

Terzi, Andrea

Working Paper

The "Keynesian moment" in policymaking, the perils ahead, and a flow-of-funds interpretation of fiscal policy

Working Paper, No. 614

Provided in Cooperation with:

Levy Economics Institute of Bard College

Suggested Citation: Terzi, Andrea (2010) : The "Keynesian moment" in policymaking, the perils ahead, and a flow-of-funds interpretation of fiscal policy, Working Paper, No. 614, Levy Economics Institute of Bard College, Annandale-on-Hudson, NY

This Version is available at:

<http://hdl.handle.net/10419/57076>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Working Paper No. 614

The “Keynesian Moment” in Policymaking, the Perils Ahead, and a Flow-of-funds Interpretation of Fiscal Policy

by

Andrea Terzi
Franklin College Switzerland

August 2010

The Levy Economics Institute Working Paper Collection presents research in progress by Levy Institute scholars and conference participants. The purpose of the series is to disseminate ideas to and elicit comments from academics and professionals.

Levy Economics Institute of Bard College, founded in 1986, is a nonprofit, nonpartisan, independently funded research organization devoted to public service. Through scholarship and economic research it generates viable, effective public policy responses to important economic problems that profoundly affect the quality of life in the United States and abroad.

Levy Economics Institute
P.O. Box 5000
Annandale-on-Hudson, NY 12504-5000
<http://www.levyinstitute.org>

Copyright © Levy Economics Institute 2010 All rights reserved

ABSTRACT

With the global crisis, the policy stance around the world has been shaken by massive government and central bank efforts to prevent the meltdown of markets, banks, and the economy. Fiscal packages, in varied sizes, have been adopted throughout the world after years of proclaimed fiscal containment. This change in policy regime, though dubbed the “Keynesian moment,” is a “short-run fix” that reflects temporary acceptance of fiscal deficits at a time of political emergency, and contrasts with John Maynard Keynes’s long-run policy propositions. More important, it is doomed to be ineffective if the degree of tolerance of fiscal deficits is too low for full employment.

Keynes’s view that outside the gold standard fiscal policies face real, not financial, constraints is illustrated by means of a simple flow-of-funds model. This shows that government deficits do not take financial resources from the private sector, and that demand for net financial savings by the private sector can be met by a rising trade surplus at the cost of reduced consumption, or by a rising government deficit financed by the monopoly supply of central bank credit. Fiscal deficits can thus be considered functional to the objective of supplying the private sector with a provision of financial wealth sufficient to restore demand. By contrast, tax hikes and/or spending cuts aimed at reducing the public deficit lower the available savings of the private sector, and, if adopted too soon, will force the adjustment by way of a reduction of demand and standard of living.

This notion, however, is not applicable to the euro area, where constraints have been deliberately created that limit public deficits and the supply of central bank credit, thus introducing national solvency risks. This is a crucial flaw in the institutional structure of Euroland, where monetary sovereignty has been removed from all existing fiscal authorities. Absent a reassessment of its design, the euro area is facing a deflationary tendency that may further erode the economic welfare of the region.

Keywords: Government and the Monetary System; Fiscal Policy; Keynes; Euro Area

JEL Classifications: E12, E42, E62

1. INTRODUCTION

With the global crisis, the policy regime around the world has been shaken. The once acclaimed pivotal role of monetary policy, widely centered on some form of inflation targeting, has given way to massive government and central bank efforts to prevent the meltdown of markets, banks, and the economy. Fiscal packages, in varied sizes, have been adopted throughout the world after years of proclaimed fiscal deficit containment. Has this marked a “return of Keynesianism”? Does this mean that the policy regime that brought the world economy into the crisis is being deeply reconsidered?

My answer is summarized in the following two points:

- 1) The alleged “Keynesian moment” in the United States largely builds on a theoretical framework where aggregate demand problems develop in the presence of rigidities and market imperfections, while demand management policy is a short-term expedient justified by the extent and depth of the crisis. As long as this remains the paradigm of reference, government policies are considered “short-term fixes” aimed at reversing the business cycle, and are to be quickly undone as soon as the economy recovers. This prominent approach not only contrasts with Keynes’s policy prescriptions but, more importantly, is doomed to be ineffective if the degree of political tolerance for fiscal deficits is too low for full employment.
- 2) The sixteen EU countries now sharing the euro accept an institutional structure that removes monetary sovereignty from all existing fiscal authorities. This makes them less open to “Keynesian moments,” meaning that the degree of tolerance for fiscal deficits is even lower than in nations that use their own domestic currency. This has moved the euro area, absent a deep political reform of fiscal authorities, on a deflationary, and possibly implosive, path.

In order to provide evidence to support these claims, the next three sections of this paper will:

- 1) contrast the short-run character of current emergency policies with the long-run properties of policy propositions in Keynes’s economics;

- 2) discuss the consequences of fiscal actions within a simple flow-of-funds model; and
- 3) detail one crucial flaw in the institutional structure of the euro area.

2. ONE FISCAL EXPANSION DOES NOT MAKE KEYNES

While discussing the global crisis, this section does not aim to assess “the hows and whys” of the crisis that the G20, at the 2009 Pittsburgh Summit, defined as “the greatest challenge to the world economy in our generation.” Rather, it considers one single, unquestionable consequence of the disruptions of financial markets and banks: the impairment of the private sector’s balance sheets that triggered a collapse of aggregate demand. Although interpretations differ, there is broad consensus that a lack of demand caused the global recession. Yet, I contend here that action undertaken by most governments in response to the crisis only marginally reflect Keynes’s theoretical framework. If policymakers are interested in exploring alternatives to the precrisis policy regime, they should explore further.

2.1 The “Keynesian Moment”: Macroeconomics Engineers “Staring into the Abyss”

In the fall of 2008, a deadly cocktail of freefalling financial and commodity prices, frozen money markets, and plunging business orders produced the nightmare of an economy close to meltdown. Both independently, as well as through international consultations, governments were urgently considering actions aimed to first bringing the economy back from a precipice, and then facing the challenge of rebuilding confidence in the market system. In the midst of plunging incomes and demand, policymakers were on the front line, seeking effective actions to counter the mounting recession.

In a “sky is falling” climate, the U.S. administration orchestrated a gigantic rescue plan for the country’s financial system, and while the U.S. president-elect was drafting the stimulus package, a short essay by Greg Mankiw (2008) declared a return to Keynes. Mankiw was calling for plain demand management policy, and his message was straightforward: the cause of the economic downturn is insufficient aggregate demand; this condition is reversed when some event triggers a rise in demand; demand has four components; little is expected to happen to consumption, investment, or exports; this leaves the government as the demander of last resort.

