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A note on competing economic theories on the 2007-2008+ financial crisis: The case for (hidden) stagflation

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Abstract

The financial crisis that erupted in 2007, continues in 2008 and likely continues longer, is in need for explanation by economic theory. The monetary authorities and financial regulators provide us with piecemeal engineering on the fly but there is a lack of overview. The lack of convincing theory and strategy becomes especially worrying when we see the crisis affecting the real economy. People and economic activities that already suffer are not well-represented in national statistics, which provides newspapers with a rosy picture as if the current crisis only affects the financial sector and not the real economy. When the crisis starts to bite those who are in the statistics then the financial crisis will become recognized for the economic crisis that it is, but apparently with little guidance from economic theory on how to solve it. The time honoured solution is to have the poor and powerless work harder and earn less to solve the problems of the rich and powerful. But economic theory can do better. The paper compares various competing economic theories and suggests that economists study a particular theory that apparently hasn't had sufficient attention yet. The current financial crisis finds a fundamental cause in stagflation. This stagflation originally was open but was later hidden by financial deregulation and innovation. By tackling stagflation the financial crisis would become manageable. A suggestion on how to tackle stagflation is provided by Colignatus (2005), "Definition & Reality in the General Theory of Political Economy", Dutch University Press

Keywords: financial crisis, economic crisis, stagflation, inflation, unemployment, Phillipscurve, taxes

Introduction

The current financial crisis gives a wide range of issues and problems, see e.g. The Economist (2008) and Leijonhufvud (2008). Though we use the catch-all phrase "the financial crisis", it may be doubted indeed whether there is only a single issue and it may well be that there are more overlapping issues. It may also be doubted whether the present author has much to say on these various issues - who could do so with some convincing power would be rather rich and clearly this is not the case, see McCloskey (1990). Yet the current financial crisis is important and some points can be indicated. Moreover, this paper will clarify that this is not only a financial crises but rather an economic crisis, relevant for the whole economy.

Even though the situation may be compared to a puzzle and even though all pieces in a puzzle are relevant, so that we can hardly say that *one and only one* piece is of prime importance, it still makes sense to observe that common expositions on the financial crisis leave out one key piece. Clearly, a puzzle is more puzzling if a (key) piece is missing.

The main point in this paper is that there are competing economic theories for the current financial crisis. This crisis provides a test on existing theories and allows us to identify which theories are relevant and which are not. The proposition here is that the prime cause behind the current financial crisis is *stagflation*, as has already argued by Colignatus (1990, 1992, 1994 and 2005). My earlier analysis clearly did not get the attention that it deserved. By consequence the world economy has been managed by relying on erroneous theories and thus I am not surprised that the current economy is a bit in disarray. The wrong policies for a while caused that stagflation became hidden, but now it is coming into the open again. It is an interesting question how much more disarray the world economy will have to suffer before my fellow economists give up their misguided ideas and take time to study a more proper alternative.

David Hendry c.s. would require me to produce models, data series and econometric tests. I refer to Colignatus op. cit. for a "definition & reality methodology" that answers to that challenge. I do want to draw attention to Pollock and Letta (2001) who discuss the causation between income and consumption, which direction of causation is quite relevant now. If we don't keep up expenditure then our income will suffer. These two remarks satisfy our current need for number crunching econometrics. For the remainder of the paper it suffices to use logic only. Readers interested in logic are referred to my book on logic, Colignatus (2007) and the review by Gill (2008).

Competing theories

The main theory, that can be called *Theory A*, is given in Colignatus (1990, 1992, 1994 and 2005). The 2005 book is the most accessible and sufficiently comprehensive for current purposes. In a nutshell the story is this. Erroneous theories and policies on the labour market, taxation and social insurance caused the stagflationary shift of the Phillips curve, with percolation to all wages and the whole economy. Fiscal and monetary authorities didn't and still don't see this and adhere to other theories. Some policies are created on the fly as new circumstances of the day create new needs. To battle unemployment and inflation the authorities have allowed laxer monetary and financial standards, and they have let themselves to be guided by ideas on deregulation and new financial instruments. Those events have hidden stagflation for a while. A consequence is that the financial sector has been inflated with money. Currently there are no reliable measures of liquidity or "how much money" is in the system but we can be sure that this has increased enormously. Wrong theories and policies have created their own monster and it will take strong nerves to control it. Obviously, all this has to be seen against the backdrop of important changes in the real economy, such as the rise of the emerging markets, the ICT revolution, population growth, the environmental problem and new scarcity, the Iraq war and such. In economics there are few mono-causal experiments.

An important element in the financial crisis is that the Chinese government propped up the dollar, apparently in order to keep up exports to the US. The lower US rate of interest propelled the stock market and mortgages. The key point here is that, apparently, the Chinese government had no good policy for inland economic development and that the US government had no good alternative for import substitution and keeping inflation low. This can be explained as a neglect of *Theory A*.

