Abstract. Keynesian economics has lost much of its effectiveness as a paradigm of world capitalism as a whole, or as a paradigm of individual developed capitalist economies. The decline of the United States as a hegemonic power capable of imposing its will over others has seen to the erosion of the relevance of the Keynesian doctrine on the global scale. The Philips curve and what Hicks calls the “social” pressure on wages have severely restricted the field of Keynesian policy at home – even through the ruling classes continue to use Keynesian theory as their paradigm. The most important lesson from Keynes work may be that the macroeconomist should start from the important problems of the day and should face the following questions: 1) How can we to understand what are is happening right now? 2) What can be done about it? What is the best policy to follow? 3) Do recent events force us to modify what is today widely accepted economic theory? If so, what is wrong and how might we go about arriving at a more satisfying theory? The most important economic problem of today is current financial crisis that started in the United States. What might we learn from Keynesian theory about it? The current situation is almost the opposite of the one that Keynes dealt with in the “General Theory”. Now day’s economics lacks an anchored understanding of the nature of the reality that economics is supposed to illuminate. Instability of leverage, connectivity, and potential instability of the price level have all been neglected in stable – with – fractions macro theory. Technical innovations will not bring real progress as long as “stability – with – fractions” remains the ruling paradigm. Meanwhile, governments are not prepared to face another crisis.

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The present crisis has shown very clearly that the markets for a number of recently innovated financial instruments do not work well. The old story of the beneficial workings of the Invisible Hand presupposes that the participants understand what they are buying and selling and this has far from always been true in the unfamiliar environments created by very rapid financial evolution. The reasons have been various: lack of transparency in the case of securitized loans, lack of legal clarity with regard to the rights of holders of different tranches of structured products, lack of an organized market for credit default swaps, etc. There is a whole host of issues of this sort(1).

The debate on how to prevent a recurrence of the present disaster has only just begun. Thus far it has concentrated on proposals to regulate particular instruments and the markets in which they are traded. The discussion has turned less frequently (and more delicately) to regulation of the powerful institutions that are the major actors in the financial system.

Contemporary economics analyzes these problems in terms of transaction costs, informational asymmetries and moral hazard and tries to find ways to eliminate or at least ameliorate these market imperfections.

The missing macro element

This is important work but our impression is that a macroeconomic perspective has so far been largely missing from this beginning debate. Perhaps this is because modern macroeconomics presumes that the economy behaves like a stable general equilibrium system. If problems arise in such a system it can only be due to “frictions” or “imperfections” of the sort just mentioned.

Once these issues are analyzed, therefore, the macroeconomist would have nothing to add.

This modern macroeconomics is wrong. If it were even roughly right, none of the desperate, improvised “non-standard measures” by treasuries and central banks aimed at preventing unstable processes from overwhelming the markets would have been needed. All traditions of central banking have been abandoned and every line of demarcation between central banks and treasuries transgressed in the last 20 months. It is not to overcome “frictions” that the authorities have been pouring trillions of dollars, pounds and euros into the world economy.

This article will take a different macroeconomic perspective and focus on the instabilities of the system that the crisis has revealed.
Three systemic problems

Everyone is familiar with the story of how free competitive markets are supposed to work. If demand exceeds supply, the suppliers will raise their price until the discrepancy is eliminated. If price exceeds a producer's marginal cost he will increase output until that discrepancy disappears. Both these “mechanisms” are examples of what is called negative feedback loops in control theory.

No centralized decision or supervision is required for the market to equilibrate.

There are three major variables that are crucial to the economy as a whole but which are not subject to the negative feedback control we associate with the Invisible Hand, namely, the price level, the overall leverage in the financial system, and the connectivity of the network of financial institutions. Under our present arrangements (Leijohncefvud, 2009), the first two will be governed by positive feedback, which is to say, they are unstable. The evolution of the third over the last ten or twenty years has changed the propagation of destabilizing impulses through the system for the worse.

Keynes and the financial side of recessions

What then can we learn from Keynes that is relevant to our current troubles? We do not find the General Theory particularly helpful. The warning not to allow the real economy to be governed by the machinations of a casino may be well taken but, once you have ignored it to your peril, what do you do then? His various papers from the early thirties are more focused on the financial crisis than the General Theory, in which the notion has taken over that the real nexus of the problem is the coordination of household saving and business investment.

The Treatise on Money contains a piece of analysis that we have found illuminating. It deals with the financial side of a business downturn. Keynes assumes an initial equilibrium disturbed by a decline in expected future revenues from present capital accumulation.