The eye-opener was that this was been claimed by a Harvard economist who had dismissed the label “Keynesian” for having “outlived its usefulness,” (Mankiw 1992) and proclaimed the reincarnation of Keynesian economics in a new body of theory, leaving little, if any, room for demand management policy. In the New Keynesian view—or, after dismissing the Keynesian label, the “new neoclassical synthesis”—monetary policy is not considered effective in the long run, while fiscal policy can only be effective in stimulating demand at the cost of bearing on future generations. Yet, Mankiw concluded that if monetary policy could not stop the plunge, there would only remain Keynes’s “good short-run fix”: a government spending plan. In his view, this would only pass the burden of “unfunded promises” to the next generation and thus “may look attractive to those without children” (Keynes himself was childless).

Mankiw’s unenthusiastic recipe was consistent with his views of the dual role of “scientists” and “engineers” in macroeconomics. Apparently bewildered by the depth of a crisis that he did not believe would spontaneously mend through market adjustment, he was not seeking solutions in the “macroeconomic research of the past three decades” that “has had only minor impact on the practical analysis of monetary and fiscal policy” (Mankiw 2006: 42). Seeking solutions in the “engineering” (rather than the “science”) of macroeconomics, he had chosen a realistic demand-side explanation of the crisis and a pragmatic demand-side policy response. This entailed the unwelcome necessity of rescuing markets through public debt. To most advocates of the Obama fiscal package this was the best, and yet precarious, solution that macroeconomic engineers could devise. It seems that the feeling of staring into the abyss was pushing the (undefined) limits of debt tolerance a bit further.

This attitude was largely shared by academics and international organizations, supporting fiscal responses while warning of its possible unpleasant consequences. Reviewing the impact of crisis-related financial support operations on government balance, the IMF raised the question of “how much room does fiscal policy have to continue its supportive action,” and recommends governments “balance two opposite risks: The risk of prolonged depression and stagnation... [and] the risk of a loss of confidence in government solvency” (IMF 2009: 39–40). Making a case for a policy response in sharp contrast with the policy regime conventionally recommended in normal times was visibly problematic and adding additional uncertainty: Had demand-management policies not been discredited? Why should they work now? How long should policies be permitted to deviate from the “norm” without undermining future stability? Were

governments not miscalculating the undesired consequences? Was there any other credible alternative to avoid a prolonged depression? And is this not evidence that capitalism can only survive by periodically engaging in policies that endanger its free market foundations, in some sort of “Marx moment”?

The point here is that the precrisis policy regime had no strategy to deal promptly with a sudden and major fall of aggregate demand. By the same token, political urgency was not leaving much room (and time) to ponder alternatives, as policymakers had to stop the bleeding caused by a crisis that had created huge output and job losses. They were compelled to choose between a temporary demand management remedy and a possibly lengthy adjustment that may be politically intolerable. It is possible that behind closed doors policymakers decided to ignore the alleged “sound principles” at a time of political emergency and undertake temporary and exceptional measures outside the established paradigm.

Lack of demand, rescuing markets, and short-run stabilization policies: these are familiar Keynesian themes, yet this was primarily a “moment of political emergency,” much more than it was a “Keynesian moment” in the sense of a reassessment of the policy regime. The consensus was that fiscal discipline should, at least momentarily, be given lower priority, and it was this temporary dispensation from ordinary principles that was called “Keynesian.”

2.2 A Set of Policy Prescriptions from Keynes’s *General Theory*

John Maynard Keynes’s theoretical approach was not aimed at devising ways to soften cycles through “short-run fixes.” While this point is well-known to the Post Keynesian literature, it is worth considering concisely the breadth of Keynes’s policy approach and contrasting it with the narrow conception of a “Keynesian moment” as an emergency fiscal package seeking to repair an anomaly.

In the *General Theory*, Keynes developed the thesis that capitalism fluctuates consistently below productive capacity. His theoretical construction accounts for what he considered

the outstanding features of our actual experience—namely, that we oscillate, avoiding the gravest extremes of fluctuation in employment and in prices in both directions, round an intermediate position appreciably below full employment and appreciably above the minimum employment a decline below which would endanger life. (Keynes 1936: 254)

The cyclical nature of the expected yields from business investment, the rigidity of money wages,¹ the limited size of the multiplier, and automatic stabilizers help contain macroeconomic fluctuations within “tolerable” bounds. Keynes’s analysis was thus primarily directed at seeking ways to let the economy permanently adjust to a higher level of activity:

we must not conclude that the mean position thus determined by ‘natural’ tendencies, namely, by those tendencies which are likely to persist, failing measures expressly designed to correct them, is, therefore, established by laws of necessity. The unimpeded rule of the above conditions is a fact of observation concerning the world as it is or has been, and not a necessary principle which cannot be changed. (Keynes 1936: 254)

Ultimately, Keynes’s economics produce policy propositions that cannot be reduced to the question of approving emergency fiscal packages. Aiming at economic prosperity, Keynes’s policy goal was more ambitious: achieving full employment of existing resources was a way to care for the future generations and strengthen the liberal foundations of society. His was the opposite of the caricature of a short-run, myopic plan, violating long-run principles, driven by a cynical attitude that in the long run we will all be dead. It was about disproving the notion that a full employment society is not possible (or not desirable). It was about providing a framework for the right set of policy tools that could free the economy of the monetary constraints to full employment.

What follows is a concise summary of Keynes’s main analytical points providing support to his long-run policy vision.

On price and wage adjustment mechanisms

In Keynes’s model, letting prices and wages adjust downwards is not a remedy to restore a higher rate of employment and growth for two main reasons: expectations of further declining wages prompt a fall in the prospective yield of investment, while falling prices increase debt burdens causing insolvencies. While he claims that only a once-for-all wage cut “by decree” could have positive effects by creating an expectation of (from now on) rising wages, Keynes contends that downward flexible, sagging wages contribute to worsening the business climate.

¹ For Keynes, rigid wages help contain, not cause, output fluctuations.

Keynes concluded that there is

no ground for the belief that a flexible wage policy is capable of maintaining a state of continuous full employment—any more than for the belief that an open-market monetary policy is capable, unaided, of achieving this result. The economic system cannot be made self-adjusting along these lines. (Keynes 1936: 267)

On the gold standard and foreign trade

In Keynes's model, countries that remedy a lack of domestic demand with an export-oriented policy pursue a socially harmful strategy that makes them dependent on foreign fluctuations of demand. It means falling into the mercantilist error of pursuing an accumulation of gold as a national objective. Under the gold standard,

there was no means open to a government whereby to mitigate economic distress at home except through the competitive struggle for markets. For all measures helpful to a state of chronic or intermittent under-employment were ruled out, except measures to improve the balance of trade on income account." (Keynes 1936: 382)

Keynes explained the mercantilist practical aim as being that of increasing the stock of gold to let the rate of interest go lower. Outside the gold standard, with central banks empowered with interest rate determination, even this justification loses its appeal. While exports, taken individually, do reward business, labor, and national excellence, in a macro perspective they should always be used to provide room for imports so that a country can transform the real goods released abroad into real goods acquired from abroad. Conversely, when exports exceed imports, while individual exporters accumulate financial assets abroad, domestic residents reduce real consumption. In this way, foreign trade becomes "a desperate expedient to maintain employment at home by forcing sales on foreign markets and restricting purchases" (Keynes 1936: 382–383). The fact that such strategy requires that other countries pursue an opposite strategy (i.e., they must be willing to net import) entails that it can hardly be claimed to be a principle of soundness.

