

Valuing financial assets out of markets

A case for disconnecting the valuation function from the exchange function of
financial markets

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Abstract: The paper argues in favor of a radical disconnection between the exchange function and the valuation function of financial markets. It defends it from an investee's point of view, mainly on the grounds that valuing financial assets is a matter of judgment. Financial assets do not have any intrinsic utility; hence allowing markets to price them implies their price changes are determined by expectations. These latter rely on information that can be variously framed and interpreted, hence no a priori and stable valuation criteria can prevail. Consequently, investees bear the consequences of judgments that do not meet basic criteria of justice. Insulating the valuation function from the transaction function of financial markets through the creation of independent valuation institutions could be a way to tackle this problem.

Key words: financial markets, valuation, judgment, investor, investee.

Introduction

The financial crisis of 2007-2008 has revived old controversies on financial theory and financial markets. Since then, very little has changed, though, in what is taught and institutionally recognized in this area of knowledge. Financial regulation, its latest developments included, remains embedded in concepts deriving from mainstream financial theory. One reason for such an inertia is certainly the strength of institutional constraints. But there also theoretical reasons.

When asked why they didn't see "this" coming, mainstream financial theorists can rightly answer that the central prediction of efficiency theory is that no one can. Besides, that's not their job to see anything coming: their job, so the story goes, is to test assumptions against historical data. Then, when faced with the fact such market swings as those seen in 2007-2008 illustrate the idea that market prices may not reflect fundamental value, they can also rightly answer that no one can tell what it is, and then ask who we are to dare and say what asset prices *should* be.

But then, these assets are priced; they have to be, one way or another. The crucial point is: which is the best one? Crucial, for if we can demonstrate that non-market settings would be better than markets at pricing financial assets, then we would have deprived the aforementioned theorists of any line of defense.

For this, we don't need to test assumptions against historical data. It would be pointless, for, if a fundamental value is not objective – and it is not – then no test of that kind can tell us if a market is good at reflecting it. We don't have figures to compare the prices with, so we can't test this¹. Only logical reasoning, based on practical evidence, can help us.

This is the way the first part of the paper will try to show that financial assets' price changes are determined by expectations, which implies their prices are driven by a self-referential market dynamics. The second part will argue this way of pricing financial assets does not meet basic criteria of justice, by considering financial markets as de facto political institutions that exert a form of power through judgment. The third part outlines what could be an alternative way of pricing these goods and answer major objections to it. The conclusion tries to put this paper in perspective.

¹ To be honest, Shiller (1981) tried to do this, but one can always argue, as was the case, that his fundamental "benchmark" is not the good one.

1. Self-reference, a.k.a reflexivity

We will start by putting aside the question of what a financial asset is or should be, by focusing first on its function, which is a way to think relationally about it. We will go back and forth between logical reasoning and practical considerations, for example by taking in account how real-life professional investors work and are compensated for.

What is a financial asset here for? Basically, a financial asset is a claim² that has been made liquid through a legal, social and institutional framing: a firm's ownership, that is a claim on its profits, or a debt, that is a claim on the debtor's wealth, becomes a set of financial assets when it is made negotiable on a market. A financial asset is here, first and foremost, to be negotiable, to be liquid, which requires the establishment of specific markets (Orléan 1999).

But then, the very development of these markets has made them become investment opportunities as such, more liquid than any others. Liquidity attracts investors, because it allows them to get cash at the very moment that suits them the best. Financial markets, definitely, are an investor's world. And what is the most important issue for an investor? Return. In finance, God has a name: it's called Return.

Return is not a price: it's a price difference, a price change. When you hear that a stock has risen by 5% at 50\$, the most important information here is "+5%", not "50\$"; it's the return, not the price. When Nassim Taleb famously revived an old debate on the shape of statistical distributions (Taleb 2007), the distributions he was talking about were not price distributions but price changes distributions, as was already the case, for example, back in 1965, in Eugene Fama's thesis (Fama 1965).

