



*Econ Journal Watch,  
Volume 4, Number 1,  
January 2007, pp 60-70.*

---

## Textbooks and Pure Fiscal Policy: The Neglect of Monetary Basics

LEE C. SPECTOR AND T. NORMAN VAN COTT\*

### ABSTRACT

**AGGREGATE DEMAND CANNOT CHANGE WITHOUT THE CONCOMITANT** support of the monetary sector. At the initial level of output, either the money supply must change, the demand for money change, or the quantity of money demanded change. The link between money demand and money velocity means that changes in the demand for money and quantity of money demanded correspond to exogenous and endogenous changes in the velocity of money at the initial level of output. In any event, absent the support of the monetary sector, aggregate demand does not change. End of story.<sup>1</sup>

One would hope that macroeconomic discussions of fiscal policy would utilize such monetary basics. Unfortunately, most leading textbooks in macro and monetary economics do not elucidate the monetary mechanisms crucial to understanding the effects of fiscal policy. Indeed, one must go back at least thirty years to find textbook discussions that do

---

\* Department of Economics, Ball State University. Muncie, IN 47306.

The authors thank Milton Friedman and Richard Timberlake for their encouraging comments on a previous version of this paper.

<sup>1</sup> At the initial level of output, endogenous changes in the quantity of money demanded or velocity can occur as a result of a change in the interest rate. Moreover, endogenous and exogenous changes in velocity at the initial level of output are probably better thought of as changes in the “desired” velocity since they stem from changes in people’s willingness to hold money.

right by monetary basics. (Similar difficulties plague the discussion of pure fiscal actions, particularly “crowding out,” in the journal literature.)

### IGNORING MONETARY BASICS

A typical policy scenario in these textbooks has the government debt-financing an increase in its government spending, leaving the money supply unchanged. An unchanged money supply classifies the fiscal action as “pure.” Given that the IS-LM diagrammatics have no shift in the LM schedule occurring, exogenous changes in the demand for money (that is, exogenous changes in the velocity of money) are precluded. Any increase in aggregate demand at the initial level of output must trace to a *decrease in the quantity of money demanded* (or endogenous rise in the velocity of money).

Authors’ equation-skipping sketches of the response to this fiscal action consistently fail to note any monetary basis for the increase in aggregate demand. The common practice is simply to assert that aggregate demand and output increase. Consider the macro textbook by Robert Hall and D.H. Papell (2005).<sup>2</sup> Their cryptic explanation of the initial response to this government action is typical: “What goes on in the economy when the government purchases more goods? First, the increase in government demand increases GDP through the multiplier” (207). No monetary basis for the increase in aggregate demand is noted.

Another author, Richard Froyen (2005), makes the omission of the monetary sector explicit. After noting that additional government spending raises aggregate demand, Froyen observes: “At a given level of income, equilibrium in the money market, and therefore in the bond market, is undisturbed by the government spending change” (165).

Do these authors omit events in the monetary sector completely? No, but the sector only impinges on the process *after* aggregate demand and output have already increased. Hall & Papell, for example, continue their explanation: “But the increase in GDP will increase the demand for money: More money is needed for transactions purposes. Since the Fed does not change the money supply, we know that interest rates must rise to offset the increase in money demand that came from the increase in GDP. This

---

<sup>2</sup> Hall co-authored the textbook’s first five editions (starting in 1986) with John B. Taylor. The following quotes are essentially the same in all six editions.

increase in the interest rate reduces investment demand and net exports, offsetting some of the stimulus to GDP caused by government spending” (207-208).

Taken at face value, these authors would have us believe the impossible. Namely, the monetary sector’s *only* role in an expansionary pure fiscal action is that of curtailing the increase in aggregate demand and output, an increase whose genesis is independent of the monetary sector. What about that bedrock proposition about all increases in aggregate demand being traceable to concomitant *support* of the monetary sector? Students and their professors simply never read about it.