On curbing booms

One popular explanation of output and job declines is that they are the consequence of the excessive boom that preceded them. If this is true, the best action to prevent a slump is to curb “overinvestment” by timely raising the rate of interest. The question then becomes how to measure “overinvestment.” For Keynes, the most appropriate notion of over-investment is “a state of affairs where every kind of capital-goods is so abundant that there is no new investment which is expected, *even in conditions of full employment*, to earn in the course of its life more than its replacement cost” (Keynes 1936: 320–321, emphasis added). When booms turn into slumps, however, we observe a different kind of “overinvestment,” i.e., “investments which are destined to disappoint the expectations which prompted them for which there is no use in conditions of severe unemployment” (Keynes 1936: 320). Investment booms turn into slumps not because the interest rate is too low, but because some investment is misdirected or expectations are too buoyant,² in which case, and until full employment is reached, interest rates (notably, long-term rates) should be lowered before disillusion turns expectations excessively pessimistic.

In Keynes’s model, raising interest rates is a way to overcome the speculative excitement and, at the same time, stop every kind of reasonable new investment, an action that “belongs to the species of remedy which cures the disease by killing the patient” (Keynes 1936: 323). Thus, the “right remedy for the trade cycle is not to be found in abolishing booms and thus keeping us permanently in a semi-slump; but in abolishing slumps and thus keeping us permanently in a quasi-boom” (Keynes 1936: 322).

On full employment and financial stability

A most effective way to end a financial crisis and restore the ability to repay debts is to increase employment. Defaults that bring systemic damage are not those coming from frauds and the like. Rather, it is the defaults caused by a decline in incomes, cash flows, and available jobs. A strong link thus exists between demand, employment, and the financial health of the private sector. In this logic, restoring demand and jobs is an effective way to restore the financial soundness of the system, preferable to capital transfers and grants to financial institutions under stress. Not only is

² Keynes was using an adverse selection approach to central bank policy: at higher rates, credit would go to the relatively more speculative (risky) projects.

unemployment “an absurdity, a confession of failure, and a hopeless and inexcusable breakdown of the economic machine” (Keynes 1981: 321), but full employment and the ensuing increase in incomes would also increase the number of creditworthy customers seeking funds.

On the desire for financial savings

This is the core of Keynes’s model, the element that breaks with Ricardian and post-Ricardian economics and Say’s law. In a monetary economy, the flow of savings by a private unit is not equivalent to future demand. What is not spent today does not entail an order for tomorrow’s output. In Keynes’s model, while a single unit’s flow of saving depends on spending decisions given income receipts, the total private saving flow is the accounting equivalent of overall investment spending, so its total size is not under the control of the savers. The attempt of savers to increase their overall saving flow by spending less can only succeed if there is a causal (and positive) link between savings and investment. Yet, the link is likely to be a negative one for two reasons: first, savings do not provide any net financial means to investors;³ second, falling orders reduce business production plans.

So what is to be done if the private sector desires to increase its savings, if the total private saving flow is given? Considering macroeconomic flows, there are three possible means to accommodate and compensate for a rising desire for savings by the private sector: a rising flow of business investment, which could only spark from a spontaneous change in confidence; a rising flow of net exports that depends on foreign economic dynamics, which means a surrender of sovereignty to the economic and political power of foreign nations; and a rising government net deficit.

This can be expressed in terms of the well-known accounting identity:

$$S = I + G + X - T - M, \tag{1}$$

where the private saving flow (S) is equal to the sum of private investment (I), government spending (G), and export receipts (X) minus the sum of taxes paid (T) and import expenses (M). While the accounting identity is always true, in Keynes’s interpretation S can only be a residual.

³ A flow-of-funds explanation is given by Terzi (1986).

An attempt by private agents to save more results in undesired business inventories (included in I) and eventually triggers a reduction of I (and S). An increase in private savings is only healthy when it happens along with (and in fact results from) an increase in spending.

Keynes's position has time and again been misrepresented as if he was calling for the private sector to spend more, even should this entail being uncaring about tomorrow (in the long run we are all dead, right?). Rather, he defined the problem of maintaining full employment as "the problem of ensuring that the scale of investment should be equal to the savings which may be expected to emerge ... when employment, and therefore incomes, are at the desired level." (Keynes 1980: 321). Keynes further noted that while business investment is inherently cyclical, and net exports cannot be a long-run solution (as above), fiscal policy can play a key function here. If the private sector feels its saving flow is too small, a rising government deficit will offset the perceived shortage, preventing the attempt to increase savings privately that would result in a reduction of the total saving flow. Keynes's economics does not stand against the notion that savings are associated with growth, providing it is understood that "savings for growth" cannot be the outcome of a reduction of current private spending, but rather stem from private investment or from taxes being lower than government spending.

The relative effectiveness of monetary and fiscal policies

Business investment is restored when a confident business climate is restored. A variation in the rate of interest cannot by itself do it: it will only influence the yield at which investors discount their future expected proceeds. For Keynes,

it is not so easy to revive the marginal efficiency of capital, determined, as it is, by the uncontrollable and disobedient psychology of the business world. It is the return of confidence, to speak in ordinary language, which is so unsusceptible to control in an economy of individualistic capitalism. This is the aspect of the slump which bankers and business men have been right in emphasizing, and which the economists who have put their faith in a "purely monetary" remedy have underestimated. (Keynes 1936: 317)

Keynes saw a fundamental difference between monetary and fiscal policy: while the former modifies the forward price of money (i.e., the rate of interest), the latter modifies

disposable incomes and the net worth of the private sector. Government spending and taxing flows provide a much more powerful means towards “the task of adjusting to one another the propensity to consume and the inducement to invest” (Keynes 1936: 380), so that aggregate demand can be kept at the full employment level, preventing both inflation and deflation. This policy approach is favorable to peace: “if nations can learn to provide themselves with full employment by their domestic policy [...] there need be no important economic forces calculated to set the interest of one country against that of its neighbors” (Keynes 1936: 382).

