-taking be only partial and not universal. But if price-taking is only partial, the law of one price cannot hold. Hence, prices cannot universally equal marginal costs, and
it might be possible for there to be changes that make some people better off without leaving other people worse off. To analyse the entrepreneurial injection of economic change into society requires a different analytical schema than the theory of competitive equilibrium (Kirzner, 1973, 1985).

It is the same with public debt. Ricardian equivalence is a close cousin to the theory of competitive equilibrium. In contrast, de Viti's theory of public debt is an analytical cousin to Joseph Schumpeter's (1934) theory of change through entrepreneurial action. De Viti's theoretical orientation proceeds in a bottom-up fashion. It characterizes a macro economy as a parts-to-whole relationship. The individual parts within a social system initiate actions, with those actions eventually resolving into some picture of the whole. The parts are the primitive carriers of action; the whole is derivative from those individual actions and is not reducible to some single action. This difference in theoretical orientations ramifies throughout the material of political economy and public debt.

1.6 DEBT, CREDIT MARKETS AND AGGREGATION FALLACIES

There is nothing wrong with the arithmetic of Ricardian equivalence, provided it is applied to a relevant entity. Ricardian equivalence applies directly to individuals who act within a legal regime of private property. It pertains to all transactions organized through privately ordered credit markets. Two people may each pay $40,000 to buy a car. One of them might pay cash, which is comparable to taxation within the framework of Ricardian equivalence. The other person might borrow and amortize the loan over several years. It would not, however, be reasonable or necessary to describe this second person as suffering from debt illusion. The arithmetic of Ricardian equivalence can be embraced by someone who chooses all the same to borrow to buy a car rather than paying cash. Such a person can reasonably spread out paying for the car over a number of years without in any way thinking that making installment payments increases his net worth.

While Ricardian equivalence pertains to individual entities, it does not pertain to the aggregate of all such entities. To make this use of Ricardian equivalence is to make a category mistake in treating a collection of individuals as if it were a single individual. To do this is to embrace the fallacy of the representative individual, which haunts and warps much macroeconomic theorizing. The arithmetic of Ricardian equivalence is a derivative and not a primitive truth, in the sense that aggregate variables are derived from the primitive variables of economic interaction among
market participants. From the perspective of macroeconomic theory, public debt is of no consequence because we do owe it to ourselves if we treat a nation as a single economic entity. Suppose 100 people each buy cars valued at $40,000 from one of ten car dealers who finance those purchases by acting as lenders. No net wealth is created by these transactions. The lenders have made it possible for the borrowers to attain a temporal pattern of consumption that they value more highly than they could have attained had they been unable to borrow. The credit market is a nexus of transactions between borrowers and lenders that enables each participant to attain a state of affairs they prefer to the alternative without a credit market.

It would always be possible to perform the statistical exercise of aggregating those 100 transactions and call the resulting aggregate ‘automobile debt.’ The aggregate of this debt would be $4 million. When viewed from the standpoint of borrowers, the debt aggregates to $4 million. When viewed from the standpoint of lenders, it likewise aggregates to $4 million. If the accounts of the individual borrowers and lenders are fused so as to create a single entity, the debt would dissolve. It would become a pile of meaningless paper or computer entries. The lenders would have among them 100 notes from the buyers, each valued at $40,000. Each of the borrowers would hold an accounts payable for $40,000. But with the borrowers and lenders fused into a single unit, nothing is lost by simply burning this paper.

This act of fusion creates a communistic society, and it is well understood that such societies cannot operate in any kind of flourishing manner. Automobile debt cannot be socialized while maintaining reasonable flourishing. To understand this condition, imagine what would happen if automobile debt were socialized. In this setting, whatever car someone bought, the debt would be socialized and incorporated into the government’s tax bill. Someone who might have bought a car valued at $40,000 when he had to pay for it himself might buy one valued at $120,000 if the cost of the car were socialized. In this situation, the cost to the individual buyer is not the added $80,000, but is only $80,000/n, where n denotes the number of car buyers who comprise the society. If n = 100, the marginal cost of buying the $120,000 car over the $40,000 car is only $800.

