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A Market Paradigm
In Public's Interest

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listeningin

Better Markets

Mike Masters, David Frenk On EMH's Failings & Their Alternative

Mike Masters, that smiling fellow on the left, and David Frenk, the gent on the right with the similarly pleasant mien, are Wall Streeters, first and foremost. Yet they have quite deliberately set themselves up as the Street's philosophical and practical bete noires in Washington political and regulatory circles. What gives? Mike, a highly accomplished trader, the founder of St. Croix-based hedge fund

Masters Capital Management, and David, an Oxford and NYU-trained philosopher who has toiled as an analyst at Masters Capital for several years, are convinced that what they call the Street's self-interested "cult of efficiency" bears the lions' share of responsibility for the financial crisis that nearly wrecked the real economy – and that free market fundamentalists' efficient markets-based understanding of the way markets work is profoundly flawed. At Masters Capital over the years, Mike has developed – and profited hugely from – a strikingly different and far more nuanced understanding of what moves markets, concepts that led him in recent years to become a leading critic of speculative domination of the energy markets and a vocal proponent of financial reform measures aimed at reining in over-the-counter derivatives. Now he has founded a non-profit, called Better



Markets, with the specific remit of countering the influence of Wall Street's legions of lobbyists and spreading education about finance in the public interest, and he has named David the organization's executive director. They recently sent me two intriguing, albeit heavy weight, philosophical tomes setting out where they're coming from, and this conversation ensued. Listen in.

KMW

What is this "Better Markets" that evidently is publishing your research now?

Mike: It's a non-profit organization that I have set up. Basically, it's an extension of the work that I have been doing *pro bono*. But we have formalized it because we think there needs to be an organization that argues for the public interest with regard to markets, their structure and regulation.

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Boy, does there. How long has this been in the works?

Mike: I guess I started thinking about setting it up a couple of years ago.

In other words, when you started trekking to Washington to testify about the energy bubble with great regularity?

Mike: Well, when you go up and do these testimonies, you certainly don't get paid. You just go up and do them, and it takes time and research work and whatever to prepare for them. I realized that this is really more of the sort of the thing that a non-profit should be set up to do – and that there needed to be an organization set up that would be the counterweight – provide the other side of Wall Street's arguments.

Plus, the way Washington works, a non-profit is accorded more credibility – deservedly or not – than a hedge fund manager, whose motives are always suspect?

Mike: That's right. Besides, I figured that there probably are a lot of people who would like to get involved in this effort, if we could get it funded and staffed immediately.

Really?

Sure, a fair amount, i.e. regulators, ex-regulators, folks in the business, consumer groups. There are a lot of constituencies out there that have a big stake in this and feel very much the way we do about the need for better markets. I just felt that it was time for Wall Street to finally have some effective opposition in Washington. For too long the problem has been that some high priest from Wall Street would come down to Washington, speaking in Latin –

More likely, in Pig Latin –

Mike: Right, it wasn't really Latin, that's too nice of a term. But the point is, the high priests of Wall Street would descend on Washington and dazzle the entire government with their financial jargon. Well, the point about our

Better Markets organization is that we speak that specialized language, too. But we're not arguing for Wall Street's narrow interests; we're arguing for the public interest. We felt we needed an organization that could deflect the arguments the bankers make; that could successfully argue with them on their level and then take those counter arguments and promote them throughout the sphere of public influence. In that way, the various public constituencies that don't know how to argue in the Latin of finance could adopt our arguments and use their already strong political organizations or capital to offset Wall Street's influence.

So you look at it as trying to level the playing field?