Wrapping up this section, there is strong evidence that the policy regime, both before and after the crisis, is largely at variance with Keynes’s policy guidelines. Conventional wisdom in policymaking today includes: support of downward price flexibility as a means to restore growth;⁴ endorsement of export-driven growth strategies;⁵ validation of interest rate hikes as a means to prevent unsustainable booms;⁶ incentives to private savings as a source of finance and growth; and a pushing for fiscal policy restraint. On the contrary, Keynes’s view of the path to full employment entailed a solid concern about the consequences of deflation, of export-driven policies, of raising interest rates too soon, of saving incentives, and of too-timid fiscal policy actions. Regarding the latter, governments’ loss of credibility in managing expenses and taxes for the public purpose is the result of a lack of leadership with respect to the long views of general social advantage. Reducing political sovereignty through “balanced budget amendments,” as proposed repeatedly in the United States and practiced in Europe, is not an effective answer, and it rather recalls the remedy of curing the disease “by killing the patient,” as above. Public deficit reductions intended to restore “fiscal responsibility” indeed lower the available savings of the private sector and thus force the adjustment by way of a reduction of demand and standard of living. This is the subject of the next section.

⁴ This policy approach is popular in Europe where structural reforms aimed at increasing wage and price flexibility are considered key to economic prosperity.

⁵ An export-led growth model is fully practiced by the most economically powerful euro member, Germany, and yet, this approach is self-defeating as it makes Euroland dependent on foreign business cycles, as well as reinforcing divergence and internal deflation (see Bibow [2007] and Flassbeck [2007]).

⁶ The emphasis on the relation between employment and financial health is missing from central banks’ strategic considerations.

3. FISCAL ACTIONS, SOVEREIGN STATE CURRENCY, AND REAL WEALTH

Having analyzed the distance between Keynes's policy issues and the current interpretation of Keynesian policies as short-run remedies, this section explores the question of fiscal deficit financing. This question marks a deep contrast between current new neoclassical synthesis interpretations and Keynes's original model. In the former, because it must be financed with either current or future taxes, public deficit can only provide a short-run stimulus to demand, as government outlays cannot long exceed receipts without generating rising financing costs and, if not timely adjusted, government default. For Keynes, fiscal expansion finds its limit in the production possibilities given by the available human and material resources, not in the financing constraints of monetary flows.

The Post Keynesian tradition has powerfully stressed how Keynes's originality is found in his analysis of the market system as a monetary economy where balance sheets and cash flows matter. Indeed, following Mankiw's distinction between scientists and engineers, the major shortcomings of today's mainstream macroeconomics can be found in both the scientists' neglect of money in general equilibrium models, as well as engineers' misunderstanding of monetary flows.

3.1 Where Does the Money Come From?

A question constantly raised with respect to the anticyclical fiscal packages is "where is the money to come from?" The scary answers to this question (such as that Americans borrow from China, or that Europeans borrow from their future generations) well-describe the discomfort with "short-run fixes": policies meant to heal the recession are allegedly not sustainable in the long run and thus ought to be reversed soon. This concern being based on the "lack of money," rather than of real resources, ignores the legacies of Adam Smith and John Maynard Keynes, as I will show next.

An important foundation of economics is the understanding of the difference between real and nominal values. On this point, the first lesson is found in Adam Smith's *The Wealth of Nations*. For Smith (1979 [1776]), the monetary values that we observe in the market cannot measure the real costs of employing real resources to obtain market products. The wealth of a

nation is measured not by the value of money, or money in circulation, but by its capacity to produce goods and services. It is now a fundamental tenet that only by comparison of monetary values we can measure real values: the cost of labor is not the absolute amount of salary paid, but is the salary paid compared to the value of the product made possible by that labor; the price of something is not its price in absolute amount of units, but its relative price in terms of another product; the value of output over time cannot be compared with absolute values, but with deflated values, etc. Smith's lesson is that the real wealth of a nation can only be measured after removing the veil of money—it consists of the material and human resources available at any given time.

The second important lesson on the difference between real and nominal values is found in Keynes's *General Theory*. Keynes stresses that only monetary returns prove the success or failure of economic decisions in a monetary economy, and agents make decisions on the basis of expectations of monetary flows. Agents' awareness of future possible surprises when making decisions under ontological uncertainty (see Terzi [2010]) affects their behavior. Most fundamentally, this induces them to storing part of their wealth in a liquid form (financial savings) as a way to keep options open, storing the power to make payments until an undefined future date. Actual and expected monetary flows thus shape economic outcomes and can place a more stringent constraint on output than the available real resources.

The views of Smith and Keynes are sometimes erroneously represented as conflicting, yet are quite complementary. When considered jointly, they teach us how to truly avoid money illusion in our interpretation of the world. From Smith, we learn that production and employment are only limited by national resources. Thus, in the hardship of postwar reconstruction or postcrisis recovery, a nation faces no real constraint other than the full employment of its existing resources. From Keynes, we learn that the desire for financial savings is both reasonable (for individuals—at the micro level—because it meets the desire to tame uncertainty) and problematic (for the nation—at the macro level—because it removes demand and production incentives), and is likely to add a monetary constraint to output and employment.

Keynes never confused money with real values: as long as we have unused resources, prosperity is “around the corner,” but cannot be attained until we remove the monetary constraint. He offered an excellent discussion of this in his 1940s analysis of the economic challenge facing Britain and the world. At the time of Britain's gigantic spending effort for

postwar reconstruction, Keynes was faced precisely with this question: where is the money to come from? To this he answered in truly Smithian style: the wealth of a nation is not its money; it is the “bricks and mortar and steel and concrete and labor and architects” (Keynes 1980: 308).

Yet, Keynes was well aware of how deeply engrained the belief was (and, alas, still is) that money is a constraint—not only for the individual, but for the nation as well—as if money had to be considered a real asset that the nation may or may not possess, while this was clearly no longer the case after the end of the gold standard. Indeed, Keynes’s answer to the question “where is the money to come from?” entails that money is a social object, a nonconvertible credit of the nation state.

This means that no run on the central bank, or the government, is logically possible, unless the nation for some reason imposes on itself an obligation of guaranteeing the national money with some other real asset (or somebody else’s credit). A community that aspires to maximizing its overall welfare should use money as an instrument, not as a restraint. While the gold standard introduces the artificial constraint of the existing stock of gold available, in an economy where the state issues money without any promise of conversion into anything else than state currency itself,⁷ the only constraint that matters, in the short or long run, is the limit of available real resources. Yet, the economy may fall short of reaching that limit when policy actions are ineffective in removing the monetary constraint, thus causing what Keynes considered the most urgent question economics should address: “a condition where there is a shortage of houses, but where nevertheless no one can afford to live in the houses that there are.” In other words, a monetary economy may generate a “poverty in the midst of plenty” situation where agents cannot achieve their production possibilities because of a monetary obstacle that prevents them from fully using the existing resources of the nation.