There is good reason why flourishing societies are organized around the principles of private property and freedom of contract. To fuse the accounts of individuals into a single account is to create a communist society. The first impulse under this type of institutional arrangement is to buy Lamborghiniis and not Fords. But this cannot be done because real constraints on resources do exist all the same, so a further set of problems arise in determining who gets to drive Lamborghiniis and who must drive
Fords. The society does not have the capacity to enable everyone to secure Lamborghinis. A few people will be able to secure Lamborghinis, but not everyone, not by any means.

The equivalence principle clashes with some central principles and precepts of the use of government budgets to promote economic stabilization through fiscal policy. Those precepts hold that governments can stimulate a sluggish economy by running budget deficits, while also being able to cool an overheated economy by running budget surpluses. In contrast, Ricardo’s equivalence principle explains that fiscal policy is an illusion. Budget deficits cannot stimulate a sluggish economy because the deficits are simply a different form of increased taxation. Nor can surpluses cool an overheated economy because the surplus is a form of tax reduction.

Public debt in recent times has been dominated by controversies over the ability of debt to influence aggregate economic conditions. These controversies have generated a good deal of econometric work on the extent to which the evidence is consistent with Ricardian equivalence. To the contrary, we think this concentration on the econometrics of Ricardian equivalence places the proverbial cart before the horse in its taking for granted that public debt can be reasonably apprehended through the concepts and categories of macroeconomic theory. In contrast, this book explains why public debt cannot be reasonably apprehended in this manner, and can only be apprehended satisfactorily through the concepts and categories of microeconomics and political economy.

To treat public debt within democratic regimes in the same fashion that the debts of monarchs were once treated is to create a myth of aggregation. Through aggregation, the individuals who comprise a governmental entity are effectively fused into a single entity. The destructive effects of this mythology are something to which we will return throughout this book. In short, a national economy is not a meaningful economic unit. The monarchs of old were meaningful economic units, in that a monarch’s accounts were separate and distinct from those of his subjects. On occasions, monarchs would use their powers to prey upon the accounts of wealthy subjects, but there was no fusing of the accounts, either in practice or in concept.

The primary originator of useful thinking in this respect is the Italian economist de Viti, whose analytical work spanned the period 1888 to 1939. More particularly, de Viti (1888) was a seminal work wherein he set forth a framework for exploring the theoretical character of public finance. This approach stood in stark contrast to nearly all scholarship in public finance at that time, and still today for that matter. De Viti sought to develop public finance as a scientific or explanatory activity, in contrast to the common effort to treat public finance as a normative effort to enable
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economists to participate in political and public affairs. De Viti revised his early work several times over his career until 1939, and with his penultimate 1934 version being translated into English in 1936. Throughout these various versions, de Viti maintained his focus on treating fiscal phenomena as objects to be explained by the same analytical principles that economists used to explain ordinary economic activities. To be sure, de Viti recognized that fiscal phenomena emerged within parliamentary assemblies and not through market processes. In this regard, de Viti served 20 years as a member of the Italian parliament where he recognized that the universal principle of economizing action must be adapted to relevant institutional differences between parliaments and markets.

Within the framework of market interaction ordered by the institutional principles of property and contract, privately owned corporations often issue debt to finance their activities. Indeed, there exists an economic literature that focuses on the comparative merits of issuing stock and issuing debt as means of financing their activities. While this book is not about corporate finance, it is worth noting that the economic literature pertaining to the organization and financing of corporations has sought to understand and explain the pattern of financial choices that corporate officials make. We seek to do the same thing with respect to public debt, and acknowledge that de Viti took some initial steps in this direction, which we seek to continue and amplify.

