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Financialization and its discontents

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Abstract

Finance is not something separate from society. It is neither a Marxian superstructure nor a monetarist veil, but rather the very substance of modern social relations, a web of time-dated promises to pay that stretches from now into the future, and from here around the globe. Financial relationships are not about mediating something else on the 'real' side of the economy; they are the constitutive relationships of the whole system. Financial globalization and global financialization have produced a global Financial Society, hierarchical and inherently unstable. The problem confronting social analysts is not so much to find the social in the money grid – the money grid is already social – but rather to understand the dynamical operations of that grid on its own terms. This essay sketches the fundamental processes that produce and reproduce Financial Society – settlement and market-making – as an attempt to provide a realistic point of departure for any feasible project of reform.

Keywords

Financialization, Polanyi, Minsky, survival constraint, market theory of money

Introduction

> Capitalism is essentially a financial system, and the peculiar behavioral attributes of a capitalist economy center around the impact of finance upon system behavior.
>
> (Minsky, 1967: 33)

Financial globalization and global financialization are the significant facts that confront any current project to build a better society. A logic of finance, with a distinct set of properties and a long history, has not only spread over the face of the globe from the advanced countries to emerging markets (call that 'financial globalization'); it has also spread to more and more areas of social life, even beyond the classic Polanyian 'fictitious commodity' trio of land, labor, and money (call that 'global financialization'). Discontent with this state of affairs is

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widespread, but also diverse and unfocused. Even among those who see a problem, there is no agreement about what the problem is, and less about its cause and possible solution.

I mention Polanyi advisedly because he is so often the starting point for modern discontents (Polanyi, 1944; Stiglitz, 2001; Graeber, 2011). But where Polanyi chronicled the nineteenth-century construction of a new Market Society by a newly powerful nation state, we today confront instead the construction of a new Financial Society by powerful private actors operating on a global stage. And where Polanyi and the spontaneous social protection movements he chronicled both confronted a well-established economic theory of the market economy, contemporary discontents confront instead the relatively new and poorly understood practices of financialization. For both reasons, the familiar and comfortable Polanyian frame arguably obscures as much as it reveals, and so serves as a poor guide for contemporary social protection movements. Going beyond Polanyi, the first step toward a proper critique of Financial Society is to understand a different logic of finance that is its driving force.

When I say Financial Society, I mean to draw attention to the way that social relations are today structured in large part by a web of time-dated promises to pay, stretching from now into the future, and from here around the globe. Typical agents of modern Financial Society – households, firms, banks, and nation-states – connect to this web in two ways. On the one hand, they issue promises that involve their own commitment to pay others (liabilities). On the other hand, they accept promises that involve the commitment of others to pay them (assets). Some agents are net debtors, and others net creditors, but it is the web of *gross* debt exposure that constitutes the fabric of Financial Society.[1] Maintenance of this fabric involves, as shall be elaborated below, two key processes: the clearing and settlement of the moneyflows implied by that web, and the pricing of the array of outstanding promises in money markets and capital markets.

For avoidance of misunderstanding, it is important to emphasize here at the start that the fabric of Financial Society is anything but flat. It is not so much a matter of the unequal distribution of wealth or income (though that is certainly a factor, both cause and effect) as it is a matter of qualitative difference in the moneyness of different promises to pay: central bank liabilities on the top, private bank liabilities farther down, and other promises below that. Financial Society is inherently *hierarchical*, as promises to pay (i.e. credit) at one level in the system serve as means of payment (i.e. money) lower down (Mehrling, 2013a). The system has a core and a periphery on both the extensive margin (globalization) and the intensive margin (financialization), and system dynamics involve fluctuation along both of these margins.

One further preliminary, it is important to emphasize at the start the *global* character of the system. Figure 1 shows a simplified image of the current international hierarchy of money and credit. At the top is global money and that money is the dollar, public state money inside the US but private bank money outside the US. The dollar is connected to other currencies farther down the international hierarchy through both public channels (central bank swap lines) and private channels (foreign exchange markets), and each national money stands on top of a more or less extensive pyramid of bank money, and then private credit below that. The top of the hierarchy is the ultimate money, the bottom mere promises to pay, and everything else in between is partially money (viewed from below) and partially credit (viewed from above).