The failure is not confined to a few macro/monetary textbooks, but is actually rather common. For other examples where the monetary basics underlying fiscal actions are dealt with incorrectly, see Dornbusch, Fisher, and Startz (2004, 279-280), Gordon (2006, 108-110), and Mankiw (2007, 304-306). Still others make no attempt at all, rightly or wrongly, at introducing monetary adjustments into the discussion—see Abel and Bernanke (2005) and De Long (2002).

The story is the same for tax changes unaccompanied by changes in the money supply or demand for money. Consider Olivier Blanchard’s (2003) explanation of the response to an increase in taxes.

The increase in taxes leads to lower disposable income, which causes people to decrease their consumption. The result through the multiplier effect is a decrease in output and income. The decrease in income reduces the demand for money, leading to a decrease in the interest rate. The decline in the interest rate reduces but does not completely offset the effect of higher taxes on the demand for goods.  
(99)

There is no mention of the fact that a decrease in aggregate demand occurs only if the tax increase induces an *increase* in the quantity of money demanded (that is, fall in velocity) at the initial level of output. Instead, Blanchard has events in the monetary sector moderating a decrease in aggregate demand, a decrease that begins independent of the monetary sector.

Perhaps these skewed presentations of the monetary sector are innocent oversights. Or maybe these authors think that expository parsimony trumps a proper accounting of the monetary sector. But the partiality is so misleading and needless that one may wonder about their

understanding of monetary basics. Whatever the reason, the omission makes for bad economics, bad pedagogy, and bad research.<sup>3</sup>

### INCLUDING MONETARY BASICS

One must go back upwards of thirty years to find textbook descriptions of pure fiscal actions consistent with monetary basics.<sup>4</sup> Milton Friedman and Walter Heller's (1969) famous exchange over the efficacy of monetary and fiscal policy was a widely adopted course reading in the 1970's, and in that sense can be regarded a "textbook." Friedman's analysis of a tax increase is instructive. Noting that a tax increase necessarily means the government will be borrowing less or retiring more debt, Friedman observed:

If there is going to be any net effect [on aggregate demand], it has to be on a more sophisticated level; it has to be the indirect effect of the reduction in interest rates on other variables. In particular, it has to be a willingness on the part of the populace to hold more money, more nominal money, when the interest rate goes down. (54)

Note that contrary to Blanchard, Friedman's analysis is consistent with monetary basics. Rather than having monetary sector events soften a reduction in aggregate demand that is independent of the monetary sector, Friedman recognized that unless the tax increase generates an excess demand for money at the initial level of output, there can be no reduction in aggregate demand. For Friedman, monetary sector events exert a proactive, contractionary influence on the economy rather than the passive,

---

<sup>3</sup> Ben Bolch (1998) once asked whether macroeconomics is "believable." If the field's textbook authors stray from first principles of their discipline, the answer to Bolch's query must be "no."

<sup>4</sup> Close to thirty years ago, Michael Bordo and Anna Schwartz (1979) pointed out that in the 1940's, Clark Warburton understood, within a Keynesian context, the essential role monetary basics play in describing the mechanism by which fiscal actions bring about demand-based changes in aggregate output. Bordo and Schwartz labeled Warburton a "pioneer monetarist."

contractionary-offsetting role current textbooks ascribe to monetary sector events.

Contemporary with Friedman, Axel Leijonhufvud (1968) pointed out that for an exogenous decrease in the consumption function: “A proper analysis would recognize that while income is declining, there is an excess demand for money, corresponding to the excess supply of commodities... The decline in income will be halted when the excess demand for money and the excess supply of commodities simultaneously reach zero” (30).