The important issue on financial markets is not so much to know how prices are determined on these markets, but how price changes are determined. That is clearly not the same question: instead of wondering how supply and demand are matched at a given moment, we have to wonder how supply and demand change over time, that is to understand the dynamics of financial markets.

² In Minsky's terms, a financial instrument is "a commitment to pay cash at some time or if some event occurs" (Minsky 1986, p. 69)

If we treat this as a practical question, not as a theoretical one, the answer is relatively simple: once a trade has been made at a given price, the next one will be clinched at a higher price if sell orders at this price can be matched with buy orders at the same price on the order book, which will generally happen if more buy orders appear on it, which signals a willingness to buy strong enough for the actors for them to be ready to pay more. Now, if you want to find an explanation for this “willingness to buy” (or to sell), the first one that will probably come to your mind is to say these actors just expect a price rise, expect a positive return that will allow them to sell later at a profit. Expectations, it seems, are just what determines price changes³.

Most real-life investors, especially professional ones, would no doubt balk at such a simplistic description, for they just don't see themselves as vulgar speculators, but, so the story goes, as sophisticated risk managers. This is not only a story, far from it, for most of them effectively base their investment strategies (or those of their robots...) on one form or another of risk modeling. What we can simply point out here is that these models rely, among other things, on specific assumptions on price changes distributions. Risk-obsessed investors do not cease to be return-obsessed: when they abide by a passive strategy (by, say, buying ETFs...), it's because they think an active one would yield, in the end, a smaller return. They are risk-obsessed *because* they are return-obsessed.

Moreover, remuneration criteria of professional investors should be taken in account. This remuneration is overwhelmingly based on return, be it absolute return or, more frequently, return compared to a benchmark. These are the incentives, and the logical outcome is that investment strategies are primarily aimed at maximizing relative or absolute return, risk modeling being only a tool – albeit, most of the time, a quite sophisticated one – to achieve this.

Return expectations, then, logically determine price changes. This implies prices are effectively driven by market dynamics.

³ This is consistent with Kaldor's definition of speculation : “the purchase (or sale) of goods with a view to re-sale (re-purchase) at a later date, where the motive behind such action is the expectation of a change in the relevant prices relatively to the ruling price and not a gain accruing through their use, or any kind of transformation effected in them or their transfer between different markets.” (Kaldor 1939, p. 1)

This is not what appears at first glance. Financial markets have traditionally been considered, at least since Walras, as the “purest” form of markets, the “real” markets closest to the model of “pure and perfect” ones. What makes them so is the way prices are seemingly determined on it: order books exhibit, for a given financial asset at a given moment, lists of potential buyers and sellers, each of them specifying the quantity it is willing to buy or sell and at what price it is willing to do so. The matching of supply and demand, that allows trades to be made, can be realized through the kind of machines Fabian Muniesa called “walrasian robots” (Muniesa 2000, 2003). What makes it so “pure” is that, at least apparently, really nothing else than supply and demand determines the price.

We said previously that return expectations determine price changes, that is... return. Orléan (1999) called this the “self-referential” nature of financial markets (and Soros (2008) “reflexivity”). Price changes on financial markets are determined by changes in supply or demand that in turn are determined by expectations, which implies the “law” of supply and demand doesn’t apply to them. This comes from the very nature of financial assets: they do not have any intrinsic utility, as consumer goods do.

The “law” of supply and demand may be, or even is, theoretically and empirically questionable, but it nevertheless does make sense on consumer goods markets; on financial markets, it is not enough to say this law doesn’t work: it just doesn’t make sense on them. When the price of a financial asset or a financial asset class rises, it can provoke a rise in demand, fueled by optimistic expectations. It’s not necessary the case, of course, but it can occur in a way that won’t show up in consumer good markets, simply because these latter are supposed to be consumed, hence not resold, hence price changes expectations do not play such a role on these markets. Moreover, the development of futures markets have made the supply and demand of financial assets nearly infinite, whereas the supply and demand of consumer goods, which are bought for themselves because they have an intrinsic utility (at least a perceived one), are always constrained by various finite factors: the purchasing power of consumers and the price of raw materials, to name two major ones.

