Transacting without pricing, pricing without transacting

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

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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 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.

The question we are going to start with is the following: for actors who buy or sell on these markets, is the price the most important issue?

It's the return, stupid

What is a financial asset here for? Basically, a financial asset is a claim\(^1\) 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

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\(^1\) 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)
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.

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 changes.

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. Which means, in our view, that return expectations ultimately determine price changes.
So why bother about prices?

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.
But what does determine prices, then?

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.
A question of judgment, which requires criteria

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 frame.²

² See also Brière (2005) for examples on bond markets.
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.

**Disconnection**

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 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.

How would it work? Prices of financial assets would be determined once or twice a year by a valuation institution. In the meantime, they would not move. Anybody willing to buy or sell a given quantity of such an asset would have to 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 diploma 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.
I will now try to answer to the two main objections 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?

You 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 various ways to frame 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 behind 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.

Moreover, from an investee’s point of view, the point is not to guess what the price will be some seconds, days or months ago 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.

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.
References


A. ORLEAN, 1999, Le pouvoir de la finance, Odile Jacob.