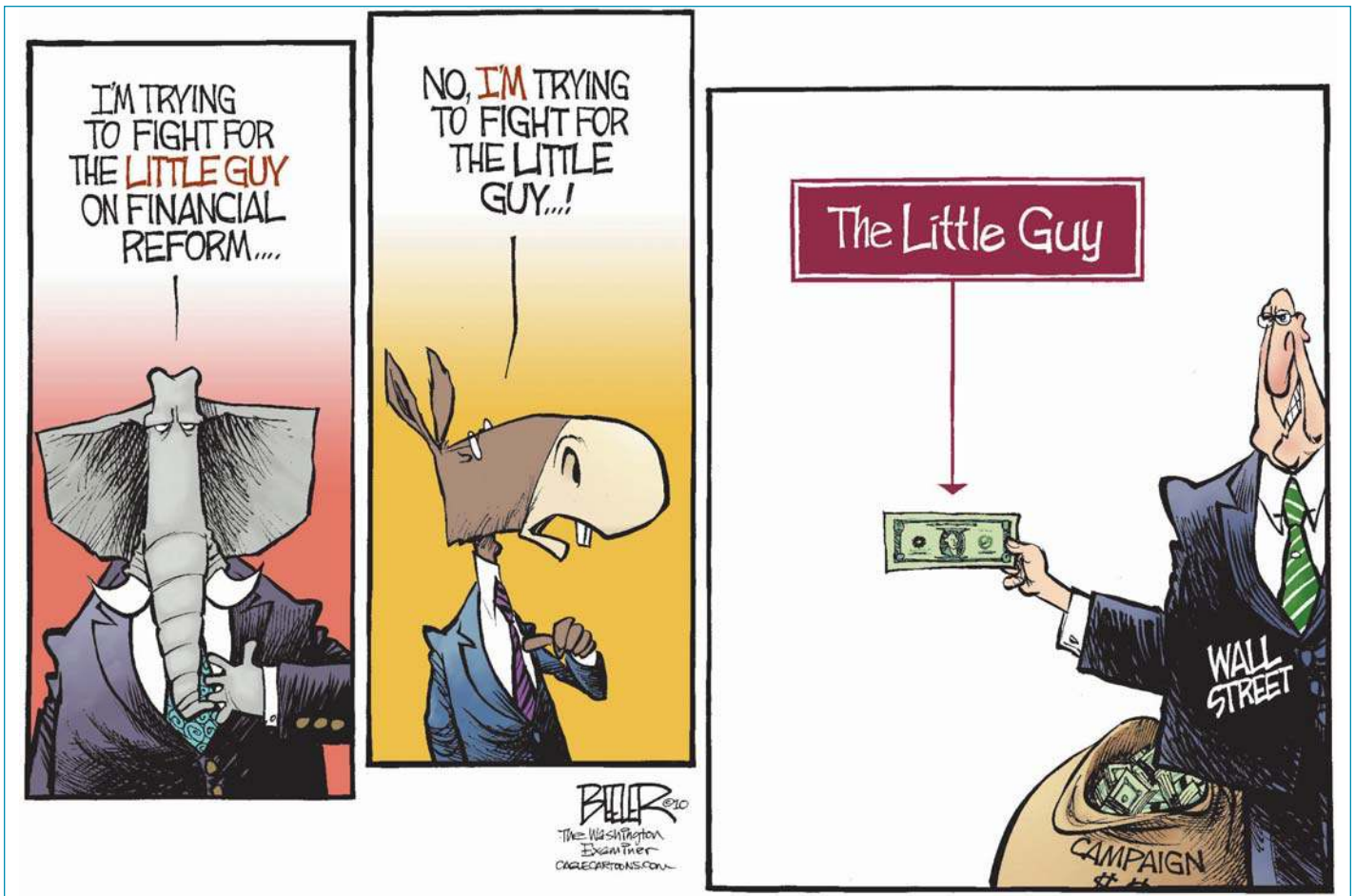
Absolutely. Wall Street has been doing this for years. They have basically paid professors to write research papers and they have promoted this whole Efficient Markets view of the world, primarily because it benefitted them. They have tried to institutionalize this philosophy, or this economic theory, as representative of reality. And then they have promoted their agenda on that basis, because

if you're a hard-line Efficient Markets person, then you don't need regulation because the market is perfect. And guess who benefits the most, if the markets don't need regulation? So the **Efficient Markets Theorem** was a natural fit for Wall Street. It gave them a great theory to bolster their arguments and so they promoted it and promoted it and promoted it.

I'm getting the idea that you're not a big fan of the Efficient Markets Theory.

Well, the problem is that it is not really representative of reality, and following it to its natural conclusion ends up favoring the elite over everybody else. It hurts just plain folks and all the rest of society – but the rest of society does not know how it is being taken advantage of. So our thought was that we *do* know the arguments – the *other sides* of Wall Street's arguments – and so we can construct the epistemo-

“We're not saying that market efficiency isn't good, we're just saying it's not the only thing that matters because there are a lot of things that matter.”



logical arguments that will frame the issue the way that we want it framed and we can then take those arguments and give them to all these other folks who need them. Our idea, to a certain extent, is to be an “arms dealer of ideas,” so that Wall Street would no longer face unarmed opponents and would be forced to fight fair –

Or more realistically, at least on a dramatically leveled playing field.

Right. I think that one of the main reasons that we got into the financial crisis in the first place, that all kinds of things happened in the years leading up to it, was that there just wasn't anyone taking another side. We'd like to be that other side, through *Better Markets*, and we think the time is right for it now.

How so?