Firms cut back on investment and, as activity levels decline, direct some part of cash flow to the repayment of trade credit and of bank loans. As short rates decline, banks choose not to relend all these funds but instead to improve their own reserve positions. Thus the system as a whole shows an increased demand for high-powered money and simultaneously a decrease in the volume of bank money held by the non-bank sector.
Keynes's preference for speaking of “liquidity preference” rather than “demand for money” becomes understandable in this context since while an increase in liquidity preference does constitute an increase in the demand for outside money it also leads to a decrease in the volume of inside money.

What makes this analysis relevant in today's context is that it describes a process of general deleveraging as part of a business downturn. Causally, it is the decline of investment expectations and the consequent contraction of output that prompts deleveraging. Today, we are faced with the converse question of whether or not the deleveraging that the financial sector is rather desperately trying to carry through will of necessity bring about a serious recession. For many months now, we have been treated to brave protestations from all sorts of sources that the real economy is strong and will not be much affected by the credit crisis. Yet, it is quite clear that, in a closed system, it is a fallacy of composition to suppose that general deleveraging can take place without a decline in asset prices and excess supply of goods and services in general (Leijonhufvud, 2007c).

Of course, the US private sector is not a closed system. Leverage can be reduced and liquidity improved by inducing sovereign wealth funds or other foreign entities to assume an equity interest in domestic enterprises as some American banks have done. Similarly, the government can guarantee certain private sector debts and/or swap safe and liquid government debt for risky and illiquid private debt. This too has been done. But there are limits to both these safety valves and it remains a serious question whether they will suffice to stave off a serious and long-lasting recession.

Policies to deal with a credit crunch

Should Keynesian policies be used in the kind of recession that we are now threatened with?

Consider the case of Japan. Eighteen years after its big crash Japan has still not completely emerged from its aftermath. One should remember, however, that Japan had two enormous bubbles bursting at the same time “one in the stock market, the other one in real estate” and that its banking system was heavily engaged in both. In the present instance, we have to cope with the bursting of just one bubble, albeit a really big one, and the United States also has a small advantage over Japan in that some part of the financial damage has to be absorbed by foreign interests, be they German banks or small Norwegian communities.

Japan tried policies inspired by Keynesian economics of the variety propounded in macro textbooks of some decades ago. Enormous amounts of
money were spent on “bridges to nowhere” and other, hopefully better motivated, projects until Japan's national debt grew to a size that discouraged any continuation of the policy all too little apparent avail.

Why so? Recall that, in the Keynesian theory, public works spending is supposed to work and have a strong multiplier effect when unemployed labor is cash constrained and unable to exercise effective demand for consumer goods. That was not Japan's problem. The effective demand failure that plagued Japan rather was that business firms could not do the intertemporal trade of expected revenues from future output for the factor services in the present needed to produce that output; that is, they could not or would not borrow to finance investment. In the early post-crash years, the state of the banks was such that they would not lend. Even when the Japanese banks eventually got into healthier shape, many business firms still had balance sheets in such condition that they were loath to borrow (Koo, 2003). So Japan was unable to resume the growth rates that it had achieved before the bubbles burst.

The other lesson to draw from the Japanese experience is that once the credit system had crashed, a central bank policy of low interest rates could not counteract this intertemporal effective demand failure. Year after year, the Bank of Japan kept its rate so close to zero as to make no difference, and even so the economy was under steady deflationary pressure and healthy growth did not resume. The low interest policy served as a subsidy that enabled the banks eventually to earn their way back into the black, but this took a very long time.

We will continue presenting this experience in contrast with that of Sweden or Finland in the wake of their real estate bubbles (and in Finland's case the loss of its Soviet Union export markets) in the early 1990s. Both Nordic countries fell into depressions deeper than what they had experienced in the 1930s. Both had to devalue and Sweden in particular had to climb far down from its lofty perch in the world ranking of per capita real income. But, in contrast to the Japanese case, the governments intervened quickly and drastically to clean up the messes in their banking systems (Jonung, 2008).