So, even if *apparently* nothing else than supply and demand determines prices on financial markets, price determination there has nothing to do with the “law” of supply and demand which characterizes, among other features, “perfect” markets. Price determination is

completely subordinate to the market dynamics that makes price changes depend from expectations.

The way financial assets are priced is decisively determined by the way they are exchanged. Just allowing markets to price financial assets implies their price changes are determined by expectations, which in turn is caused by the fact that financial assets do not have any intrinsic utility.

Such an approach is difficult to accept for *both* economists and social scientists: on the one hand, mainstream economics' methodology, at least since Friedman (1953), is massively based upon testing theories and assumptions quantitatively against data. Now it is logically impossible to test this way the proposition that expectations determine financial assets' price movements: this is purely based on logical reasoning; besides, the ultimate justification of this proposition, that is the absence of any intrinsic utility of financial assets, cannot be quantitatively tested either, for it is part of their very *definition*. On the other hand, such a proposition cannot be tested through direct observation or interviews of actors in the field: a sociological or anthropological approach will show us precisely how these people work, how financial markets are organized, which "market devices" they use and so on (Knorr-Cetina & Preda dir., 2005, Callon & Muniesa, 2005, Ortiz, 2008), but what makes these markets fundamentally different from non-financial ones will not appear, for it ultimately stems from an unobservable feature of these abstract items that financial assets also are.

2. About justice, or what makes a judgment symmetrical

There may be many ways to describe a financial crisis, but my guess is the most straightforward (and purely descriptive) is the following : a sharp and unexpected fall of the price of financial assets of some kind, that makes most people think and realize these assets had been grossly overvalued. That means a financial crisis is, at first glance, a valuation crisis.

That's not really the case from an investor's point of view: in this perspective, what is grave here is neither the price fall nor the previous overvaluation *as such*: it is just the unpredictability of the fall. Hence the classical blame on economists: why didn't they see this coming? Again, price is not the main concern for investors: it's return, its predictability, hence the predictability of price changes.

It is a major concern, though, for investees. I used the term investee (first in Charron 2010) not only to designate “the company in which an investment is held” (definition seen on <http://www.encyclo.co.uk/define/investee>, accessed 08/30/2011) but, in a much broader sense, any kind of actor, organization, state... that is valued by a financial market, for example through the pricing of its shares (for a listed firm) or through the interest rates applied to its debt (for a state). I meant here to make a symmetry discernible: investors value, investees are valued, the first ones are subjects, the second ones objects. If we consider the valuation function of financial markets, that is, the way prices are determined on it, investors are the actors who effectively perform it. But the actors that bear the consequences of these operations are the investees; and if we take in account the decisive influence of these valuations in the kind of financialized capitalism we have been experiencing since (roughly) 30 years, it doesn't seem much exaggerated to say that *all the rest* of the society is made of investees. Of course, a given organization can be both an investor and an investee at the same time, but the distinction can be made analytically. Even if you are both an investor and an investee, what you expect from financial markets as an investor is not what you expect as an investee. Whereas return matters only for investors, price does for investors, hence for firms, states, societies.

When we say that a financial asset is “overvalued” or “undervalued”, it clearly assumes there is some kind of optimal valuation of this asset, which corresponds to what is generally called its fundamental value.

Then, to determine the fundamental value of a financial asset is not a matter of science: it is a matter of judgment (Bhidé 2010). It is so, not because we haven't discovered yet a scientific solution, the right model, the right formula, but because of the very nature of the object we are talking about. A financial asset is nothing more than a promise, and nothing less. What they have is an expected utility, which is not a scientific matter but a matter of judgment.