At the time Keynes was engaged in this discussion, Abba Lerner (1943) had just written an excellent piece on the logic and the reality of the constraint of feeding the economy with public spending or tax cuts. In a letter to James Meade, discussing the use of fiscal policy to maintain full employment, Keynes claims to be in agreement with Lerner’s notion that deficit spending is only limited by real resources. Keynes writes a revealing comment in this regard: “Lerner’s argument is impeccable. But, heaven help anyone who tries to put it across the plain

⁷ This is “sovereign money” in the sense of Wray (2003).

man at this stage of the evolution of ideas” (Keynes 1980: 320). Keynes was quite aware that the true nature of money outside the gold standard, or any other self-imposed constraint, can be politically scary, and should be handled with great care. Nevertheless, he was quite clear in his comments on budgetary considerations about how to create employment in postwar Britain:

The Committee give the impression that, whilst the measures they propose to avoid unemployment are admittedly necessary and advisable, a price has to be paid for them in the shape of budgetary deficits and perhaps a consequent weakening in international confidence in our position. Exactly the opposite is the truth... Is it supposed that slumps increase the national wealth? ... How slow dies the inbred fallacy that it is an act of financial imprudence to put men to work! (Keynes 1980: 366–367)

The challenge to the dominant views on money was the most controversial aspect of Keynes’s theory. Although dismissed by the IS-LM Keynesians, this has been the major thrust of Post Keynesian scholars.⁸ More recently, in several path-breaking papers, Warren Mosler⁹ has tirelessly contended that all we need to conquer unemployment and inflation is to properly understand how our monetary system works. Once we master it, the limit to fiscal deficits clearly appears to be nothing else than what is required to achieve full employment and price stability.

If a market system is compatible with full employment and sustainable growth, why do we have so little of these? Keynes believed in the power of ideas. One wonders, however, to what extent it is a matter of logic, and to what extent it is a question of lack of political willingness to create a sustainable full employment society, where the raising of human dignity may well produce social consequences that specific powerful constituencies would rather shun. By the same token, one cannot expect to overcome the political obstacles until the principle is accepted as a matter of logic. What follows is a simple flow-of-funds framework aimed at clarifying some fundamental relations between the private and the public sector when the latter is the monopolist supplier of currency, whose supply is unconstrained.

⁸ Notably, Paul Davidson (1972) and Hyman Minsky (1975).

⁹ Cfr. Mosler (1997 and 2010).

3.2 A Private Sector-Public Sector Flow-of-funds Model

Both Lerner and Keynes claimed that the public sector has, outside the gold standard, the power to impose, or remove, the monetary constraint to growth. This can best be seen by moving the focus from the notion of savings to that of financial savings of the private sector. Reconsidering (1) above, it can be seen that the total private flow of savings consists of a real and a financial component. While the value of investment (I) reflects the accumulation of private real assets, the difference between government spending and tax receipts ($G - T$) reflects a change in private holdings of financial assets:

$$G - T = \Delta \text{ private sector's holdings of government liabilities.} \quad (2)$$

Similarly, the trade balance ($X - M$) reflects a change in private (domestic) net holdings of financial assets abroad:

$$X - M = \Delta \text{ private sector's holdings of net assets abroad.} \quad (3)$$

Thus, using (2) and (3) into (1) above,

$$S = I + \Delta \text{ private sector's holdings of government liabilities} + \Delta \text{ private sector's holdings of net assets abroad.} \quad (4)$$

The real component of savings (I) for the private sector is the outcome of the accounting definition of investment goods. Because investment spending is recorded in the capital (not the current) account, an equivalent amount of savings is generated as a matter of accounting.¹⁰ These savings exist in the stock of investment goods produced, and do not provide the private sector with a net acquisition of financial wealth: the financial savings of “surplus” units is perfectly offset by the financial dissavings of “deficit” units and the net financial savings of the consolidated private sector is zero.

¹⁰ Should a category of goods be redefined as investment instead of consumption, total private savings would *pari passu* increase. Total private savings is purely definitional (cfr. Terzi [1986]).

The other two components of total private savings include the net acquisition of public sector liabilities and the net acquisition of foreign sector liabilities. Both provide the private sector with a net flow of financial assets. Thus, the desire of the private sector for a positive inflow of financial assets can only be fulfilled by either a government deficit or a trade surplus (or a combination). If it is fulfilled by a government deficit, no change in real wealth follows; only a change in accounting entries between the issuer and the users of money. If, instead, the desire for financial savings is fulfilled by a trade surplus, then the net acquisition of financial assets by the private sector is offset, dollar-for-dollar, by a reduction of the goods and services owned by the domestic private sector. Thus, it is only the public sector that can bring about a net increase in private sector's financial wealth without requiring a loss of real wealth.

To illustrate these points, a simple flow-of-funds model is considered here. It shows intersectoral flows between a private sector consolidating households, business firms, and banks (i.e., the currency using sector) and a public sector consolidating all government agencies, including the central bank (i.e., the currency issuing sector).¹¹ It is assumed that the public sector acquires the goods and services it needs to operate by making payments to the private sector in the form of a credit of the central bank (currency), and that the private sector is requested to make tax payments in the same form of central bank credit. It is further assumed that central bank credit is not pegged to the value of any real asset or foreign currency, and can be issued at will by the public sector that functions as the currency monopolist of the nation. This means that the public sector is assumed to possess monetary sovereignty, i.e., its liabilities are accepted as tax-credit units and are issued without prior need of real resources.¹²

In table 1, the private sector's total payments include private spending on consumption and investment ($C + I$) and tax payments to government (T); the private sector's total receipts include private spending ($C + I$) and government spending (G).¹³ Each sector's net financial savings, like in any flow-of-funds account, is the difference between total (nonfinancial) receipts and total (nonfinancial) payments. If such difference is positive, that sector is acquiring net financial savings.

¹¹ Consolidation of the Treasury and the central bank is legitimate if we consider they both pursue public purpose, though may appear heretical to the theorists of central bank independence.

¹² This also entails that the risk that the public sector be unable (as distinct from unwilling) to pay off its liabilities in units of state currency is zero.

¹³ Notice that the difference between consumption and investment spending is irrelevant in what follows (and, consequently, so is S).

If G and T are both zero or, alternatively, if they are equal in amount, then the (annual) flow of the private sector's net financial savings must be zero. In such case, as above, any financial savings generated by one member of the private sector is perfectly offset, as a matter of accounting, by financial dissavings of another member of the same sector.

It follows that the private sector is in a position to increase its net financial savings only when, by interacting with another sector, its consolidated receipts are greater than its consolidated payments. When the "other" sector is the public sector, this happens when government spending exceeds taxes: fiscal deficits produce private financial savings.¹⁴

Table 1: A Two-sector, Flow-of-funds Model: Net Financial Savings

| | PRIVATE SECTOR (currency using sector) | PUBLIC SECTOR (currency issuing sector) |
|---|---|--|
| (1) Total payments | $C + I + T$ | G |
| (2) Total receipts | $C + I + G$ | T |
| <u>Net financial savings</u> = (2) - (1) | $G - T$ | $T - G$ |

For the sake of illustration, and because this is the most common situation, it is assumed that the net financial savings of the public sector ($T - G$) is negative. Thus, the private sector's net financial savings are positive, and they must take the form of a liability issued by the public sector: bank reserves, cash, or Treasury securities.¹⁵ Table 2 shows how each sector's net financial savings must equal the acquisitions of financial assets less the additions to liabilities.