A prime alternative, that can be called *Theory B*, is that the current financial problem is only a problem for the financial sector. Indeed, some might argue that the crisis is smaller since some instruments have allowed some hedges against worse developments. However, current developments correctly cause us to restore various regulations. *Theory B* would hold that this would be enough. If we restore regulations such as on distinctions between savings banks, investment banks and insurance companies, on bonus systems, new financial products, and such, then things would be OK again – at least that is this theory. This approach has the benefit that it accepts that the financial sector is no longer the best example of 'rationality' and

'efficiency'. Yet, this *Theory B* still denies the linkages between the monetary / financial sector and the "real" economy. It is advisable indeed that various deregulations are reversed and that the financial sector is re-regulated again. However, when the hands of the monetary authorities are tied again, as they used to be, and they no longer have this other way out of de-regulation and financial innovation, then it is quite likely that stagflation will show up into the clear again. We may even hold as a criterion of success of re-regulation that stagflation comes into the open again.

This conclusion is consistent with Leijonhufvud (2008): "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." From this it follows that *Theory B* can be rejected: this is not just a crisis for the monetary and financial sector.

Deregulation has not been limited to the financial sector but has been applied to the whole economy. **Theory** C is that overall deregulation and more unequal distribution of income, with e.g. more executives' pay and bonusses and stock options, are the engine of investment, innovation and growth. The development of the financial sector would be only an example of this overall idea. Since this approach apparently hasn't worked well for the financial sector, witness the rejection of **Theory** B, the authorities perhaps now might want to opt for a stronger dosis of **Theory** C for the non-financial sectors. This however would be the next mistake, see **Theory** A.

Other alternative theories, which collection can be called *Theory D*, are given by the known list of monetarism, old keynesianism, new keynesianism, disequilibrium theory, rational expectations, and the like. These are discussed by Colignatus op. cit. and are rejected there. What remains is "proper Keynesianism", that is included in *Theory A*.

There don't seem to be many other theories. Perhaps the shocks on the commodity markets may be mentioned, like a repeat of the earlier oil crises and the need to recycle profits, including the threat of inflation. Part of the financial crisis must indeed be related to these greater flows of capital. Yet this issue pales against the issues of regulation. It may also be that a deeper problem concerns population and the environment, and that these are at the root of economic behaviour. Yet, the issue of re-regulation is to a large extent independent of those other issues, and it suffices here to oppose *Theory A* to the mentioned *B*, *C* and *D*.

The intermediate conclusion

In summary the economic situation is as follows. *Theory A* explains stagflation but is being neglected. In the mean time, the authorities muddle through between deregulation, re-regulation and the dangers of open stagflation, using theories that can be rejected from an economic point of view. One may presume that it would be rational for economists at the academia, in government offices, working for the media, within pension funds or within the market sector to advise the authorities to adopt an economic theory that works. Within the financial sector the incentives however have been towards more deregulation and one can imagine that economists within other sectors have their own pecularities concerning incentives. Since a forecast must be based upon those processes of information management, a forecast is hardly possible.

In the mean time it remains interesting to see what might be done with the financial crisis proper. It may be noted that *Theory A* originated in 1989-1990 which was before the financial deregulation. Hence, some comments are possible on how to extend *Theory A* with monetary and financial regulation as seen from the experience of the last decades and the current situation. Europe, that is less affected than the US, might benefit from such lessons.

Some consequences

The central bank

An important element in re-regulation would concern the ownership of the US Federal Reserve System. Currently, part of that system is in private hands, which causes the wrong incentives. An argument at the creation of the system would have been that the private partners, who were already involved, were henceforth included to give them part of the responsibility by law rather than profit, yet, this neglects the negative incentives. It would be advisable that the US creates a Central Bank like is common in Europe. PM 1. On accounting for fiat money and the proper calculation of national debt, see Colignatus (2005a). PM 2. For the question whether a CB should target not only inflation but also unemployment: this issue is dealt with by *Theory A*: a Central Bank would not be be accountable for unemployment, but could focus on the value of money (inflation or deflation, asset bubbles and implosions), the health of the banking system, and possibly the rate of exchange.

CB independence is a related issue. Leijonhufvud (2008) rightly states: "When monetary policy comes to involve choices of inflating or deflating, of favouring 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 independence doctrine becomes impossible to uphold." This statement neglects *Theory A*. When this theory is used to shift back the Phillipscurve then the bandwidth of Central Bank decisions does not need to be so large. See further Colignatus (2005) on Central Bank independence, where the general proposal is to first create an Economic Supreme Court before dealing with the relatively minor point of CB independence.