The problem is that, on actual financial markets, the way these judgments are made simply do not meet the most basic criteria of justice. When you are judged, you have the right to know on what grounds, to know which criteria are applied. For investees, the most important is not to know how prices are established but what the criteria of pricing are.

Now, what does the way financial markets operate mean in terms of valuation criteria? It means that valuation changes over time depending on what price changes investors expect and how they “translate” these expectations into investment strategies. We cannot even say that these changes depend on information (about valuation, supposedly...), because information is necessarily interpreted and framed, and can be so in different ways that can also change over time. Consequently, there are simply no *a priori* valuation criteria for financial assets. Some may be found *a posteriori*, but again nothing guarantees their stability. Zajac & Westphal (2004) provide a good example of this; studying market reactions to stock repurchase plans, they show that negative reactions to such decisions prevailed before the 1980’s, these plans being interpreted as an inability to find profitable development opportunities to be funded, and that, then, positive reactions to the *same* decisions, the same informations, prevailed later because they were seen through the lens of agency theory, through another interpretative frame⁴.

Financial instability, then, is not primarily caused by some kind of irrationality, but by the very way financial exchanges function, and more specifically by the simple fact that pricing is made through trading and trading through pricing. From an investee’s point of view, what makes financial markets problematic and (at least potentially) harmful is first and foremost the absence of stable and publicly known valuation criteria; it entirely lies, then, in their valuation function.

As a matter of fact, financial markets have at least two functions: an exchange function (they make financial claims liquid), a valuation function (they price these claims). One could mention other ones, for example a capital allocation function, but we will concentrate on exchange and valuation, simply because it is the interplay between these two ones that, in our view, determines the dynamics of financial markets and hence their crises.

3. Disconnection, objections, and why they miss the point

Here comes our basic idea: what is needed from an investee’s point of view and, one should say, from the society’s point of view are stable, publicly known and publicly debated

⁴ See also Brière (2005) for examples on bond markets.

and established valuation criteria. This cannot be achieved through a market mechanism, and this is why the valuation function should be insulated from the others through the establishment of independent valuation institutions.

Such a proposition is likely to provoke strong objections. I will now try to answer to the two main ones that will probably come to your mind:

-why would an institution be better than a market at pricing?

-why would experts be better as a crowd of investors at doing this?

One could say these are two different ways to ask the same question. I nevertheless chose to expose these two ways separately because each of them corresponds to a highly popular and successful argument in favor of the rule of markets: the Hayek's argument, the Surowiecki's argument.

Other sources could and should be discussed, but Hayek's article "The use of knowledge in society" (Hayek 1945) is probably the best known and the most influential text explaining why the market price system is the best one to establish prices. Here's the rub: its reasoning doesn't apply to financial markets. The first reason for it is that it deals with the allocation of scarce resources, whereas financial assets cannot be considered so, except in extreme cases (when a single investor makes a "corner" on a market, for example). But the main reason appears when we see what is at the core of the argument: speaking of the individual agent (or, in his terms, the "man on the spot"), Hayek explains "it does not matter for him why at the particular moment more screws of one size than of another are wanted, why paper bags are more readily available than canvas bags [...]. All that is significant for him is how much more or less difficult to procure they have become compared with other things with which he is also concerned, or how much more or less urgently wanted are the alternative things he produces or uses. [...] It is in this connection that what I have called the economic calculus proper helps us, at least by analogy, to see how this problem can be solved, and in fact is being solved, by the price system." (Hayek 1945, p. 525). To be consistent, this reasoning requires that price changes reflect changes in the relative importance, in terms of a relative "difficulty to procure", of what is priced. Now, as we saw before, this is not the case on financial markets, where price changes are determined by expectations. Moreover, the problem Hayek deals with is how to convey the relevant information, hence it completely ignores the fact that information is interpreted and framed, whereas this is of decisive

importance on financial markets, where expectations are often based on different ways to frame the same information.