De Viti de Marco had no quarrel with the arithmetic of Ricardian equivalence that is applied to a closed entity where individual accounts are fused into a single account. De Viti accepted fully the proposition that to borrow instead of taxing is to replace present taxation with future taxation of equivalent present value. This is a proposition of double entry accounting applied to the aggregate accounts of the individuals within a closed economy. For de Viti, however, equivalence was just a point of departure and not an analytical destination. Ricardian equivalence held nothing of interest as a point of analytical destination. To develop material of interest required getting beneath Ricardian equivalence to the individual transactions that comprised the aggregate.

1.7 MYTH, REALITY AND THE POLITICAL ECONOMY OF MACRO VOLATILITY

Our distinctions between myth and reality as these pertain to macro theory and political economy can be illustrated readily by a set of conceptual claims that run contrary to the standard macro-theoretic claims on behalf of fiscal policy. In this respect, Herschel Grossman (1975) portrayed the
Tobin presumes that the historical record of monetary and fiscal policy involves a series of avoidable mistakes, rather than the predictable consequences of personal preferences and capabilities working through the existing constitutional process by which policy is formulated. Specifically, Tobin shows no interest in analysis of either the economically motivated behavior of private individuals in the political process or the behavior of the government agents who make and administer policy (pp. 845–6).

Tobin embraced orthodox macro thinking and fiscal policy, wherein politics was treated as operating with a single-minded dedication to promoting some notion of public good as conveyed by the promotion of policies to reduce economic volatility. In some cases there may be failures of policy, but this will be a matter of mistake in the face of the inherent complexity of the task and not a systematic consequence of the insertion of political imperatives into economic processes. The alternative line of analysis which explicitly seeks to pursue a realistic scheme of analysis leads to recognition that the internal imperatives of political conduct operates more fully to cause volatility than to smooth it.

Any topic of examination must confront the two-sided character of any analytical model: on the one hand it allows us to explore more fully our object of interest; on the other hand, it deflects our vision away from the insights that an alternative model might offer. In other words, there is a bidirectional relationship between method and substance. From one direction, what we see in the world is assisted by the methods we use. But from the other direction, the methods we use influence what we see and also what we do not see. Models help us to see by concentrating our attention, but that very concentration will blur our vision if the model misdirects our attention.

This situation plays out trenchantly in theorizing about the relationship between politics and macro stability. In brief, there is good reason to think that extant conceptual frameworks have obscured at least as much of the phenomena in question as they have revealed. What has resulted is a kind of methodological neutering of the analytical possibilities that were raised in some of the original literature on politically induced business cycles (Nordhaus, 1975; Tufte, 1978). That literature started from recognition that the orthodox counsel of fiscal policy ran contrary to the imperatives of political conduct: the use of fiscal policy to promote macro stability could run contrary to the opportunity to use fiscal policy to enhance electoral success. The central idea behind this literature is that whether political processes promote variability or stability depends on the relative pay-offs...
from different policies to those who conduct the affairs of state. The initial literature largely developed under the presumption that states have the competence to promote stability, but might choose instead to promote variability because doing so offers political gain. The starting point for such PBC theorizing was the presumption that an incumbent’s electoral success is influenced by macroeconomic conditions as measured by rates of inflation, unemployment and growth prior to an election.

Figure 1.1 can be used to illustrate the various threads of argument of PBC models. There are two components to Figure 1.1, and these correspond to preferences and opportunities within a framework of constrained optimization. Preferences are expressed by votes or, alternatively, by measures of popularity. The quite reasonable presumption is that politicians would rather win an election than lose it. The PBC literature presumes, based on econometric evidence as well as on intuition, that increases in inflation and unemployment each exert negative effects on the popularity of the governing party. These presumptions are represented in Figure 1.1 by the iso-vote functions described by $v_1$ and $v_2$, and with the value of those functions increasing toward the origin: if $v_2$ denotes, say, 48:52 odds of electoral success for the incumbent party, $v_1$ might denote 52:48 odds.