It is this hierarchy, I submit, that is the origin of most discontent. Agents who operate at the lowest levels, whether individuals or entire countries, feel their subordinate status as an injustice. By rights men are equal, and sovereigns are equal, but in practice the liabilities of men and the liabilities of sovereigns are deeply unequal. Some privileged few issue money,

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while everyone else issues promises to pay money. Indeed, even the ability to issue promises to pay money typically depends on finding a creditor somewhere (often higher up in the hierarchy) who is willing to accept them, and then arranging one's affairs so as to obtain the money needed to redeem these promises when they come due. The very existence of such a hierarchy seems an injustice, and especially so in times of tight credit when debtors find it impossible to fulfill promises made in easier times, while creditors refuse to allow extension of payments due into a possibly easier future. Those at the bottom of the hierarchy ever resent the present constraint on their own action, and especially so when they see others higher up evading similar constraint.

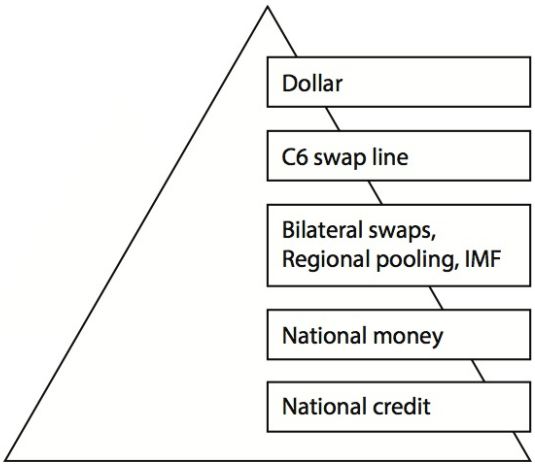


Figure 1. The international hierarchy of money and credit. *Source*: Author's own.

Here we find the origin of present discontent, and here also the origin of the wide range of proposals for more or less radical reform that jostle for our attention – Bitcoin, Positive Money, debt jubilee, helicopter money – as we shall elaborate below. For now, the key point to have in mind is that each one of these proposals arises from the lived experience of financial life at a specific spot in the hierarchy that is Financial Society. What is usually missing from these proposals however is a sense of the system as a whole, a concrete sense of how the whole thing works, and as a consequence they typically get little traction outside the circle of those who live in a similar place. The focus tends to be on revealing and urging correction of apparent injustice, rather than on understanding the mechanisms at work underneath.

It is hard to build a better society if you don't know how the system you are trying to reform works. Indeed, I would submit, ignorance of how the system works allows those few who do know, i.e. the bankers, to build more or less as they like, for their own convenience and profit. My goal is to try to sketch the outlines of how the system the bankers have built actually works, which I offer as the point of departure for any feasible project of reform.[2] If we want change, we need to anchor our ideas in reality, which is to say in the logic that is expressed, in practice, in the system as it operates today.

The money view

Three institutions are of central importance. First, *money*, which plays a central coordinating role as a means of daily *settlement* of maturing promises to pay. Second, *finance*, which plays a central coordinating role as a means of daily *valuation* of existing promises stretching out into the future. Third, *banking*, which plays a central coordinating role as a means of daily

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allocation of credit, which is to say new promises to pay that channel purchasing power in one direction rather than another. It is the institutions of money/finance/banking, and their central role in facilitating the processes of settlement/valuation/allocation, that comprise the infrastructure of modern Financial Society. We must begin our inquiry into the dynamics of Financial Society by understanding the operation of these institutions.

There exists, of course, an enormous economist literature on each of these three institutions, and there is much to learn from it. But it is largely a specialist literature, treating each of the three separately rather than as dimensions of an integrated system. There are good historical reasons for this intellectual specialization, namely the historical separation of money markets from capital markets, commercial banking from investment banking, and central banking from private banking. But all of these historical institutional boundaries have long ago been breached, and today the quintessential form of banking is so-called 'shadow banking' – money market funding of capital market lending – which integrates all three. We require an integrated intellectual approach to deal adequately with our integrated monetary and financial system. That is the goal of the 'money view', to bring to light the underlying logic and mechanism of contemporary Financial Society at the level of the system as a whole.