Surowiecki is not an academic economist, but the “wisdom of crowds” argument has proved influential, for example through the development of prediction markets. Surowiecki’s argument, precisely, is centered on the ability of “crowds”, that is of non-coordinated and independent individual agents, to guess or to predict specific outcomes, but also to make decisions more generally. If we focus on financial markets, we will first recall that, for investors, the point is not to guess some “true” value but to maximize their return; their expectations, through investment strategies, determine this return. Investors *are* the market, to the point that the price is not something that stays before them at a distance, but something they make happen. The famous example, told by Francis Galton, of a crowd guessing the weight of an ox clearly has very little to do with a situation where, so to speak, the ox would not exist without the crowd and this crowd makes its weight vary. In this case, the verbs “to guess” or “to predict” are clearly improper.

So, if we consider price determination on financial markets as a problem, it is clearly not, in Surowiecki’s terms, a “cognition problem”. This is not so clear-cut for this author, who, on several occasions in his book, seems to treat it this way, particularly when he stresses the inability of most professional investors to beat the market, which means their predictive performance is what is at stake. It is not the case if what they face is, again in Surowiecki’s terms, a “coordination problem”, where their decisions contribute to the making of the reality they are trying to evaluate. He seems conscious of that when, dealing with bubbles and krachs, he does provide an insightful analysis, partly based on Keynes, taking in account the role played by interdependent opinions and expectations, rightly explaining how it makes a difference with non-financial markets. But then what he recommends is for investor to make their decisions *independently*. Surowiecki’s problem, in our view, is that he doesn’t go as far as considering interdependence as *structural*. If he did, then he would have to recognize, as we do, that investor’s decisions are heavily constrained by the features of the interdependence they are inevitably involved in (Elias 1978, 1983). For us, to behave independently, for an investor, is not an option, at least not a realistic and profitable one. The interplay between trading and pricing on a market for goods that don’t have any intrinsic utility implies, as we saw previously, that prices will depend on expectations produced without a priori stable criteria.

Conclusion

The idea that financial markets are self-referential dates back to 1936 at least, when Keynes famously compared them to a beauty contest. What this paper tries to do is to base this idea on a definitional feature of financial assets but also and more importantly to relate it to a political dimension through the question of justice criteria. This can be made by disentangling both financial theory and financial regulation from an investor's point of view.

From an investee's point of view, the point is neither to guess what the price will be some seconds, days or months ago nor to urge investors to make their decisions independently, but to know on which criteria they are judged. Focusing on the way investors produce estimates and make decisions means you are embedded in an investor's point of view. This is only one side of the story, where success, whatever it takes, is the only criterion: we do not only make decisions, we also bear the consequences of decisions made by others. And in this case we have the right to know of their rationale and to make sure they are based on much more precise criteria. To take an extreme example, when you are arrested, your most basic human right is to know what you are accused of precisely, to know your rights, to know which legal procedure will apply and to know what kind of penalty you incur. Listed companies do not even get this from markets: when their stock price varies, it can be so for various reasons, these reasons can change over time, the way their performance is estimated can also change and so forth.

Now, how would independent valuation institutions work? Prices of financial assets would be determined once or twice a year by it. In the meantime, they would not move. Anybody willing to buy or sell a given quantity of such an asset would have to find a counterparty willing to (respectively) sell or buy it *at this price*. Any transaction done at another price would be illegal, null and void. A possible way to enforce this would be to rule that an investor that would have bought an asset at an "illegal" price would not be recognized as its legal owner. To be a member of the valuation body would require both a professional legitimacy, acquired through expertise and experience, and a democratic one, acquired through direct election or appointment by an elected institution. At this stage, I won't go further in the details, simply willing to defend the principle of this institutional design.

Financial markets may be better than any body of experts at serving certain investor's needs, notably liquidity. But they are not at pricing in a way that meets the basic needs of investees for stability and justice. Independent valuation institutions would, in our view, do it better and, by doing so, would also probably serve long-term interests of investors.

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