Competition in the financial market

A main point why bonusses in the financial sector rose so much must derive from lack of competition. When there is more competition then bonusses would have to be much lower. A focus for policy on the monetary and financial sector thus would be to create adequate competition.

Customers depositing their money within banks apparently are not aware of the (system) risks and current regulations goad them into a false sense of security. Banks compete on safety and trustworthiness but are currently allowed to use false signals. One can imagine that anyone making a deposit or taking a certificate in excess of \$10,000 will be required to hold at least 10% of that deposition in controlling equity of the same bank. Similarly, participation in a pension funds should entitle to a say in how the fund is run.

For the various financial innovations, we must distinguish between (i) the creation of (complex) mathematical constructions and (ii) the implementation in the market. For (ii) we may restrict transactions to the known instruments, such as loans and equities, for which conventions and regulations are in place. For (i) we may allow all kinds of invention and construction. Thus the only regulation required is that any new construction may only be implemented by known instruments. The risks of errors of translation then are taken by who does the implementation and those risks would always be covered by the regulations on normal instruments.

Another aspect is the proper definition of risk – see Colignatus (2005) again. The commonly fashionable "value at risk" does not sufficiently take account of the total risk involved.

¹ Up to \$10,000 no equity is required but the next dollar of deposits requires first an acquisition of equity to the amount of \$1,111.10 before that deposit can be considered. If the deposit is reduced then this does not imply that the equity holding is reduced.

Competition between mortgage banks translated in variable rates of interest with low starting values but should have been translated into who took the risk of foreclosure, related to the overall housing market. ²

The bail out

Currently in the US, a \$ 700 bn "bail out" is under discussion, or, when this paper is published, perhaps already even signed. It is not clear whether \$ 700 bn would be enough but at least it is the first time in a year that a more comprehensive approach is tried for the system as a whole.

The September 25 *Troubled Asset Release Plan* (TARP) proposal puts the emphasis on saving the bank system but the September 28 version rightly improves this with a wider package. It is advisable indeed to do something about the subprime mortgages and the home owners as well, and it is advisable as well to do something about the current payment and bonus system. Yet, one could go further. It would be important to put an end to the various financial innovations that have been creating such havoc – and that, apparently and curiously, are still allowed to operate at this moment. Some suggestions on mortgages and the new financial instruments have already been done above. Also, a serious effort is useful in recovering past payments and bonusses that apparently have been paid out based upon wrong information, notably on risks. The latter adjustment would consist of (a) using as much of existing laws and regulations, (b) create new law – where possibly the Supreme Court would eventually be involved.

The following paragraphs discuss how a resolution might work. This is not the TARP but the TARP might work partly along the same lines. These are primarily my suggestions on what might work. For the banking system, a new insurance regulation ought to motivate bank owners to take risks more sensibly. We should distinguish the risks taken on loans (such as mortgages) and the risks of the moral hazard by bank owners and management (to take too much risk). Let us consider the basic balance statement for a bank and its profit equation. The Bank Equity or Net Worth will differ from the Owner's Equity as traded on the market since the latter also includes expected profits and losses.

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NetWorth = Loans + Reserves – Deposits – BorrowingFromFED

Profit = \Delta NetWorth + r_{in} Loans – r_{out} Deposits – r_{FED} BorrowingFromFED – Operation

ReturnOnEquity = (1 - tax) Profit / NetWorth(-1)
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We want to increase the incentives for bank owners to be more sensible about risks. There already are regulations, notably Reserves $\geq f$ Loans, with f the reserve requirement, and r_{FED} targetted on the economic cycle. A typical example of the current financial crisis would be that loans for mortgages or securities based upon such loans default, which causes a collapse of net worth and solvency. The response to put more liquidity into the system works a bit (easier borrowing from the FED translates in profits and retained earnings) but may not work sufficiently well and increases the risk for later inflation. A bail out might take over bad loans plus a part of equity, so that in fact the bank would sell the loan and sugar it with equity covering the bad risks in the loan. Since the current equity values have already taken a dent, bank equity however doesn't cover those risks. A new insurance then would step in.

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² For subprime mortgages, the idea might have been that the defaulting home owner would remain in debt for the rest of his or her life. In a foreclosure, if house prices had dropped, the current situation frequently is that the risk remained with the original owner. The mortgage bank then would be like a predator, goading the client into too much risk. Perhaps a house price bubble made all parties think that the risk was worth taking, but still, regulations in some European countries appear stricter than in the US and it is advisable to consider those. But we can go a step ahead and transfer risk to the stronger partner.

Using the bank profit equation we can consider the options for such an insurance. When your house has burned down it will not be possible to get insurance. So the insurance should basically work for the future, but we could insert a recovery credit line to get banks back into business, so that the phrase "(ex post) insurance" might be adequate.