As mentioned above, two processes are fundamental: payment and market-making. It is important to understand why they are so fundamental.

In the monetary economy everyone – households and businesses, but also governments and financial institutions – is a cash-inflow/cash-outflow entity, receiving payments from and making payments to the rest of the world. A key disciplining element faced by everyone is the constraint to settle their debts as they come due. Debts are promises to pay money, and money is the means of settling debts. Importantly, this settlement constraint is asymmetric, requiring deficit agents (whose cash outflow exceeds their cash inflow) to find means of payment that surplus agents (whose cash inflow exceeds their cash outflow) are willing to accept. Every day, the process of settling the vast array of interlocking promises tests the fabric of Financial Society. The system imposes a simple and specific constraint on all participants: Is the pattern of promised cash outflows lined up with the pattern of actual cash inflows in such a way that the promises can be kept, or is it not?

And if it is not (or rather *where* it is not, since inevitably there will be deficit agents somewhere in the system), then the further question arises whether the deficit agents have the wherewithal to meet those deficits from other means at their disposal. Most immediately, the question is whether they hold sufficient reserves (money) to meet the shortfall, but because reserve holdings inevitably fall short for any deficit position that is sustained over time, the deeper question is whether the deficit agents are able to meet their payment gap by borrowing, or by selling some asset. (Brunnermeier and Pedersen [2009] refer to these two mechanisms as 'funding liquidity' and 'market liquidity', respectively.) Specifically, is there some surplus agent willing to defer promised payment to a future date (i.e. lend), or to accept delivery of some non-monetary asset instead (i.e. buy)? If yes, then the fabric of Financial Society holds fast for another day. If not, then default.

In this way, the settlement constraint – Minsky (2004: 96) called it the "survival constraint" – becomes crucial to maintaining coherence of the system as a whole. In effect, every day the settlement system sends a key signal to every individual about his current standing in the system as a whole. A positive signal requires no action, since excess positive cash flow simply accumulates as monetary reserves. A negative signal however requires immediate action: dishoarding of reserve balances, new borrowing to push the settlement constraint into the future, or sale (possibly fire sale) of an asset in order to acquire means of settlement. In this way, deficit agents are more or less forced to adapt their behavior to the

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system, and it is surplus agents who force them. Through the discipline of settlement, agents who make promises and then don't deliver are found out and weeded out, unless higher forces intervene, as well they may do.

I have emphasized that creditors call the shots in enforcing the survival constraint, but there seems to be no reason necessarily to suppose that these calls contribute more to maintaining coherence of the system than to undermining it. Credit can be too tight, and also too loose. The discipline of settlement may possibly weed out enterprises that would have proven their worth if given just a bit more time. And relaxation of that discipline may possibly facilitate continued survival of zombie enterprises that have no hope of ever making good on their promises. To make matters worse, it is entirely possible for credit to be at the same time too tight and too loose, at different places in the system.

Once you accept that the ability to meet settlement is what regulates the financial system, you will think differently about 'good' and 'bad' credit. Credit isn't good or bad, so much as it is disciplined or undisciplined. Creditors call the shots but they can err in either direction, and that's why their call is typically subject to some kind of legal or political review. But legal and political review can also err, and also in either direction. Indeed, 'lender of last resort' can provide too easy backstop to one part of the economy, even while 'zero tolerance' provides too tough discipline to another part. Even more, to the extent that prospective debtors and creditors have in mind the potential for future review at the moment they are making and accepting promises to pay, anticipation of future intervention can play a role in misaligning the pattern of cash outflows and inflows right from the start.

Borrowers and lenders who anticipate rescue in the event of default have less reason to concern themselves with aligning anticipated future cash inflows with promised outflows. Economists call this kind of distortion of behavior 'moral hazard', and typically concern themselves about the resulting inefficient allocation of resources at a moment in time. This is a political distinction about the way one meets the survival constraint, which does not change the fact that the objective imposed by the system is to meet it. Looking from a system perspective, as social analysts, we should be attentive to how these political decisions play out. But for me, because I put the logic of the system at the center of my analysis, we should be more concerned about the way such distortions build in a tendency toward future incoherence and consequent instability of the system as a whole, unraveling the fabric of Financial Society and so making eventual political and legal review more likely and more necessary. After you've mastered the money view, some of you may conclude that we need to defy the settlement constraint, which sounds radical, but doesn't strike me as very effective if you're interested in stable global relations; defiance will only amplify incoherence, because like it or not, this is the system as it exists. Instead, I am proposing that we consider the constraint and the conditions under which agents can or cannot meet that constraint, as a material moment in contemporary life where social and political relationships can be understood and governed.