Both Sweden and Finland took some three years to overcome the crisis but have shown what strong growth is, by European standards, since. The devaluations that aided their export industries were no doubt of great importance for this growth record but it is

**Central banking doctrine in light of the crisis**

The Federal Reserve, he noted, has gone to “the very edge” of its legal authority. “Out of necessity”, said Volcker, “sweeping powers have been exercised in a manner that is neither natural nor comfortable for a central bank.” He was referring to the $29 billion guarantee of Bear Stearns assets that had been extended to JP Morgan and the subsequent offer to swap $100 billion of Treasuries for illiquid bank assets. The Bear Stearns “rescue” was aimed at averting a dangerous situation in the default risk derivative market, and the swap operation sought to restore some liquidity to “frozen” markets. These were indeed unconventional measures, but ones without which more conventional interest rate policy could not be expected to have much effect in the current situation.

It is probably fortunate that the Fed had at its helm the most distinguished student in his generation of the Great Depression and someone, therefore, able to perceive the “necessity” more or less correctly. As in the Japanese case, the lesson of the Depression is that a collapse of credit cannot be reversed and that the consequences linger for a very long time. It is also true, however, that until only a year or two ago Chairman Ben Bernanke was a consistent and outspoken advocate of a monetary policy of strict inflation targeting, which is to say, of a central banking doctrine that required an exclusive concentration on keeping consumer prices within a narrow range with no attention to asset prices, exchange rates, credit quality or (of course) unemployment.

Bear Stearns, Northern Rock, and Landesbank Sachsen are the best known institutional victims of the current crisis, so far. But the damage is of course far more extensive and a great many CEOs have had to go into ignominious retirement with only a few million dollars as plaster on their wounded reputations. It is the rule of efficient capitalism that you must pay for your mistakes alas!

There are two aspects of the wreckage from the current crisis that have not attracted much attention so far. One is the wreck of what was until a year ago the widely accepted central banking doctrine. The other is the damage to the macroeconomic theory that underpinned that doctrine.

Critical to the central banking doctrine was the proposition that monetary policy is fundamentally only about controlling the price level. Using the bank's power over nominal values to try to manipulate real variables such as output and employment would have only transitory and on balance undesirable effects. The goal of monetary policy, therefore, could only be to stabilize the price level (or its rate of change). This would be most efficaciously accomplished by inflation targeting, an adaptive strategy that requires the bank to respond to any deviation of the price level from target by moving the interest rate in the opposite direction.
This strategy failed in the United States. The Federal Reserve lowered the federal funds rate drastically in an effort to counter the effects of the dot.com crash. In this, the Fed was successful. But it then maintained the rate at an extremely low level because inflation, measured by various variants of the CPI, stayed low and constant.

In an inflation targeting regime this is taken to be feedback confirming that the interest rate is “right”. In the present instance, however, US consumer goods prices were being stabilized by competition from imports and the exchange rate policies of the countries of origin of those imports. American monetary policy was far too easy and led to the build-up of a serious asset price bubble, mainly in real estate, and an associated general deterioration in the quality of credit. The problems we now face are in large part due to this policy failure.

A second tenet of the doctrine was central bank independence. Since using the bank's powers to effect temporary changes in real variables was deemed dysfunctional, the central bank needed to be insulated from political pressures. This tenet was predicated on the twin ideas that a policy of stabilizing nominal values would be politically neutral and that this could be achieved by inflation targeting. Monetary policy would then be a purely technical matter and the technicians would best be able to perform their task free from the interference of politicians.

Transparency of central banking was a minor lemma of the doctrine. If monetary policy is a purely technical matter, it does not hurt to have the public listen in on what the technicians are talking about doing. On the contrary, it will be a benefit all around since it allows the private sector to form more accurate expectations and to plan ahead more efficiently. But if the decisions to be taken are inherently political in the sense of having inescapable redistributive consequences, having the public listen in on all deliberations may make it all but impossible to make decisions in a timely manner.

When monetary policy comes to involve choices of inflating or deflating, of favoring debtors or creditors, of selectively bailing out some and not others, of allowing or preventing banks to collude, no democratic country can leave these decisions to unelected technicians.

The likely prospect for the United States in any case is a period of stagflation. The issue is going to be how much inflation and how much unemployment and stagnation are we going to have. To the extent that this can be determined or at least influenced by policy, the choices that will have to be made are obviously not of the sort to be left to unelected technicians.
The state of macroeconomic theory

So far we have argued that recent events should force us to re-examine recent monetary policy doctrine. Do we also need to reconsider modern macroeconomic theory in general? We should think so. Consider briefly a few of the issues.