- (1) Owners are already hurt by the loss of their equity. A bail out would restore their property. This does not seem wise. Best is that the currently responsible owners part from their ownership and (non-market) prospect of future profits. Due to corporate law, the owners are not accountable with their personal wealth. However, when there has been reckless management, with e.g. disproportionate profits in the preceding period, then they are. It would be wise to pursue this line. Hence, lots of Chapter 11's and investigations of willfully bad management.
- (2) Part of the "bail out" fund can be used to buy up such Chapter 11 banks. Poisoned loans are reallocated to a separate management unit, banks are restored to normal operations, equity is sold at proper market prices, and government involvement can stop there.
- (3) Poisoned loans can be traced to who created them. There is a money trail and it can be followed. People are accountable for bad business practices.
- (4) For all banks (including those that need not be bailed out) an insurance premium (including the ex post insurance provided by a credit line) that would be neutral to the other activities would have the form of a premium on profit. The return on equity thus becomes:

ReturnOnEquity =
$$(1 - tax - premium)$$
 Profit / NetWorth(-1)

with executives' pay depending upon net profits as well (though with ceilings). Such an insurance premium is equivalent to acquisition of part of equity but it takes away the costs of administration. Rather than an uniform insurance premium rate there would be various risk classes with appropriate rates, with likely a first start on the actual size of the individual bail out. Over time, when profitability and equity values restore, and the bail out fund is repaid, it may become more feasible to assign the risk classes to the activities and the loans involved and not to the bank ownership itself, though such an insurance system might still remain in place to control asset bubbles.

We can review the steps by considering the balance sheets. Table 1 gives a situation where a bank is undercapitalized and tries a risky loan to prop up profits. Table 2 gives the situation where that risky loan of \$ 15 million defaults, wiping out net worth. We use the example of a clean wipe out, but relatively small values around zero are equally troubling.

Table 1: Original balance sheet

Assets (million dollars)		Liabilities (million do	Liabilities (million dollars)	
Loans	150	Deposits	140	
Reserves 15		Borrowing from the FI	ED 10	
		Net worth	15	
Total	165	Total	165	

Table 2: Balance sheet after loan default

Assets (million dollars)	Liabilities (million dollars)	
Loans 135	Deposits 140	
Reserves 15	Borrowing from the FED 10	
	Net worth 0	
Total 150	Total 150	

The bank might clear out all accounts or file for Chapter 11 but the owners can save their ownership and (non-market) prospect of future profits by the new (ex post) insurance. The fund buys the \$15 million loan for say \$ 5 million, and the bank is subjected to a 30% insurance premium on future profits till that \$ 5 million plus interest has been repaid plus a markup for costs and future deterrent (equivalent to some loss of equity). Table 3 gives the balance sheet (but not profitability). Note these points: (1) Rather than taking over the defaulting loan, the fund might decide that this bank deserves credit, which it otherwise would not get in the market. In that case it swaps cash for future tax/premium payments. (2) The fund might take ownership of the defaulting loan if it would be better able to investigate possible mismanagement or disinformation by the sellers. (3) There is a distinction between banks that come under Chapter 11 and lose all equity ownership and those who retain equity ownership but are penalized by partial loss of that.

Table 3: Balance sheet after loan default

Assets (million dollars)	Liabilities (million dolla	Liabilities (million dollars)	
Loans 135	Deposits	140	
Reserves 20	Borrowing from the FED	10	
	Net worth	5	
Total 155	Total	155	

In summary, for the bail out it makes sense to distinguish between the risk related to ownership and management and risks in the loans. The required (ex post) insurance premium is like a corporate profit tax but would stop after repayment of relevant costs. In some sense it indeed is a bail out for bank owners. They have been courting disaster but many will of necessity be saved from a total loss. There is some responsibility by the authorities for allowing all kinds of financial instruments that have not been put to the test, and thus it makes sense to accept some national responsibility. But clearly most of the cost can be carried by the financial sector and capital owners (including pension funds).

Conclusions

The line of reasoning is clear. Various possible economic explanations for the current financial crisis can be considered but one approach stands out convincingly.

The current financial crisis finds a fundamental cause in stagflation. This stagflation was openly visible in 1970-1995 and was 'solved' by financial deregulation and innovation – but this 'solution' only meant that it became hidden. By now tackling stagflation the current financial crisis would become manageable. Colignatus (1990, 1992, 1994 and 2005) provides a suggestion on how to tackle stagflation.

Economic crises tend to be solved by saving the rich and letting the poor suffer the consequences. This especially happens when there is no good theory and when solutions have to be found "on the fly". In the current financial crisis, economic theory can do better.

It would be proper for economists to inform the general public of the available options so that people can better express their preference on what should be done.

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