Because more people are accepting that a lot of their market theories are, in fact, completely wrong and that a lot of Wall Street's old arguments about liquidity or about speculation – all the standard chestnuts that they bring out – are wrong. We can tell people *why* they're wrong and we can give organizations what they need in

terms of the intellectual armament to argue against the banks. So now we could have a situation where we have a real opposition to Wall Street's interests. And if we have that opposition, then I think we can move the ball forward some ourselves. But we can also block a lot of things that are really not necessary or harmful to society, even though they may benefit Wall Street's interests directly. If you think about the CFMA [**Commodity Futures Modernization Act of 2000**], you had 92 senators vote for the CFMA. It's hard to get 92 senators to salute the flag, but you had 92 senators vote for this thing! Many of them wish that they hadn't at this point, and in my view the main reason that so many of them *did* vote for it was that there wasn't really any effective opposition to it at the time. What we did with our testimony back then, and that of others on our side, wasn't really organized opposition, but that was all there was to counter Wall Street's influence. When there is no effective organized opposition, then you can just walk in, but as soon as you have real opposition in Washington, it becomes very difficult to get anything done prospectively, in terms of further deregulation, if you will. More importantly, we are hoping *Better Markets* can make

real theoretical progress on our side, among other things becoming an “Underwriters Lab” of sorts for “financial innovations” – because someone needs to be looking at this stuff before it blows up the world.

As it almost did, in 2008 –

Mike: Which is exactly why I think people are receptive to the idea today. Most importantly, there are a lot of regular people out there in society that I think are looking at markets in a different way today.

Okay, so what exactly is your intellectual beef with the efficient markets mantra?

The problem with the efficient market hypothesis and this whole notion of hard line market fundamentalism is that they made markets into an idol. Markets are not perfect, they are a human creation. So markets need rules and regulations just like any other human creation – because like any human creation, they’re full of flaws. Our idea is, too, that since we are using markets in society as our *de facto* governor, our allocator of resources and capital, it’s a hugely important job that we have given to the markets. What is crazy is that we’ve said we’re going to let the markets do this and then we’ve said we’re going to ignore them. We’re not going to pay attention to how they operate because they can operate perfectly by themselves, without any regulations or rules or anything else – which is insanity. The allocation of resources and capital is one of the most important things in society and we’ve said we’re not only going to not look at it, we’re going to look away from it and just let things go along the way they are. So what do we think is going to happen? It’s no wonder we had the disaster we had.

I’ve always thought it’s tremendously cynical for Wall Streeters, who make their living exploiting market inefficiencies, to promote deregulation based on efficient markets.

David: The first paper we wrote for *Better Markets, How Markets Function*, begins by making explicit the theoretical status quo that underpinned the ideas and behaviors that made the financial crisis possible, and in many cases directly contributed towards causing it. The paradigm in question – the Efficient Markets Hypothesis (EMH) – arose from the assumptions neoclassical economics and includes a theoretical characterization of market participants as fully informed agents with rational expectations.

Which of course is nonsense.

David: Right. But from these assumptions about the nature and situation of market participants, efficient markets theorists developed the EMH model, which states that market prices reflect all known information. The ramifications of this theory are that markets naturally lead to maximally rational resource allocation because of their perfectly rational price formation mechanism. For this reason, EMH has become associated with the “free market” ideology of maximal deregulation. The idea behind this connection is that if markets are “naturally” efficient, in the sense of EMH (i.e. prices are perfectly rational), then governments ought to minimize intervention in markets, for any attempt to interfere will simply detract from the market’s innate ability to allocate resources optimally. While this story seems benign enough, the policies that were based on it have proved disastrous. So what we did in our first paper was to trace back the failures of the efficient markets paradigm, and the models that came out of it, to its unrealistic assumptions about the nature and situation of market participants.

Garbage in, garbage out, in other words.

David: You could look at it that way. Far from being ideally rational, fully informed autonomous agents, market participants are real people acting in real institutional roles. **Their behavior is therefore not governed by abstract rational rules, but by a combination of their institutionally driven incentives (what we call Mandate) and individual and collective psychology (which we refer to as Mind). We call this view of market participants “Anthropic Finance,” from the Greek ἀνθρώπος (anthropos), meaning “human”.**

It sounds more than a little like Behavioral Finance –

David: No, it goes well beyond **Behavioral Finance** and shouldn’t be confused with it. Behavioral Finance is based on recognition of various cognitive biases inherent in human reasoning, and the discrepancies this generates between the actual behavior of market participants, and that predicted by the efficient markets paradigm. Anthropic Finance aims to incorporate the insights of Behavioral Finance, while recognizing that the vicissitudes of human reasoning are simply one component of the failure of the efficient markets paradigm because there’s another set of considerations,

alongside the psychological traits (Mind) that drives behavior. We call these situational traits “Mandate”. This set includes all incentives and institutional or legal restrictions on behavior. Not only does this add another dimension to the behavioral critique of efficient markets, Mandate is actually a far more important factor in governing market participant behavior. At any rate, we wrote *How Markets Function* not merely to examine the assumptions inherent in the theoretical paradigm of efficient markets to uncover exactly where it went wrong and how it led to the policies and procedures that brought the economy to the brink of disaster, but to propose an alternative, Anthropic Finance, which is both theoretically sound and practical. The next installment in our *Better Markets* series, our *The Social Role of Markets* paper, explores the broader normative issues surrounding the role of markets in society, and the appropriate framework within which to understand the political debate surrounding regulation of markets and financial derivatives.