In sum, the settlement constraint plays a fundamental role in revealing emerging incoherence in the system, and forcing some kind of response to it. It is this mechanism that we primarily rely on for maintaining coherence, but it is a very blunt and imperfect instrument for that purpose, and so are all the mechanisms of review that we have so far invented to correct for its imperfections.

From this point of view, we are now in a position to appreciate the early warning provided by the price of financial contracts, which moves today in anticipation of looming future settlement constraint problems. It is not only at the moment of promised payment that the system reveals misalignment between promised cash outflow and actual cash inflow, but also

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before that moment when the system assigns a price at which that promise of payment can be sold for money. How likely is it that future cash inflow will prove adequate to meet promised cash outflow, not only for each particular financial contract but also more importantly for the entire interlocking web? Obviously promises of future payment are worth less than actual present payment but how much less, and what causes that discount to be sometimes (and in some places) high and to be sometimes (and in some places) low?

Here we come to the second fundamental process involved in maintaining the fabric of Financial Society: market-making. The process of market-making is fundamental because that's where the price of the future in terms of the present is determined, which is to say the rate of interest or discount.[3] The key point to appreciate is that market-making is a business operated for profit, and also a business inevitably intertwined with the business of payments (Hicks, 1989). As emphasized above, deficit agents rely on the ability to borrow or to sell an asset in order to fill any gap between promised cash outflow and realized cash inflow. The price at which these facilities are available is determined by the system of market makers, or profit-seeking dealers.[4]

Dealers supply market liquidity by offering options to trade. If you want to trade, the dealer is willing to trade with you at the prices he quotes, buy or sell, but if you don't want to trade that's okay too. It's up to you, not the dealer. This way of conceptualizing the dealer reveals that anyone who offers an option to trade, for example by placing a limit order, is supplying liquidity to the market. Anyone can be a dealer in this respect, but it takes a lot of work and attention to make money at it. (Amateur day traders often supply liquidity until they run out of money.) Our interest is in the professional dealer complex that supplies market liquidity in the most important financial markets, generically money markets and capital markets.

In money markets, the market-maker seeks profit by exposing himself to liquidity risk, for example by offering three month lending against a demand liability (private money). It is in this market that the short-term interest rate is determined. The detail of how this works is specific to each country, and different countries may have different short-term interest rates, but all are connected up into the global system through foreign exchange markets, and in particular through forward exchange arbitrage that links forward exchange rates to interest rate differences (Mehrling, 2013b). The important point to appreciate is the way that, at the level of the system as a whole, movements in short term interest rates reflect fluctuating demand and supply of funding liquidity, with the marginal source of supply being the global market-making system that is willing to take on liquidity risk for the expectation of profit. The short-term rate of interest is thus a system-wide signal of the degree of imbalance between demand and supply of funding liquidity, and it is also an incentive for individual agents to adjust their own balance sheets in light of system needs.

In capital markets, the market-maker seeks profit mainly by exposing himself to price risk, for example by offering five-year lending against three-month funding. A balance sheet like that will eventually face liquidity risk, in three months when the time comes to roll over the funding, but more immediately the risk is that the value of the five-year loan falls as the loan fails to perform, so eating into the dealer's capital cushion. (This price risk can create liquidity problems as well, to the extent that the asset serves as collateral to secure the funding.) The big problem comes when system-wide capital cushions are sufficiently encumbered so as to reduce the ability of the market-making system to make markets. If dealers are unable to serve as the marginal buyers of assets, then price will find its own level, and that may be significantly lower. But even before such a dreaded 'air pocket' materializes, profit-seeking dealers will adjust the prices they quote. These prices serve as a system-wide signal of the

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degree of imbalance between the demand and supply of market liquidity, and also as incentive for individual agents to adjust their own balance sheets in light of system needs.