When the public sector makes its payments, this is in the form of bank reserves (R), i.e., the central bank credit that functions as "currency." To the extent that the private sector has a preference for holding some banknotes and coins, a fraction of bank reserves will be converted

¹⁴ The only logical alternative is when the domestic private sector net receives from a foreign private sector more than it net spends (i.e., runs a trade surplus). In this case, again, the savings of one country are offset by the dissavings of another. For the world, only the public sector can generate net savings to the world private sector.

¹⁵ It cannot be held in the form of bank deposits, as deposits are both an asset and a liability of the private sector.

into cash in circulation (C). Notice that if the public sector issues no additional Treasuries, all the private sector's net financial savings are held in either cash or bank reserves, depending on private sector's preferences (for holding banknotes and coins), and thus the excess reserve condition in the banking system will send the interbank interest rate to zero.¹⁶ The issue of Treasuries (B)—net of loans of the public sector (L)—has only the function of replacing reserves (assuming an unchanged private sector's preference for cash): by offering an interest-bearing asset, the public sector raises the interbank interest rate above zero. The central bank can then fine tune the interbank interest rate by engaging in open market operations: using Treasuries in circulation, it can set interest rates (i.e., the ask and the bid intertemporal price of money). Central bank operations can only substitute one financial asset for another and thus have no power to influence the private sector's net financial savings.

Table 2: A Two-sector, Flow-of-funds Model: Changes in Financial Assets and Liabilities

| | PRIVATE SECTOR (currency using sector) | PUBLIC SECTOR (currency issuing sector) |
|---|--|---|
| Net financial savings = (3) - (4) | G - T | T - G |
| (3) Acquisitions of financial assets | R + C + B | L |
| (4) Additions to liabilities | L | R + C + B |

From this perspective, Keynes's theory of effective demand can be read as follows: Anytime the private sector attempts to increase its financial savings, unemployment will climb unless the public sector is ready to provide additional financial savings through its fiscal deficit. It is thus an option for the public sector to inject a sufficient amount of financial savings to meet the demand of the private sector, until aggregate demand has reached the level that generates full employment. The public sector can only do this by means of its taxing and spending powers that directly modify private net financial savings. Monetary policy operations, such as central bank

¹⁶ This assumes no interest on bank reserves is paid. For more on this see Fullwiler (2007).

lending (L) or “open market operations” (modifying the relative components of R and B in the private sector’s portfolio) have no effect.¹⁷

In the flow-of-funds framework developed above, public spending is not limited by the financial resources of the public sector (taxes) or of the private sector (state borrowing against future taxes). To the contrary, the ability of the private sector to pay taxes and acquire government bonds is made possible by the public sector running a deficit by issuing central bank credit.

Fiscal sustainability means that fiscal measures must provide the private sector with a sufficient amount of financial savings, and the size of the deficit should only be constrained by full employment. An excess injection of savings should be avoided to prevent a situation where the private sector’s attempt to reduce its savings will cause aggregate demand to exceed available resources and cause inflation. Until then, no other monetary constraint should act as an obstacle to the full employment of real resources.

Tables 3 and 4 introduce a further distinction within the private sector between domestic and foreign residents. While table 3 illustrates how net exports ($X - M$) produce net financial savings for the domestic private sector, in addition to government deficit, table 4 shows how net exports equal the increase of deposits held abroad (DA) net of domestic deposits owned by foreigners (DF).¹⁸ Keynes’s characterization of net exports as a “desperate expedient” can be read as follows: For any period when the private sector sells abroad more than it buys from abroad, the resulting increase in financial savings in the form of credits with foreign institutions (thus not exempt from exchange rate or default risk) is offset by a loss of output available for residents (i.e., the goods and the services delivered abroad). As stated above, only the public sector has the power to create net *financial* wealth without loss of *real national* wealth. By the same token, government creation of financial wealth does not necessarily create real wealth. This should call for the government to carefully regulate its deficit size: net private financial savings may be too low for unemployment or be too high for price stability.¹⁹

¹⁷ Interest rates on government bonds, however, affect private sector’s incomes from holding Treasuries, and thus G.

¹⁸ For simplicity, it is here assumed that foreigners do not acquire bonds.

¹⁹ These considerations about deficit size abstract from other important issues in fiscal policy, including the consequences of different tax systems upon income distribution and inflation, and of the quality of public spending and its impact on national real wealth. Discussion of these issues is not this paper’s objective, and yet this paper points to the fact that such issues can only be properly addressed once the nature and consequences of deficit size is properly understood.

Table 3: A Three-sector, Flow-of-funds Model: Net Financial Savings

| | PRIVATE DOMESTIC SECTOR | PRIVATE FOREIGN SECTOR | PUBLIC SECTOR |
|--|-------------------------|------------------------|---------------|
| (1) Total payments | $C + I + T + M$ | X | G |
| (2) Total receipts | $C + I + G + X$ | M | T |
| <u>Net financial savings</u> = (2) - (1) | $(G - T) + (X - M)$ | $M - X$ | $T - G$ |

Table 4: A Three-sector, Flow-of-funds Model: Changes in Financial Assets and Liabilities

| | PRIVATE DOMESTIC SECTOR | PRIVATE FOREIGN SECTOR | PUBLIC SECTOR |
|--|-------------------------|------------------------|---------------|
| <u>Net financial savings</u> = (3) - (4) | $(G - T) + (X - M)$ | $M - X$ | $T - G$ |
| (3) Acquisitions of financial assets | $R + C + B + DA$ | DF | L |
| (4) Additions to liabilities | $L + DF$ | DA | $R + C + B$ |

In conclusion, when fiscal deficits are unconstrained by the use of sovereign state currency, it will always be possible to generate a sufficient flow of private financial savings that equals the amount desired when incomes and employment are at the target level. The size of fiscal deficit is, in this sense, purely instrumental and “functional” to any given target for the level of economic activity. Thus, there is no obstacle to full employment, providing that no artificial limits on government deficits are imposed. Such limits can only result from self-imposed rules, such as setting the domestic currency at par with a foreign asset or checking government power to issue central bank credit when needed. Any self-imposed limit to $(G - T)$ can hamper this power in much the same way as the gold standard did.