The opportunities facing an incumbent party are described by a trade-off between inflation and unemployment. Figure 1.1 shows an exploitable relationship in the short run, as illustrated by $p_1$ and $p_2$, but not in the long run, as illustrated by the natural rate claim, $P$. Contained within this description of opportunities is the presumption that an incumbent party can use its powers to enhance its electoral prospects by acting on those opportunities. In Figure 1.1, the pre-election position is denoted by $a$, #
which lies on \( v_2 \). Under the assumption that there is an exploitable Phillips relationship denoted by \( p_1 \), the incumbent party is presumed to use its policy power to shift the economy to \( b \), where it faces more favorable odds of electoral success described by \( v_1 \). Under the assumption that there is no permanently exploitable Phillips relationship, the economy subsequently shifts to \( c \), where Figure 1.1 shows restoration of the pre-election odds of success at the next election; moreover, a third iso-vote could be added to Figure 1.1 to illustrate lowered odds of success.

Examination of the sequence \( a-b-c-d \) shows an election-inspired cycle. Starting from zero inflation and full employment at the natural rate, inflation is used to increase employment so as to increase electoral prospects. If the incumbent has good timing, and also the powers of policy presumed by the model, the reversion to the natural rate of employment will happen after the election. At this point the incumbent party faces a choice. Down one path it can continue with the permanent inflation and try yet another inflationary episode before the next election. Following this path, however, will generate decreasing political oomph from inflation. Down the other path, the incumbent runs a deflationary policy that lowers its popularity as shown by the move to \( d \). If this is done sufficiently far in advance of the next election, the economy will have returned to \( a \), and the incumbent party will be poised to repeat the policy cycle.

1.8 METHODOLOGICAL NEUTERING OF PBC IDEAS

The original PBC construction was developed to show a possible disparity between some normative prescriptions of activist macro policy and the behavioral incentives contained within political processes, as illustrated by the aforementioned dichotomy that Grossman sketched. The original PBC formulations were based on a simple Keynesianesque formulation of the income-expenditure type, which likens an economy to a balloon and envisions government acting to inflate or deflate the balloon. Those formulations were also based on adaptive expectations, meaning that people look in their rear-view mirror to form judgments about where they are going.

Roughly coincident with the development of PBC theorizing came two developments in macro theory that neutered the PBC formulations, provided, of course, that these macro-theoretic developments were embraced. These developments were the replacement of adaptive expectations with rational expectations and a wholehearted embrace of the presumption that our observations were always of equilibrium states. These alternative presumptions rendered nonsensical the PBC formulations. If the PBC
is modeled as a repeated game between a representative politician and a representative citizen, the actions described by the PBC violate ordinary canons of rationality, unless rapid and significant loss of memory is assumed to plague citizens. Furthermore, the reduction of complex polities to a representative politician and complex economies to a representative agent or citizen is rendered sensible by the presumption of general equilibrium, but would not be sensible otherwise.

The idea that political processes might allow the opportunistic pursuit of gain to generate macro-level variability was excluded by methodological construction of the analytical framework. What replaced the notion of opportunistic cycles was the notion of partisan cycles, as exemplified by Alesina and Roubini (1997), Drazen (2000) and Besley (2006). When electoral competition, general equilibrium and rationality in expectation are combined, the possibility of partisan cycles is all that is left standing from the original notion of political business cycles.