We have emphasized how the settlement constraint imposed by creditors can err in both directions, too tight or too loose, and the same is true of the prices set by the market-making system. Indeed, even more so, since the expectation of profit that is necessary to attract dealers to the business drives a wedge between price and value even in normal times, a wedge that moreover tends to fluctuate in such a way as to amplify booms and contractions.[5] That is why determination of short-term interest rates and long-term asset prices by the private dealer system is typically subject to further review, by national and international policymakers, central bankers and finance ministers. Most importantly, monetary policy involves intervention into the market-making system to set short-term interest rates, but also more or less every country identifies some set of privileged borrowers (in addition to the state itself) whose access to long-term credit is considered to be a matter of public interest. In practice, governments are not indifferent to the price of their own bonds, nor the price of the bonds of favored constituents, be they business bonds or household mortgages.

Just as private market-makers can err in both directions, so too can government market-makers. The key point to hold onto is that asset prices are a signal of the future coherence of the system as a whole, and also an incentive for individuals to adjust their individual affairs in light of that system state – but they are a blunt instrument for that purpose. Intervention may possibly stabilize, but it can also make things worse. And anticipation that intervention will be forthcoming can distort behavior and so also prices, in a way that makes future incoherence and instability more likely rather than less likely.

Why is money difficult?

It is not enough to sketch the fundamental concepts of the money view. Over the years, I have come to appreciate a variety of barriers that people bring with them to the study of money, and to appreciate the necessity of bringing these barriers up to consciousness as part of the process of getting the conversation on track. (I would hazard a guess that 90% of dispute about money has its origin in these unrecognized barriers, and hence is basically a waste of time. But that's a subject for another time.) What follows are, for me, some basic propositions that we need to have in common.

The first and largest barrier is what I call the *alchemy of banking*. Banks make loans by creating deposits, expanding their balance sheets on both sides simultaneously. This process apparently offends common sense understanding of what it means to make a loan – I can only lend you a bicycle if I already possess a bicycle. Even more, it seems to go against a fundamental principle of elementary economics that 'there ain't no such thing as a free lunch'. Against this resistance, I insist that the essence of banking is a swap of IOUs.

The second barrier is *essential hybridity*. Money is part private (bank deposits) and part public (central bank currency), though in normal times we hardly notice because the two kinds of money trade at par. Similarly, central banks are part private bankers' bank and part public government bank, with the proportions shifting over time with financial development and with the exigencies of the state (such as war). This fact of hybridity is however apparently hard to accept, mainly because it offends political sense. Idealizations of pure public money attract the left (quoting Knapp), and idealizations of pure private money attract the right (quoting Menger), so that the actual system seems to everyone to be somehow polluted by illegitimate extension.

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The third barrier is *inherent hierarchy*, which refers to the sense in which central bank money is better money than private bank money, even though they trade at par. You and I use bank money to settle our promises to pay, but banks use central bank money, and central banks themselves use world reserve money. The fact of hierarchy is apparently hard to accept mainly because it offends our sense of justice as between states – the Westphalian notion of equal sovereignty. Importantly, for economists, it also offends our sense of justice as between participants in markets within states. Hierarchy sounds like monopoly, or power, or other non-market mechanisms of allocation that trained economists instinctively abhor.

The fourth barrier is what Hawtrey (1932: 166) called "the inherent instability of credit". Promises to pay are made and accepted today, but the future to which they refer inevitably turns out different than anyone imagined at inception, so some failure is to be expected. More important, all credit (non-bank as well as bank credit) seems to be subject to a kind of positive feedback loop since, as more and more people come to have a common view of the possible future, promises to pay in that possible future get bid up in value and that makes it easy, indeed inevitable, to overpromise.

This fact of inherent instability is something we have an especially hard time confronting, since it goes to the heart of our existential dilemma. We don't know the future but we are nevertheless required to behave as though we do. Indeed, the commitments we make to one another to perform in various ways in the future form the very fabric of the society in which we live. Marriage is like that, and so is credit. The fact of financial instability threatens that fabric, indeed constitutes a kind of unraveling of that fabric, as default on one set of promises undermines another set as well. As economists, we cling to conceptions of equilibrium, including intertemporal equilibrium, which have the reassuring property of excluding instability, but the resulting psychological comfort is bought at the price of abstraction from a fundamental feature of the actual system in which we live.