The real interest rate. In the old monetarism of Milton Friedman, the real interest rate was determined by real factors and could not be manipulated by the Central Bank. Any attempt to do so would quickly destabilize the price level in Wicksellian fashion. This property was carried over into rational expectations monetarism and then into real business cycle theory and dynamic stochastic general equilibrium (DSGE) theory in general.

The Federal Reserve System under Greenspan put this proposition to the test in the years following the dot.com crash, pursuing an extreme low interest policy.

The result was more Keynesian than Monetarist and more Austrian than Keynesian: virtually no CPI inflation, but drastic asset price inflation and very serious deterioration of credit standards (Leijonhufvud, 2007c).

The problem is that the real interest rate does not exist in reality but is a constructed variable. What does exist is the money rate of interest from which one may construct a distribution of perceived “real” interest rates given some distribution of inflation expectations over agents. Intertemporal non-monetary general equilibrium (or finance) models deal in variables that have no real world counterparts. Central banks have considerable influence over money rates of interest as demonstrated, for example, by the Bank of Japan and now more recently by the Federal Reserve.

Ricardian equivalence was another property of rational expectations monetarism. It was in effect tested by the Bush administration, which swung the federal budget into large deficit. The increase in the deficit was not compensated by increased private saving. Instead, American households decreased their saving to basically nothing. The violation of Ricardian equivalence suggests that the transversality condition imposed in intertemporal general equilibrium models has no empirical counterpart. Without such a condition, consistency of all decisions is no longer guaranteed in intertemporal models. But bubbles and crashes are admitted.

Modern financial theory is incorporated as a component of dynamic stochastic general equilibrium theories.

Its core assumption that future returns are normally distributed fits neatly into rational expectations models but has been proven false innumerable times.
The repeated occurrence of financial crashes or crises hardly seems consistent with intertemporal equilibrium theory.

A list covering only the last twenty years would include the October 1987 stock-market crash on Wall Street and the Norway banking crisis in the same year, followed by Japan (1990), Sweden and Finland (1991), the East Asian crises (1997), Russia (1998) and Brazil (1999), the US dot.com crash (2000), Argentina (2001), with the latest installment being the on-going credit crisis centered in the United States (2007-?) (7).

The representative agent. If all agents are supposed to have rational expectations, it becomes convenient to assume also that they all have the same expectation and thence tempting to jump to the conclusion that the collective of agents behaves as one. The usual objection to representative agent models has been that it fails to take into account well-documented systematic differences in behavior between age groups, income classes, etc. In the financial crisis context, however, the objection is rather that these models are blind to the consequences of too many people doing the same thing at the same time, for example, trying to liquidate very similar positions at the same time. Representative agent models are peculiarly subject to fallacies of composition.

The representative lemming is not a rational expectations intertemporal optimizing creature. But he is responsible for the fat tail problem that macroeconomists have the most reason to care about.

Conclusion

There are three things we should learn from Keynes. The first is to take our social responsibilities seriously and focus on the macro problems of our own day. Today's problem is the ongoing credit crisis and its gradually unfolding consequences.

The second is to try to understand what can be done with it. Standard Keynesian policies are not the answer. Neither is the central banking doctrine that has dominated in recent years. Fortunately, Ben Bernanke and Mervyn King have shown that they realize that we must move beyond that doctrine.

The third is to ask whether events proved that existing theory needed to be revised. Dynamic stochastic general equilibrium theory has shown itself an intellectually bankrupt enterprise. But this does not mean that we should revert to the old Keynesian theory that preceded it (or adopt the New Keynesian theory that has tried to compete with it). What we need to learn from Keynes, instead, are these three lessons about how to view our responsibilities and how to approach our subject.
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Notes

(2) For a fuller discussion, see Leijonhufvud (2009).
(3) Standard & Poor recently warned the U.S. government that its contingent liabilities for Fannie Mae and Freddie Mac added to those created in the Bear Stearns affair, if triggered, could lead to a downgrading of the Federal government's credit rating! Extremely unlikely that anything like it could have been achieved without the policy of “quarantining” and then settling the credit problems resulting from the crash.
(4) Quoted as delivered orally www.youtube.com/watch?v = ticXF2h3ype. New York Times, April 9, has slightly different wording.
(5) In one case apparently not all that few (reportedly 190 million!).
(6) This focus is one of the legacies of Monetarism. Historically, central banks developed in order to secure the stability of credit.
(7) Events in faraway countries tend to have little impact on macroeconomics in America. This lack of interest overlooks the fact that American financial institutions played important roles in most of the episodes mentioned.

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