Partisan cycles are anemic relative to opportunistic cycles. They are founded on the presumption that politicians are indifferent to opportunity and care only about some pristine purity of some pre-political objective function that they seek to enact through political action. In competition between two such politicians, say with 50–50 odds, the actual, post-election policy will necessarily impose shocks to the expectations that were held prior to the election. For example, people might generally expect one party to operate with 8 percent inflation and the other to operate with zero inflation. Prior to the election, a rational expectation would require economic calculation based on a 4 percent rate of inflation. After the election, one or the other rate of inflation will prevail and everyone’s prior expectation will have been shocked. Hence, elections can serve as sources of cycles. Those cycles, however, are inherent in the electoral process in a setting where politicians act with purity and not opportunistically. What we have is a methodological hard core that renders the partisan framework the only sensible formulation of the relation between politics and macro variability. Opportunistic cycles are neutered by the methodological framework, leaving partisan cycles as the only sensible option within that framework.

As a metaphysical proposition about human nature, the animating idea behind opportunistic cycles seems reasonable. After all, it is the same idea that animates economic theory generally, which is that as biological organisms we have partiality to our own projects and will use the means at our disposal to advance those projects. Yet the hard core of partisan-type theorizing eliminates this possibility, though we say this not as an act criticism per se because any analytical framework rests upon some such a hard core, as Lakatos (1978) and Latsis (1976) explain. Several conceptual elements comprise this hard core, and act together to neuter the prospect that
opportunistic political conduct can generate macro-level variability. Stated in obverse manner, opportunistic theories of macro variability require an alternative analytical framework to give them room to breathe.

1.9 AN ALTERNATIVE FRAMEWORK FOR PBC CONCEPTUALIZATION

The macro framework conveyed by Figure 1.1 cannot bear the analytical weight necessary to carry forward the claims about opportunistically generated variability. An alternative theoretical framework is required to carry forward those ideas. Here we will explore some of the contours of an alternative line of examination, which we will examine more fully in Chapter 2. These elements pertain to aspects of the contrast between what Wagner (2010) characterizes as neo-Walrasian or comparative static and neo-Mengerian or emergent-dynamic hard cores that constitute distinct research programs.

To start, macro variables are not direct objects of action but rather are statistical traces of direct objects of action. To claim otherwise is to assert that a politician who desires to spend a trillion dollars to shift electoral prospects as described by Figure 1.1 would be indifferent to the composition of that spending. Once it is recognized that people are not indifferent to the composition of spending, the use of aggregate magnitudes as providing a sufficient basis for theorizing about politics and macro variability must be rejected. Only people act, and the macro aggregates are just statistical recordings of such action. Something like Figure 1.1 might be a useful summary of some observations, much as illustrated by that statement that a picture is worth a thousand words. But the action on which Figure 1.1 is based is not captured by Figure 1.1 but rather takes place below Figure 1.1, so to speak, as we shall elaborate in Chapter 2.

The scene depicted by Figure 1.1 emerges out of some micro structure of relationships that is not contained within Figure 1.1. With respect to emergent-style theorizing, Figure 1.1 supervenes on some underlying network of interaction. Beneath Figure 1.1 should reside some micro model of political-economic interaction that under some circumstances might aggregate into Figure 1.1. Analytically speaking, it is impossible to infer the features of that micro structure from the macro portrait. It is, however, possible to generate a macro pattern out of some particular micro structure.

Consider the movement from a to b in Figure 1.1. The incumbent party is facing a tough election, say as described by 50–50 odds of success, and can use its power to spend some serious money. According to Figure 1.1, the incumbent should be indifferent as to how that money is spent. But
anyone not blinded by such models will know better. For instance, suppose the parliament contains 99 seats. Further suppose that 33 of those seats are considered safe, 33 are considered impossible to secure and 33 are regarded as tightly contested. The neutral program would distribute the money equally among the districts, say $100 million in each. This program would have less oomph than a discriminatory distribution that placed most of the money in the tightly contested districts.4

The macro-level portrait shown in Figure 1.1 is erected on some kind of micro-level structure of considerable complexity, and each such structure would play out in different fashion, and such structure would have to be incorporated into any exploration of the relation between politics and business cycles. Figure 1.2, based on Wagner (2012b), illustrates what we have in mind. The top part carries forward the macro framework of Figure 1.1 in a standard AD-AS form. The bottom part, and the connection between the two parts, illustrates that the macro level supervenes on or emerges out of interaction at the micro level. Macro-level outcomes

![Diagram showing macro-micro supervenience](image-url)
are not directly accessible through any causal relationship among macro variables, for macro-level variables emerge through interaction at the micro level. With micro-level relationships constituted in networked fashion, macro-level observations will vary with changes in the structure of network relationships.