These are the main four barriers to understanding, according to me. The central problem we face is that the current institutional fact of financial globalization makes all four barriers especially hard to overcome. So-called shadow banking – which I define as 'money market funding of capital market lending', and consider to be the quintessential institutional form of banking for financial globalization – disorients our intuition which is based on the comfortable but outdated image of Jimmy Stewart community banking. We pine for a former age when alchemy/hybridity/hierarchy/instability seemed to be under acceptable social control. Just so, the 'money multiplier' promised a fixed ratio between public and private money, but no longer.

Money is always difficult, and it is more difficult than ever today. The main difficulty however is not with the complexity of the world, but rather with ourselves and our inherited habits of thought.

Varieties of discontent

There is no question that discontent with financialization is widespread, but what exactly are people discontented with? Following Polanyi (1944), some focus on the way that the logic of finance has extended into more and more dimensions of our lives, turning everything it touches into an asset with a speculative price. From this point of view, finance appears like an invading alien, subjecting more and more of our lives to its alien rules, and the main point is simply resistance, defending boundaries and traditional rules of life. Typically this involves an appeal for higher authority (moral and/or political) to review and overturn the results of the alien logic wherever they seem most egregious, and to replace these results instead with something more appropriately 'social'. Just so, society defends itself from the market.

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Against this impulse, the money view insists on the linked institutions of money, finance, and banking as the fundamental infrastructure of modern Financial Society, and the mechanisms of payment and market-making as the fundamental processes that maintain the coherence of that society over time, even if imperfectly.[6] These institutions and mechanisms are thus not something separate from society, but rather the actual fabric of society itself. The central focus of the money view is therefore not so much on the illegitimacy of these institutions and mechanisms, and how to overthrow them, as it is on taming the tendency toward instability that is inherent in the normal operation of these institutions and mechanisms, and so on preventing the unraveling of the fabric of Financial Society.

'Let it unravel', modern Polanyians may urge, and so make room for building a better, more 'real', society in its place. Just so, a wide range of proposals for reform begin analytically from some conception of what money 'really is' (or should be), and conceive of credit as a rather dubious superstructure built on top. Among those who identify the problem as coming from money, some dream of a world of essentially private money anchored in the real by means of recommitment to a gold standard, or maybe embrace of a new digital Bitcoin standard, while others dream of a world of essentially public money anchored in the real through the taxation power of the nation state. Among those who identify the problem as coming from credit, some dream of a private debt jubilee that would absolve private debtors of their obligations while others dream of what would in effect be a public debt jubilee, through helicopter money or monetization of outstanding public debt.

Against all these proposals, the money view insists on credit as the elemental relationship, and the interlocking web of commitments as constitutive of modern society. Money is not the base and credit the superstructure; rather, money is simply the highest form of credit. Unraveling the web of credit would mean unraveling the fabric of society itself. It might happen, but be careful what you wish for. The money view is not an obstacle to reform. Rather, it provides the point of departure for any actually feasible project of reform.

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Notes

1. Copeland (1952) is the origin of the Flow of Funds Accounts, which remain today the best map we have of this web.
2. Readers interested in going deeper are directed to my online course at <https://www.coursera.org/learn/money-banking/>, and the materials on my webpage at <http://www.perrymehrling.com/>.
3. The market-making that determines the other prices of money – par between public and private money, the exchange rate between different monies, and the price of goods in terms of money – reflects dislocation of one part of the system relative to another, at a point in time.
4. The best and most comprehensive introduction to the institutional infrastructure of market-making is Harris (2003)
5. Technically speaking, that expectation of profit compensates for risk bearing of one kind or another, and provides a possible explanation for the empirical failure of the Expectations Hypothesis of the Term Structure on the one hand and Uncovered Interest Parity on the other

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(Mehrling and Neilson, 2014). Mehrling et al. (2014) offer an account of the 2009 financial crisis that emphasizes the role of the market-making system in amplifying both boom and contraction.

6. And over space as well, though there is not room in this essay to explore that dimension, merely to note its importance as in footnote 3.

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