Several textbooks during this time got their monetary basics right. Both Michael Darby (1976) and Boris Pesek and Thomas Saving (1968) offered sketches of debt-financed increases in government spending consistent with bedrock monetary principles. Pesek & Saving, assuming the government debt-finances additional spending from an initial position of a balanced budget, observed:

Now we have two borrowers competing for saving: the government and the investors. Before either can spend the money it borrows, it must borrow it. Something has to give and what will give is the rate of interest [at the initial level of output]... As the rate of interest increases, at least some people will want to economize on their money assets... As a result, part of the increase in government borrowing will be financed out of decreased money holdings so that the rate of interest will not rise so much that the decrease in consumption and investment [due to the government's bond sale] will equal the increase in government expenditures. Thus, the net effect will be an increase in aggregate demand. (336)

Note that for Pesek & Saving the increase in aggregate demand for goods and services mirrors a decrease in the quantity of money demanded. The same is true for Darby. To wit,

This increase in government spending requires a reallocation of resources from the production of goods and services for the private sector—especially investment—to production for the government. The reduction of private investment is achieved... by a rise in the interest rate as the increased government borrowing drives down the price of bonds... These higher interest

rates may, however, decrease the demand for money, thus creating excess cash balances and an increase in aggregate demand. (180-181)

For both Pesek & Saving and Darby, the fiscal action increases aggregate demand only because it elicits an excess supply of money at the initial level of output. Analogous to Friedman's discussion of a tax increase, Pesek & Saving and Darby have events in the monetary sector exerting a proactive, expansionary influence on the process. Contemporary authors reverse the portrayal—namely, monetary sector events have a passive, expansionary-offsetting influence. Pesek & Saving and Darby are consistent with monetary basics; their contemporary counterparts are not.<sup>5</sup>

Armen Alchian and William Allen's (1972a) celebrated textbook, *University Economics*, offered an analysis of an increase in aggregate demand that paralleled Friedman, Darby, and Pesek & Saving's attention to monetary sector basics. Alchian and Allen focused on an increase in private investment, but their attention to monetary basics was similar to that of Friedman, Pesek & Saving, and Darby. Regarding the increase in private investment, Alchian and Allen noted: "To say...that the investment function has increased so that more investment goods are demanded is to say (assuming a balance of the consumption goods' demand and supply) that the public demands less money, so that with the given initial stock of money, the amount supplied is excessive" (577). In their instructor's manual, Alchian and Allen (1972b) then apologized for a lack of candor in presenting monetary sector basics, saying: "Perhaps we were not wise to have been so meek in omitting the full exposition from the text. But it is too much of an innovation to put into a textbook when the standard acceptable exposition seems so deeply ingrained" (120-121).

Today the situation is worse. We have not made an exhaustive investigation, but it is our impression that monetary-sector basics are ill-treated or neglected in pretty much all the textbooks today, not just most, as

---

<sup>5</sup> Incidentally, here is Warburton's (1945) analysis of fiscal policy: "In fact, if fiscal policy has no effect on the volume of money *or its rate of use* in the purchase of products of the economy, the production policy expressed in the objects of government expenditures is a substitution of goods and services ordered by government for goods and services which would be ordered by individuals...*the net effect of fiscal policy upon the total volume of economic activity or production is due solely to its monetary aspect*" (p. 75, emphases added).

was the case when Friedman, Pesek & Saving, Darby, Leijonhufvud, and Alchian and Allen were writing.<sup>6</sup>

### OTHER CONSIDERATIONS

Some might be tempted to offer the following excuse: The authors who neglect monetary basics all use the IS-LM framework, a simultaneous-equations system that does not admit to sequential description. In other words, the textbook authors have made the best of a difficult situation

However tempting such an apology might be, it must be pointed out that the macroeconomic explanations provided by Friedman, Pesek & Saving, and Darby all fit into an IS-LM setting. If they could do right by monetary basics, why can't Hall & Papell, Froyen, Blanchard, and the others?

Consider, for example, Pesek & Saving's account. They argue that, following a debt-financed increase in government expenditures, aggregate demand increases to the extent that the private sector finances purchases of the government's new debt by reducing money holdings as opposed to reducing its consumption and investment. The incentive for either means of financing the debt purchases is the increase in the interest rate that follows upon the government's sale of new debt. The degree to which the private sector economizes on money vs. reduces consumption and investment turns on the relative interest sensitivities of the demand for money and private expenditures. The increase in aggregate demand in the Pesek & Saving description will be larger as the interest sensitivity of the demand for money increases relative to the interest sensitivity of private expenditures.

