Functional Finance: Old and New

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Overview

- OLD FUNCTIONAL FINANCE
  - Lerner's principles of functional finance
  - Implications for government spending
  - Two types of Post Keynesian functional finance
  - Functional finance vs. sound finance
- 'NEW' FUNCTIONAL FINANCE?
  - Fiscal policy effectiveness in the mainstream?
  - Theoretical controversy over fiscal policy
  - The unique nature of government liabilities
  - Implications for fiscal policy going forward

Lerner’s principle of functional finance

- Fiscal policy is to be judged by its economic effects, not by an ex-post accounting identity, called the government budget balance
  - The budget is to be used at all times to address specific economic problems, most importantly individual economic security
  - Balanced budgets or debt/deficit-to-GDP ratios are inappropriate policy objectives
  - Full employment and price stability are

Lerner’s principle of functional finance

- The government has 3 pairs of policy levers:
  - Spending and taxation
  - Borrowing and repayment of loans
  - Issue of new money and withdrawal of money from circulation
- All to be undertaken “with an eye only to the *results* of these actions on the economy and not to any established traditional doctrine about what is sound and what is unsound.” (1943, p. 354)
- *Functional Finance* is the principle of judging fiscal measures by the effects on human activity
  - 1. Government is responsible to adjust its rates of expenditure and taxation such that total spending in the economy is neither more nor less than that which is sufficient to purchase the full employment level of output at current prices.
  - 2. The preferred method of achieving full employment is by issuing new money
    - Any resulting deficits, greater borrowing, or "printing money," are in and of themselves neither good nor bad. They are simply the means to the desired ends of full employment and price stability (1943, 354).

State Money and Functional Finance

- The government can pursue functional finance because money is a Creature of the State
  - The modern state can make anything it chooses generally acceptable as money and thus establish its value quite apart from any connection, even of the most formal kind, with gold or backing of any kind. It is true that a simple declaration that such and such is money will not do, even if backed by the most convincing constitutional evidence of the state's absolute sovereignty. But if the state is willing to accept the proposed money in the payment of taxes and other obligations to itself the trick is done. Everyone who has obligations to the state will be willing to accept the pieces of paper with which he can settle the obligations, and all other people will be willing to accept those pieces of paper because they know that taxpayers, etc., will accept them in turn. On the other hand if the state should decline to accept some kind of money in payment of obligations to itself, it is difficult to believe that it would retain much of its general acceptability...What this means is that whatever may have been the history of gold, at the present time, in a normally well-working economy, money is a creature of the state. Its general acceptability, which is its all-important attribute, stands or falls by its acceptability by the state. (Lerner 1947, 313)

State Money and Functional Finance

- Money is a creature of the state at all times
- In modern history, countries have monopoly powers over their own currencies
- Some countries voluntarily abdicate their sovereign control over their monetary systems
  - Currency boards, fixed pegs, monetary unions, dollarized countries
- Functional finance will have a different impact on the economy depending on the currency regime in question
  - Not all countries can pursue functional finance for economic security and full employment

Implications for government spending I

- Taxation is not a funding operation
  - its effect on the public is to influence their economic behavior (1951, p. 131)
- Borrowing is not a funding operation
  - Should be undertaken only if money in the hands of the public is considered to be too large
  - The primary purpose of bond sales is to manage reserves and thus the overnight rate of interest. The government should sell bonds "if otherwise the rate of interest would be too low" (Lerner 1943, p. 355)
    - Modern Money—IRMA
  - (T)he spending of money...out of deficits keeps on increasing the stock of money (and bank reserves) and this keeps on pushing down the rate of interest. Somehow the government must *prevent* the rate of interest from being pushed down by the additions to the stock of money coming from its own expenditures...There is an obvious way of doing this. The government can *borrow back* the money it is spending. (Lerner, 1951, pp. 10-11, original emphasis)

- Government spending *precedes* taxation and borrowing

Implications for government spending II

- Functional finance is not a specific policy; it is a framework within which various policies may be conducted.