Structure matters greatly for network-based models, as Potts (2000) and Barabási (2002) explain. The macro observations depicted in the upper portion of Figure 1.2 emerge out of interaction among the micro entities depicted in the lower portion of Figure 1.2. There is an order of theoretical precedence that runs from the micro level where action occurs to the macro level where the results of action are summarized. The scheme of thought depicted by Figure 1.1 eliminates the networked micro structure from which macro-level projections are constructed, leaving those macro projections reminiscent of D. H. Robertson’s summary of J. M. Keynes’s liquidity preference theory: ‘a grin without a cat’ (Robertson, 1966, p. 174). Macro portraits are drawn through micro-level interaction, which means that a macro-level observation can be considered truly to have been explained only if it is generated through micro-level interaction, as the papers collected in Joshua Epstein (2006) explain. Where partisan cycles seek to develop an alternative field-based statement that seems less embarrassing as compared with early PBC models, the path to sensible understanding surely resides in connecting the micro level of action with the macro-level summarization, as Potts and Morrison (2007) illustrate.

The aforementioned connection between micro and macro levels is not a sensible thing to deal with if one presumes that all observations are of equilibrium states. The significance of an effort at connection makes sense only if the analytical focus is placed on processes of motion and development and not on states of equilibrium, particularly once it is recognized that process is the natural home of knowledge that is both incomplete and asymmetric and of competition as a ceaseless activity by which people seek to thrive in the presence of entropy (Georgescu-Roegen, 1971). This competitive process is naturally turbulent, as Wagner (2010) sketches.

Suppose we theorize about societal coordination in terms of the image of a crowd of pedestrians and not a parade. The coordination of a crowd is not as smooth as that of a parade. For a parade, all marchers are evenly spaced and march at the same pace. Hence a parade has none of the jostling and bumping that you experience in a crowd; however, when viewed from a balloon a mile high, the two configurations would resemble one another, and with the crowd being misperceived as a terribly flawed parade. Among other things, the crowd would exhibit macro-level turbulence, and in principle it would be possible to develop measures of this
turbulence, or at least some features of it. These measures would all involve phenomena that would be absent from the parade. For instance, a person wanting to exit the moving mass from the middle of that mass would have to work to the edge before leaving. This could cause some jostling that would slow down other people; moreover, the person in question might not have made it to the edge in time to take the desired exit and so might have to traverse a longer route. Such things as we have just described are forms of capital losses where plans did not work out as anticipated because the success of those plans depends also on actions taken by other participants in that nexus.

The standard literature on political business cycles reflects a presumption that polity and economy are separate entities, and with action inside each entity proceeding in sequential fashion wherein polity acts upon given data from economy. The analytical challenge is to develop alternative conceptualizations wherein economic and political action both occur simultaneously, and with each being sources for the generation of data. Here we refer to the notion of entangled political economy set forth in Wagner (2016) and applied to the recent financial crisis in Smith et al. (2011), in contrast to the orthodox notion of separated political economy as illustrated by Persson and Tabellini (2000).

When we come to political economy, we need to bring political participants into that crowd and to do so in entangled fashion where there is interaction between the participants, as against the two types of participants comprising distinct crowds. Since the analytical challenge is to model an ecology of enterprises in a setting where there are constitutive differences among the enterprises, the analogy to a crowd would seem naturally to assimilate to a model where market-based pedestrians have somewhat different rules of motion than polity-based pedestrians.