4. THE INSTITUTIONAL SHORTCOMINGS OF THE EURO PROJECT

The previous section's investigation of the causes and consequences of the creation of public sector liabilities illustrates Keynes's (and Lerner's) policy approach to removing all monetary constraints to demand, employment, and growth, as only real constraints should matter. This can be a lesson to current concerns about fiscal solvency. As Lerner put it,

No government will be able to sit back and wait for the degree of unemployment which will result in the degree of price fall that will create enough idle money to induce sufficient private investment to start a movement back to prosperity. The New Deal and the war prosperity will have shown enough people that serious depression is dispensable. Some form of functional finance will in fact be practiced by whatever government we have. The only danger is that it will be too little and too late. (Lerner 1947: 315)

Indeed, with the global recession, one problem common to a number of countries is that discretionary increases in fiscal deficits have not been enacted rapidly and have been too timid. One obvious example is the euro area where, absent any significant effort to intentionally increase the deficit of the public sectors, a fiscal crisis has been mounting, first with the worldwide financial crisis of 2007–08,²⁰ and then with the consequence of the economic crisis of 2009–10 when automatic stabilizers drove fiscal deficits to break the upper limits set by fiscal coordination. This final section provides an assessment of monetary arrangements in the euro area where institutional constraints to the supply of central bank credit have reintroduced national solvency risks, typical of the gold standard. It concludes that, absent an effective change in its monetary operations, the euro area is facing a deflationary tendency that makes it, as feared, a very precarious economic region in the world economy today.

4.1 The Euro Conceived as a State-of-the-art Disciplining Tool

The euro was conceived within the institutional and political construction of the European Union, where nation-states have, in the course of the past half-century, dramatically increased their degree of pooled sovereignty, though still upholding some key aspects of national

²⁰ Cfr. Kelton and Wray (2009)

sovereignty, notably their tax-and-spend authority. Within this broader project, the common currency offered additional scope for shared governance.

Yet, the act of moving to a single, pooled currency was differently appealing to the actors involved. In the Europeanist view, it was a way to foster the identity of Europe and accelerate the political integration process for this to include other dimensions of shared sovereignty, such as security, foreign policy, fiscal authority, and macroeconomic governance.

In another view, call it the “virtuous currency view,” it was primarily a way to create a shared, sound currency. Quite apart from the time required to extend political integration, and indeed even in case of no further political integration to be seen soon, the European single currency was meant, by and of itself, to reduce transactions costs and create a more homogeneous area, by eliminating intra-European foreign exchange, creating a single banking payment system (thus also removing intra-European foreign exchange settlement risk), and eliminating exchange exposure, thus creating the necessary (though not sufficient) monetary conditions for a true single market where companies could do business on a larger scale, with both micro- and macro-economic benefits to Europeans.

The virtuous currency approach was the one that dominated the preparation, the creation, and the management of the European single currency area. While the Europeanist approach was rooted within a broader design and a political agenda where the common currency was a motor of political integration, the “virtuous currency” project was considered similar to the adoption of a superior technology, a means to acquire monetary stability and lay out one condition to economic success of the monetary union. The chosen path of aiming, primarily, at a “sound” currency acquired a broad consensus. It was perceived as more robust, because it did not seem to require a quick move towards greater political integration, and it would not suffer if this latter process would come to a standstill.

The idea of creating a state-of-the-art monetary system was appealing even to those who had initially supported a more politically oriented process. Indeed, most Europeanists favored this strategy as a means to consolidate one significant accomplishment that would remain even in the face of future setbacks of the integration process. To be the golden apple of Europeans, the new currency had to be not politically powerful, but rather technically sound.

This outcome of monetary integration in Europe can be seen as a compromise between Hayek’s denationalized, private, competitive money and the traditional state monopoly assigned

to the chartered central bank: the new currency was denationalized, yet not private; it was ultimately public, though chartered by a supranational treaty. All sound principles were spelled out in the treaty and adherence to the sound principles would allegedly deliver the sound currency that Europeans had been dreaming of.

The objection that countries, both individually and as a community, would lose their macroeconomic stabilization policy tools was countered by theories claiming that structural policies sponsoring market integration, market competition, and labor market flexibility would suffice to free up the potential of the newly created region. This would be encouraged by commonly agreed prescriptions, but ultimately left to a competitive process of individual nations. With regards to demand-side conditions, these would be monitored by the central bank in such a way so as to achieve price stability and thus provide a proper environment and a further stimulus for the growth process to unfold in the new single market.

Equipped in this way, the new pooled currency of Europeans was meant to deliver “perfect money” that needed no gold, no state, and could become a template for other shared currencies in other world regions. The “golden apple” had become the long-awaited accomplishment that would, by and of itself, strengthen the course of European integration. The quality of the new currency would work as an “attractor,” something European countries would find it in their interest to adopt.

Within this approach, the euro has been safeguarded from governments’ threats to its “integrity,” including fiscal “discipline” aimed to preventing a situation where “excessive” deficits undermine the soundness of the euro. Deficits are considered harmful, as they allegedly absorb union’s financial resources and raise interest rates, thus raising financing costs for all private investment in the union, and ultimately interfering with monetary policy.

In the light of the flow-of-funds framework developed above, however, it is dramatically inaccurate to describe public deficits as effectively absorbing financial resources. Indeed, as a matter of accounting, deficit spending by any economic sector—private or public—generates a positive net financial balance elsewhere; public deficits (unless the state currency is pegged to a real asset such as gold) do not absorb real resources, but have the power to accommodate the private desire for financial savings.²¹

²¹ Virtually every macro textbook shows how a government deficit ($G - T$) must be offset by an excess of saving

4.2 The Euro Ailing from Too Much Virtue

It turns out that “disanchoring” the European currency from the nation states without creating a federal fiscal authority resulted in a gigantic risk, measured by governments’ loss of monetary sovereignty in the same manner as a dollarized country.²² The sovereign debt crisis of Greece has been a consequence of such institutional construction, and yet the political reaction in Europe is not challenging the “virtuous currency” fancy. The European Commission has claimed that Europe needs to strengthen its discipline and reinforce the compliance with common (fixed) fiscal rules, as if the euro were not virtuous enough in spite of all efforts. Yet, reality is different, and the problems of the euro should be found precisely in the mistaken attempts of making it a “virtuous” currency.

Two elements, meant to build its “virtue,” need attention, as each creates risks even when one assumes that all member nations diligently make their best efforts to comply with fiscal rules. First, the agreed limits on deficits have been fixed in a set of cast-iron figures that have no theoretical foundation²³ and do not contemplate changing cyclical conditions (i.e., the “outstanding” feature of the large swings of economic activity that Keynes had stressed long ago). This undermines the ability of Europeans to use fiscal policies to the same degree as when they had retained monetary sovereignty.²⁴

The other element is governments’ loss of monetary sovereignty without a higher, federal level acquiring it, thus creating a fundamental financial distress at the highest level of monetary hierarchy. On the one hand, when European deficits increase as a result of either governments actively breaching the rules or of automatic stabilizers during recessions, an injection of financial savings takes place in the form of cash, reserves, and Treasuries, as illustrated in the previous section. On the other hand, the Treasury component (B) in private portfolios becomes subject to credit risk, as member nations, just like states in the United States, cannot use central bank credit as needed to settle payments and may thus default on debt.

overinvestment ($S - I$) in the private sector. What the same textbooks often fail to stress is how such excess saving disappears if the deficit is eliminated, and they often convey the totally unwarranted notion that those excess savings, if not absorbed by public deficits, could be differently (and perhaps better) be employed.