- Functional finance can be practiced for achieving many objectives: military aggression, bailing out the financial sector, securing true full employment

Post Keynesian functional finance

- In Post Keynesian theory the objective is full employment; two different views of how we get there:
  - Pro-investment, pro-growth, aggregate demand approach
    - This view defines full employment as the level of employment where aggregate demand runs into an inflation barrier.
  - Direct job creation/ELR
    - This view defines full employment as the condition where all who want jobs are gainfully employed. Price stability is enhanced by stabilizing the most essential price in the economy—the price of labor via a the ELR buffer stock mechanism.
    - Minsky's tight full employment, Keynes's <1% unemployment

Lerner's policy preference

- Aggregate demand and "low full employment" vs. "high full employment"
- "Functional Finance is not priming the pump" (Lerner, *Economics of Employment*, 1951, p. 315)
- Direct job creation in the form of public works may be necessary in order to attain and maintain full employment and price stability (Lerner, *Economics of Control*, 1944, p. 315n)

Functional Finance vs. Sound Finance

- The mainstream has abandoned the full employment objective and, until recently, fiscal policy in general
  - Sound Finance
  - The peculiar case of Ricardian Equivalence
- The shifting mainstream position on government finance and fiscal policy

New Macroeconomic Consensus?

- The 'new view' of fiscal policy effectiveness—no consensus
  - Zero interest rate bound/Japanese style deflation
  - Limits to government spending?
  - Limited or sizeable role?
  - Optimal policy mix of monetary and fiscal policy, which is more potent?
- *The Fiscal Theory of the Price Level* (Woodford 1996, 1998, 2000)
  - Non-Ricardian regimes and the government budget constraints
  - Solvency vs. sustainability issues
  - The unique nature of government liabilities/Modern money in the mainstream?
  - Wealth effect and its transmission mechanism
- Implications of the 'new view'
  - Inflation is a purely fiscal phenomenon
  - Fiscal Policy limited role: it is still distortionary, inflationary…
  - Monetary authority is *not* independent from fiscal policy

Fiscal Theory of the Price Level: Non-Ricardian Regimes

- Fiscal policy ineffectiveness and Ricardian Equivalence
  - B_t/P_t **= Present value of primary fiscal surpluses** as of time t, $t = 0, 1, \ldots$

- 'Active fiscal-passive monetary' regimes (Leeper 1991, Woodford 1995, 1998)
  - Non-Ricardian regimes, no commitment to primary surpluses
  - fiscal policies have sizeable demand-side effects
  - prices must *necessarily* adjust
  - manifested via a wealth effect mechanism

- How long can a Non-Ricardian regime last?
- Doesn't the private sector *impose* a budget constraint on government spending anyhow?
  - Woodford: No. Government liabilities are in a unique position, distinct from that of private sector liabilities

Budget constraints imposed on government by private agents?

- "A subtler question is whether it makes sense to suppose that actual market institutions do not actually impose a constraint … upon governments (whether logically necessary or not), given that we believe that they impose such borrowing limits upon households and firms. The best answer to this question, I believe, is to note that a government that issues debt denominated in its own currency is in a different situation than from that of private borrowers, in that its debt is a promise only to deliver *more of its own liabilities*. (A Treasury bond is simply a promise to pay dollars at various future dates, but these dollars are simply additional government liabilities, that happen to be non-interest-earning.) There is thus no possible doubt about the government's technical ability to deliver what it has promised…". (Woodford 2000, p. 32,original emphasis)

Budget constraint imposed on Government by private agents?

- the proper interpretation of government debt owned by the public:
  - …[it] is a consequence of optimal wealth accumulation by households, not of any constraint upon government borrowing programs other than the requirement that in equilibrium someone has to choose to *hold* the debt that the government issues.” (Woodford 2000, p. 30) (original emphasis)
  - If the private sector refuses to buy bonds, the Federal Reserve will step in as the residual buyer.

Government Spending, Wealth Effect, Transmission Mechanism

- Woodford's '**bond drop**' theory of the fiscal impact on output and inflation, via a wealth effect when bonds end up in the hands of private agents.
  - Original formulation 'cashless' economy. How is the bond drop financed? How do agents buy these bonds?
- "the relevant measure of nominal government liabilities for [the] discussion of the 'wealth effect' is the *sum* of government debt in the hands of the public and the monetary base" (Woodford 2008, original emphasis)

Problems with the “bond drop” view

- Confused causality:
  - government spending always *creates* reserves.
  - Bond sales/purchases are only undertaken for the purposes of maintaining interest rates.
  - If private agents want to increase their net financial assets, reserves must increase first and bonds can be purchased later.
  - If anything, this should be called a ‘reserve drop’ theory of fiscal spending.

- Woodford: government sells bonds to the private sector to finance operations or to the Fed.
  - *Note that the wealth effect cannot occur* if the private sector buys bonds, because it will lose one government asset (reserves) as it gets another (bonds).