In any of several ways, these differences among entities would generate interactions that were detectably different from those among market-based entities. For instance, market-based entities have strong incentives to settle disputes without trial because they can retain the costs of the litigation that would otherwise have been necessary. It is different with a dispute between a commercial and a political entity. For a political entity there is no residual to claim. The expenses of litigation can, however, serve as a form of investment in seeking higher office. Two commercial disputants speak the same language as it were, but this claim cannot be made for disputes between commercial and political entities. Much of the orderliness of ordinary pedestrian crowds comes about from the general dislike that people have in colliding with one another, as manifested in the making of capital losses. The presence of political entities changes this setting by creating positions that gain utility by such collisions, as expressed by Jane
Jacobs’s (1992) treatment of how interaction between commercial and guardian syndromes can lead to ‘monstrous moral hybrids.’

1.10 PROBING SOME ANALYTICAL POSSIBILITIES

We shall close this chapter by sketching briefly a few analytical possibilities that come into the foreground once the hard core of a political economy centered on static equilibrium is replaced by a hard core centered on emergent dynamics. Actually, these possibilities are all variations on a common theme concerning the treatment of contract and coordination within the catallaxy denoted by entangled political economy.

Rather than coordination being postulated by presumption as a reflection of an equilibrium, coordination is something that is generated in variable degrees through interaction among participants who care little to nothing about global coordination but who care greatly about the success of their plans. Any explanation of the coordinated quality of pedestrian crowds would surely start with recognition that individual members of that crowd are seeking to be effective in action. They are not human variants of bumper cars; pedestrian crowds do not mirror demolition derbies.

An ecology of plans differs from a pedestrian crowd in that successful action within that societal ecology requires cooperative participation among other market participants. This cooperation we denote as contract (Fried, 1981). Contract connects participants by coordinating their actions over some designated period of time covered by that contract, and with relational contracting extending beyond that explicit contractual period. Complete coordination would mean that all contractual promises proved to be mutually consistent. Such complete coordination does not prevail, but orderly procedures exist for repairing the breaches of contract that accompany inconsistent or incomplete expectations among contractual partners. Most breaches of contract occur without legal action, and take the form of renegotiations of obligations and commitments previously made. In all of these activities, the desire for commercial success as calculated by profit and loss provides a common language through which coordination is secured within an inherently kaleidic world.

Contractual relationships with political entities do not work in the same manner, as Richard Epstein (1993) explores. While political entities also recognize a language of gain, that language is of a different dialect from that of profit and loss. Indeed, it might even prove to be a different language entirely, if this linguistic image were to be pursued. There are no positions of residual claimancy within political entities, at least not directly as against there being indirect positions of residual claimancy. Indeed,
Epstein's description of bargaining with the state could well be modeled by treating the political members of that crowd of pedestrians as human equivalents of bumper cars.

One facet of the absence of residual claimancy is surely a reduction in contractual durability. One longstanding principle in this respect is that no legislature can commit its successors. Historically speaking, a subsequent legislature will typically continue with most of what has been inherited, in large part because most of the membership remains the same. Still, there are no contractual commitments in the sense that govern actions among market participants. Anyone who doubts this should place social insurance programs into contractual language, with one side of the contract being promises to recipients and the other side being promises to taxpayers. An unfunded liability of something in the order of $100 trillion in the US represents the extent of the mutual misrepresentation of contractual promises. To be sure, no one states the matter this way, but the failure to do so just testifies that political entities import different operating precepts into the catallaxy. A commitment made is not maintained just because it is a commitment, nor are breaches of commitment negotiated to a mutually satisfactory conclusion due to an interest in future dealings.

One aspect of an entangled political economy concerns the pattern of connection among different types of enterprises. If political entities are analogized to the human equivalents of bumper cars, one question becomes whether those political entities are indifferent to the market entities onto which they connect or whether systematic patterns of connection seem likely to result. Connections do not just happen among enterprises, they are created. Connections between market-based firms are governed by a calculative language of anticipated profitability. But what is the language of connection between market-based and polity-based enterprises? Compare two sets of market-based enterprises. One set contains enterprises that are new and small, a number of which will become large over the coming years. The other set contains enterprises that are large and established, many of which have already seen their best days.