The latter interest relationships determine, in part, the relative slopes of the IS and LM curves. It follows that Pesek & Saving's monetary-based explanation of the increase in aggregate demand adapts easily to IS-LM underpinnings. The same factors that lead to a larger increase in aggregate demand in their explanation make the LM schedule flatter relative to the IS

---

<sup>6</sup> Roberts and Van Cott (1978; 1979) pointed out the minority status of Friedman, Pesek & Saving, and Darby. In terms of influencing the inclusion of monetary basics in analysis of pure fiscal policy, Roberts and Van Cott's articles met the same fate as these authors.

schedule, meaning the fiscal action is more effective in increasing equilibrium output.

Of course, current authors come to the same conclusion about the relative interest sensitivities, the slopes of the IS and LM curves, and policy effectiveness. Does this mean the foregoing is much ado about nothing? Not at all! Whatever the effectiveness of the pure fiscal action in increasing output, Hall & Papell, Froyen, Blanchard, and the others have the monetary sector choking off a rise in aggregate demand that it does nothing to facilitate, while Pesek & Saving et. al. have the monetary sector being the source of the rise in aggregate demand. One cannot have it both ways. The contradiction is real. And it cannot be dismissed as an inescapable consequence of the IS-LM framework being a simultaneous equation system.<sup>7</sup>

### SOURCE OF THE CONTRADICTION

We submit that the contradiction traces to an important omission in the offending authors' equation-skipping sketch. Consider the debt-financed increase in government expenditures. Unlike Darby and Pesek & Saving, the offending authors fail to ask how the government gets the money it spends. Never mind that the fiscal action is debt-financed. The government must convert its bonds into money (via sale to a financially constrained private sector in this case) if it is to augment its purchasing power in the market for goods and services.

The overlooking of the bonds-into-money step in the adjustment process is what leads current authors to an account where everything occurs *subsequent* to the increase in aggregate demand. Where does the government get the money it spends? The offending authors never say. Does the government's attempt to augment its purchasing power have inter-market consequences? Reading the offending authors, one might conclude "no," because they never ask how/where the government gets the money in the first place. It is Pesek & Saving and Darby's careful attention to this step in the fiscal process that leads them to a portrayal consistent with monetary basics.

---

<sup>7</sup> Lest there be any doubt, Pesek & Saving cast their discussion in terms of an IS-LM diagram.

Some might argue that the government need not sell its bonds until it takes delivery on the goods and services. Thus, output can increase before the government's bond sale. However, the production of goods for the government must still be financed—in this case producers tap the credit market to finance production of the goods. Reshuffling who first taps the credit market does not negate the requirements that monetary basics imposes on the description.

### **CROWDING OUT**

Properly accounting for the monetary sector's role in pure fiscal actions has important implications for the analysis of crowding out. Textbooks explain crowding out as the result of increases in aggregate demand and output, which puts upward pressure on the interest rate. The higher interest rate crowds out private spending. Thus, events in the monetary sector are seen as the proximate cause of crowding out.

Pesek & Saving and Darby reverse the story. Crowding out is a consequence of the government's bond sale (not the increase in output), as the higher interest rate due to the bond sale causes a decline in interest-sensitive private expenditures. Any increase in aggregate demand mirrors the interest rate induced fall in the quantity of money demanded (or endogenous increase in velocity of money). Rather than acting as a drag on the expansion, as textbooks authors suggest, events in the monetary sector are the source of whatever increase in aggregate demand occurs. Indeed, crowding out would be complete were there not some interest sensitivity to the demand for money.

### **FINAL COMMENT**

Milton Friedman's (1968) much-cited presidential address to the American Economic Association cautioned economists not to expect too much from monetary policy. The pendulum had swung too far back from early Keynesian thinking that had, in Friedman's words, "twice damned" monetary policy (2). Damned because it was incapable of reducing the

interest rate, and damned because even if rate reductions were possible, it would not matter because private investment and consumption expenditures are little affected by interest rates.