²² Goodhart (1998) had seen this risk coming.

²³ Cfr. Pasinetti (1998)

²⁴ This approach is of course consistent with the notion of fiscal policy ineffectiveness in the “new neoclassical synthesis,” the same macroeconomic “science” that Mankiw considers scientifically correct, but inadequate for problem solving.

The combined outcome of these two components of euro “virtue” is that when fiscal deficits increase on a cyclical slowdown, governments are forced to undertake procyclical policies; if growth does not pick up soon enough, and widening deficits scare financial markets, interest rates rise, reflecting default risk. The level of private sector’s savings can thus only be restored through net exports or a sufficiently large output drop. This leaves two options for generating the financial savings that the public sector cannot provide: pursue an export-driven growth model or, when exports falter, accept straight deflation.

Notice that the fiscal crisis in the euro area has been, at least temporarily, halted with the controversial decision of the European Central Bank to organize purchases of national government debt. By engaging in monetary operations that facilitate national solvency, in spite of the rhetoric of strengthening rules, the euro area has found a way of surviving by precisely reducing the alleged “virtue” of its currency. The future of the euro area is likely to depend on whether the attempts to fully restore its (harmful) virtues or the efforts to establish central (federal?) macroeconomic governance will prevail.

5. CONCLUSION

The political emergency sparked by the crisis has forced governments to choose actions that mainstream economists do not consider sound in the long run. They agreed that the problem is a lack of demand and accepted the “Keynesian moment” as the only game in town. Government interference with banks’ balance sheets and expansionary fiscal policy were justified by the urgency of rescuing the system from meltdown and the need to kick-start the economy.

As deficits grow, pressure rises in the United States for taking deficit-reducing actions that prevent a “fiscal crisis.” In the euro area, this pressure is institutionalized, as deliberate fiscal policy to accommodate the private sector’s desire for financial savings is not an option, absent a political decision to reconsider the “no-state currency” status of the euro.

This paper has provided evidence that:

- 1) The prevailing policy regime, both before and after the crisis, is largely at variance with Keynes's policy guidelines and, more importantly, it is doomed to be ineffective if the degree of tolerance of fiscal deficits is too low for full employment;
- 2) Private financial resources are a consequence, not a condition, of government deficits. Indeed, the truly distinctive point on this matter made by Keynes, following Smith, is that the limit to aggregate spending is set by real, not financial, resources; and
- 3) The euro area offers an example of a self-constrained approach to fiscal policy where the aim at a virtuous currency has backfired.

If the analysis of the relation between fiscal deficits and financial savings discussed above is correct, then governments have a real option to choose for or against full employment. The global crisis may thus become a turning point, in that those countries that will boldly use fiscal actions as a means to prosperity will find a way to strengthen their economic welfare, while others who prefer to use fiscal actions to deflate may be doomed to economic and social decline.

REFERENCES

- Bibow, Jörg, 2007. "Global Imbalances, Bretton Woods II, and Euroland's Role in All This." in Jörg Bibow and Andrea Terzi (eds.), *Euroland and the World Economy: Global Player or Global Drag?* London: Palgrave Macmillan.
- Davidson, Paul. 1972. *Money and the Real World*. London: Macmillan.
- Flassbeck, Heiner. 2007. "Wage Divergences in Euroland: Explosive in the Making." in Jörg Bibow and Andrea Terzi (eds.), *Euroland and the World Economy: Global Player or Global Drag?* London: Palgrave Macmillan.
- Fullwiler, Scott. 2007. "Interest Rates and Fiscal Sustainability." *Journal of Economic Issues* Vol. XLI(4): 1003–42.
- Goodhart, Charles A.E. 1998. "The two concepts of money: implications for the analysis of optimal currency areas." *European Journal of Political Economy* 14: 407–32.
- Greenspan, Alan. 2008. "Testimony, Committee of Government Oversight and Reform." October 23.
- IMF. 2009. "Fiscal Implications of the Global Economic and Financial Crisis." IMF Staff Position Note 09/13. Washington, DC: International Monetary Fund.
- Mankiw, N. Gregory. 1992. "The reincarnation of Keynesian economics." *European Economic Review* 36(2–3): 559–65.
- . 2006. "The Macroeconomist as Scientist and Engineer." *Journal of Economic Perspectives* 20(4): 29–46.
- . 2008. "What Would Keynes Have Done?" *New York Times*, November 28.
- Kelton, Stephanie A., and L. Randall Wray. 2009. "Can Euroland Survive?" Public Policy Brief 106. Annandale-on-Hudson, NY: Levy Economics Institute of Bard College.
- Keynes, John M. 1936. *The General Theory of Employment Interest and Money*. London: Macmillan.
- . 1980. *Activities 1940–1946 Shaping the Post War World Employment and Commodities, Collected Writings of J.M. Keynes*, Volume XXVII. London: Macmillan.
- . 1981. *Activities 1929–1931 Rethinking Employment and Unemployment Policies, Collected Writings of J.M. Keynes*, Volume XX. London: Macmillan.
- Lerner, Abba. 1943. "Functional Finance and the Federal Debt." *Social Research* 10: 38–51.

- . 1947. “Money as a Creature of the State.” *American Economic Review* 37(2): 312–17.
- Minsky, Hyman P. 1975. *John Maynard Keynes*. New York: Columbia University Press.
- . 1986. *Stabilizing an Unstable Economy*. New Haven, CT: Yale University Press.
- Mosler, Warren. 1997–98. “Full Employment and Price Stability.” *Journal of Post Keynesian Economics* 20(2): 167–82.
- . 2010. *Seven Deadly Innocent Frauds of Economic Policy*. Available at:
<http://www.moslereconomics.com/wp-content/powerpoints/7DIF.pdf>
- Pasinetti, Luigi L. 1998. “The myth (or folly) of the 3% deficit/GDP Maastricht ‘parameter’.” *Cambridge Journal of Economics* 22(1): 103–16.
- Smith, Adam. (1979 [1776]). *An Inquiry Into The Nature and Causes of The Wealth of Nations*. Oxford: Clarendon Press.
- Terzi, Andrea. 1986–87. “The Independence of Finance from Saving: a Flow-of-funds Interpretation.” *Journal of Post Keynesian Economics* 9(2): 188–97.
- . 2010. “Keynes’s uncertainty is not about white or black swans.” *Journal of Post Keynesian Economics* 32(4): 559–66.
- Wray, L. Randall. 2003. “Seigniorage or Sovereignty?” in Sergio Rossi and Louis Philippe-Rochon (eds.), *Modern Theories of Money: The Nature and Role of Money in Capitalist Economies*. Cheltenham, UK: Edward Elgar.