We can ask whether there is any good basis for thinking that political connections are more likely to form with the second set of firms. If there is some fixed cost involved in establishing a relationship, those relationships are forms of capital investment. But will that investment pay off? What would be reasonable anticipation about its rate of return? From the political side, moreover, returns must accrue during the anticipated tenure in office of the office holder because there is no cashing out, at least directly, at the expiration of legislative service. From this point of departure, it is easy enough to imagine a sequence of steps that might lead to a form of conserving bias for political action. By this we mean that entanglement...
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slows down the rate of economic change because it is biased toward established over nascent enterprises.

The PBC framework is really one of politically induced miscoordination and not cyclicity. Miscoordination might entail cyclicity, but it need not do so. There are many sources of disturbance to patterns of economic relationship, and these can vary greatly in their macro-level impact. Disturbances to money and credit are particularly noteworthy because they operate across all markets, in contrast to many other sources of disturbance that are narrower in scope. But it should not be thought that miscoordination implies cyclicity. Suppose we never observe fluctuations, at least of sufficient magnitude to be described as fluctuations as distinct from normal variability. Does this mean that miscoordination has vanished? This would be so only if miscoordination could manifest itself only in cycles. But miscoordination can manifest itself in other ways as well. Such activities as scrapping and renovating are surely examples of miscoordination. Any effort at plan revision points to miscoordination. There is no necessary reason why unemployment must accompany miscoordination, though as a practical matter the two would probably go together to some degree.

Our objects of scientific interest are not objects that we can observe directly, for our objects are constructed through theoretical construction. Those theoretical constructions might illuminate our object of interest, but they might also place it in the shadows. The reductionism of the new orthodoxy in political economy, whereby polities and economies are both reduced to point-mass entities, surely places the original concerns about the macro or systemic consequences of political–economic interaction into the analytical shadowland. What is required to escape that desolate place involves an extensive rethinking of political economy within an analytical setting that entails network-based conceptualizations grounded in notions of complexity and emergent dynamics. That analytical setting is one where macro-level observation supervenes on micro-level interaction, just as a traffic jam supervenes on interaction among the individual cars that constitute the jam (Resnick, 1994).

NOTES

1. To be sure, in pre-Keynesian times full employment pertained to a system of private ordering. Someone who did not have a job but wanted one could always find one. It might not be at a wage the person wished to receive, but a job could be secured all the same. Under modern schemes of public ordering, no reasonable notion of full employment exists any longer because numerous restrictions prevent the operation of private ordering. For one thing, people can be paid for not working, which renders involuntary unemployment a dubious notion. For another thing, numerous restrictions exist on the
ability to people to secure employment, as illustrated by minimum wage requirements as one among many restrictions.

2. We should perhaps also note that in these formulaic presentations there is typically a term at the end denoted as \((X - M)\), with \(X\) denoting exports and \(M\) denoting imports. Depending on one’s analytical purposes, one can include or ignore that term. We ignore it because it does not serve any analytical purpose for us.

3. We should perhaps note that we do not think there is any significant difference between monetarist and Keynesian formulations of the income-expenditure model that encapsulates both frameworks. They both operate wholly at the aggregate level and both posit direct relationships among aggregate variables. Our macro formulation is strikingly different, as conveyed in such works as Wagner (2012a) and Lewis and Wagner (2016).

4. This illustration is based on a parliamentary and not a presidential system. The illustration also leaves unstated how the additional expenditure is financed. It is simply asserted that the incumbent party can use its powers of office to provide the spending. At this point, the relationship between fiscal and monetary powers becomes relevant, as illustrated by Selgin and White (1999) and White (1999).