Our message here is that many textbook authors' negation of the monetary sector's proactive role in pure fiscal actions is a subtle, and perhaps unwitting, continuation of this "twice damned" tradition. Because the negation consists merely of incomplete sketches of transitions between equilibrium positions, it is less susceptible to empirical refutations like those Friedman and others brought to early Keynesian thinking. Modern textbook authors seem to have dodged intellectual accountability. Nevertheless, the time is long, long past that monetary basics should be explicitly incorporated into discussions of pure fiscal actions.

### REFERENCES

- Abel, A. and B. Bernanke.** 2005. *Macroeconomics* (5<sup>th</sup> ed). Boston: Pearson/Addison Wesley.
- Alchian, A. and W. Allen.** 1972. *University Economics* (3<sup>rd</sup> ed). Belmont, CA: Wadsworth.
- Blanchard, Olivier.** 2003. *Macroeconomics* (3<sup>rd</sup> ed). Upper Saddle River, New Jersey: Pearson/Prentice Hall.
- Bolch, Ben.** 1998. Is Macroeconomics Believable? *The Independent Review* Spring 2(4): 485-499.
- Bordo, M. and A. Schwartz.** 1979. Clark Warburton: Pioneer Monetarist. *Journal of Monetary Economics*. No. 5.
- Darby, Michael.** 1976. *Macroeconomics: The Theory of Income, Employment, and the Price Level* (1<sup>st</sup> ed). New York: Mc-Graw-Hill.
- DeLong, J.B.** 2002. *Macroeconomics*. Boston: McGraw- Hill.
- Dornbusch, R., S. Fischer, and R. Startz.** 2004. *Macroeconomics* (9<sup>th</sup> ed). New York: McGraw-Hill.
- Friedman, M.** 1968. The Role of Monetary Policy. *The American Economic Review*. 58(1): 1-17.
- Friedman, M. and W. Heller.** 1969. *Monetary vs. Fiscal Policy*. New York: W. W. Norton.

- Froyen, R. T.** 2005. *Macroeconomics: Theories and Policies* (8<sup>th</sup> ed). Upper Saddle River, New Jersey: Pearson/Prentice Hall.
- Gordon, R. J.** 2006. *Macroeconomics* (10<sup>th</sup> ed). Boston: Pearson/Addison Wesley.
- Hall, R. E. and D. H. Papell.** 2005. *Macroeconomics: Economic Growth, Fluctuations, and Policy* (6<sup>th</sup> ed). New York: W. W. Norton
- Leijonhufvud, Axel.** 1966. *On Keynesian Economics and the Economics of Keynes*. New York: Oxford University Press.
- Mankiw, G.** 2007. *Macroeconomics* (6<sup>th</sup> ed). New York: Worth Publishers.
- Pesek, Boris P. and Thomas R. Saving.** 1968. *The Foundations of Money and Banking*. (1<sup>st</sup> ed). New York: The Macmillan Company.
- Roberts, P. C. and T. N. Van Cott.** 1978. Restrictive Versus Permissive Money: Two Is-Lm Views of Pure Fiscal Actions. *Public Finance Review* 6(3), July: 267-76.
- \_\_\_\_\_. 1979. More on the Monetary Sector's Role in Pure Fiscal Actions. *Public Finance Review* 7(4), October: 509-514.
- Warburton, C.** 1945. The Monetary Theory of Deficit Spending. *Review of Economics and Statistics* 27(2), May: 74-84.

#### ABOUT THE AUTHORS



**Lee C. Spector** is Associate Professor of Economics at Ball State University. He obtained his Ph.D. at the University of Iowa and has published in, among others, *Empirical Economics*, *Journal of Macroeconomics*, *Public Finance/Finances Publiques*, *Economics of Education Review*, and *Journal of Theoretical Politics*.



**T. Norman Van Cott** is Professor of Economics at Ball State University. He obtained his Ph.D. at the University of Washington and has published in, among others, *The Independent Review*, *Economic Inquiry*, *Constitutional Political Economy*, *Eastern Economic Journal*, and *Public Choice*.