Bernanke's Money Drop / The "Free Gift" Policy

- Japanese style recession: quantitative easing is the goal but the Central Bank cannot 'rain money unilaterally' on the population.
- In such cases, a 'money financed tax cut' is needed. '**free gifts**' (Bernanke 1999)
- Bernanke's '**money drop**':
  - "Under a fiat (that is, paper) money system, a government (in practice, the central bank in cooperation with other agencies) should always be able to generate increased nominal spending and inflation, even when the short-term nominal interest rate is at zero… The U.S. government has a technology, called a printing press (or, today, its electronic equivalent) that allows it to produce as many U.S. dollars as it wishes at essentially no cost." (Bernanke 2002)

Bernanke's Money Drop

- "In practice, the effectiveness of anti-deflation policy could be significantly enhanced by cooperation between the monetary and fiscal authorities. A broad-based tax cut, for example, accommodated by a program of open-market purchases to alleviate any tendency for interest rates to increase, would almost certainly be an effective stimulant to consumption and hence to prices. . . . A money-financed tax cut is essentially equivalent to Milton Friedman's famous 'helicopter drop' of money." (Bernanke 2002)

Central Bank independence?

- Temporary abdication of independence to reach goals and coordinate with fiscal authority
- Monetary policy is effective at the zero-bound *only* because of its fiscal component
  - Alternative OMOs, purchases a wide range of assets
  - Open market sale of currency (for depreciation)
  - Money-financed fiscal transfers

Bernanke's Functional Finance

- Fiscal Components / 'free gifts' policy — oriented with an eye to a specific economic objectives:
  - Lower long term interest rates
  - Set a price floor on toxic assets
  - Depreciate currency (swaps, not OMS of dollars)

  - No recognition that fiscal components are ever present
    - Government spending creates reserves, taxes destroy them
  - No proposal for a fiscal component for full employment
    - Set on raising interest rates before full employment

Implications from the 'New View'

- MV=PQ does not explain inflation
- It's all fiscal policy: **'Bond drop' or 'Money drop—fiscal components of monetary policy'—too much issuance of government liabilities is inflationary**
- Inflation-fighting Central Bank can try to *internalize* and *neutralize* the government effect, and only *allow* it to be effective. But it may also *worsen* the inflationary effect, if the stock of debt is too large and the Taylor rule is too aggressive
- interest rates paid on government liabilities, only increase the total amount of government liabilities held by the public, producing an additional wealth effect and pushing inflation further (Loyo 1999: Brazil hyperinflation).
- No Central Bank independence. Particular notion of interdependence. Optimal policy mix is in question

Implications from the 'New View'

- Traditional NEC View -- Sustainability:
  - tight and binding constraints to budget deficits and debt, intended to limit the freedom of the fiscal authorities
- Emerging NEC View -- Solvency:
  - under an interest rate peg ('bond-price support') regime, the interaction between the monetary and fiscal authority, permits sizeable fluctuations in the debt stock

- *Solvency is the issue, not sustainability, but constraints are probably necessary nonetheless*

Genuine Resurrection of Fiscal Policy?

- Unique nature of government money is not fully understood
- Bonds and Taxes are still viewed as funding operations, even if in extreme circumstances ‘money drops’, ‘free gifts’ are recommended.
- Some understanding of the role of bonds as IRMA tool (paying interest on reserves)
- No real understanding of the role of taxation (except Sims?)

Sims on the nature of money

- Christopher Sims (2005)
  - "tax-backed money"
  - "Some institutional frameworks aimed at ensuring "independence" of the central bank undermine the credibility of any claim to provide a 'tax-backed floor' to the value of money" (Sims 2005, p. 287)
  - "By cutting all explicit connections with fiscal authorities and ruling out the holdings of government debt as assets" The ECB, unlike the Fed, lacks an "institutional structure to use in case it were to need balance sheet replenishment" (Sims 2005, 295)

Functional Finance going forward?

- The new view: lots of controversy, but solidifies the inflationary aspects of government spending
- The issue of solvency is understood, but not the full implications of 'tax-backed-money' and 'money as a creature of the state'.
- Functional Finance for stabilizing asset prices is understood and practiced
- Functional Finance to set interest rates (borrow and lend/sell and buy Treasuries via OMOs)
- Taxing and spending for the purposes of Full Employment and Price Stability is not.

- The comeback of sound finance: single most important obstacle to the recovery
- “Dysfunctional finance”: obsession with accounting results, not impact of policy.
- Relatively small employment impact from the large stimuli in the US and Japan indicates that *how* governments spend matters
- Abandon the pump priming/aggregate demand model
- Move toward Functional Finance that directs demand to the unemployed