Mike: When David and I wrote these papers that we sent you, it was really because we wanted to describe the philosophical underpinnings behind *Better Markets*; what we were doing and why we were doing it. We really did it, first of all, for our own use, but then we sent it out to some folks. There are just a lot of issues that come out of this exercise that are applicable to challenges facing this society. For instance, when people talk about efficient markets, one of the big problems with that is that the EMH doesn’t just value efficiency, it values *maximum* efficiency more than any other goal, and that’s just not reflective of society’s values. After all, one of the arguments for slavery in the 19th Century was literally that it was more efficient.

Sure, that the agricultural economy of the South would collapse if they had to pay their free laborers.

Mike: So you couldn’t get rid of slavery because it was the most efficient way of doing things. The reality, of course, is that the South’s argument ignored technological innovation and it ignored fairness, the durability of the markets; it ignored all sorts of other issues society thinks are important. The truth is that efficiency is not the trump rule for markets. There are lots of other things that matter in markets, other than efficiency. But under the thrall of EMH, you’re just maximizing that one

value. We’re not saying that market efficiency isn’t good, we’re just saying *it’s not the only thing that matters* because there are a lot of things that matter. The most efficient form of government is a dictatorship, but I would argue that most people would rather not have a dictatorship. So this whole notion of market efficiency, or what we call the “cult of efficiency”, is sort of a misnomer.

David, you’re the trained philosopher here. How about taking a stab at explaining how you arrived at these conclusions?

David: Sure, “efficient markets” were never just a description of the way markets work, the phrase has always been bound up with a normative or prescriptive element, so what you have, on the one hand, is a theory about the way markets function and, on the other, a set of ideals – a set of values and a set of policies – that are implied, showing how society *should* be run. So we tackled the problem in two ways. The first thing we said was, listen, EMH is wrong because in the real world markets don’t really operate that way. Under the efficient markets paradigm, for instance, it’s assumed that the more speculators you have, the more efficiently the markets will run. But as we have seen, from experience, that is not the case. Speculation can be a positive thing or it can be very destabilizing. So you can’t simply say, *a priori*, because of these assumptions about the rationality of human nature, that the more speculation you have, the better these markets are going to function – even just in terms of efficiency. So leaving aside every other single issue, you can say EMH is wrong even if you’re only looking at efficiency. The broader point we wanted to make is that even if it were the case that if you completely deregulate markets, they would be maximally efficient, who is to say that is the best way to run a society? We have chosen a market-based system over a centrally planned economy because it has obvious advantages. But that doesn’t mean that we have to go to the absolute extreme of a completely deregulated market. There are many different types of market economies that you can have and the key is to balance considerations of efficiency with the other considerations that we as a society value. Really, those who are arguing that efficiency ought to be the sole end of markets ought to take a step back. That’s what we have tried to do, saying that we have chosen these markets, we think they’re the best allocation system, and there is plenty of evidence that’s the case. But

what we have also discovered recently is that when you radically deregulate the markets, you basically sacrifice all the other values that we as a society care for. As Mike said, those include little things like fairness, like stability. Maybe a maximally efficient market in some sense might not be as stable as we'd like. So those are the two planks of our message. One part is a practical denial – a showing that the real world actually doesn't behave like the efficient market guys say it does. The second is a normative statement about how markets could function better, demonstrating that efficiency isn't the only thing that we as a society care about. There are lots of values we want to be reflected in our market system, given that it's the basis for allocating resources in our society.

Don't you get into treacherous territory, when you start talking about the values being reflected in the economy?

David: Yes, we are actually very careful to distinguish between economics and the economy on one hand and finance and financial theory on the other. A crucial question here is what is it that we ultimately care about as a society? Clearly that would include things like the provision of food and shelter and so on, the basic necessities, but we also care about material prosperity and about other values that are less tangible. Really, all of those are served by the real economy. Now, **the financial sector can either be a support to the real economy** – and I think nobody today would deny that a healthy, well-functioning financial system does exactly that, **it improves the circulation of capital, allocates capital where it is needed in the real economy.** So it is the **lynchpin of prosperity.** But the irony is that very often the very same people who try to protect the real economy from overbearing *government intervention* fail to see that equally the real economy can be threatened by overbearing *financial intervention.* **The financial sector can actually become parasitic upon the real economy and, rather than allocating capital in the way that is best for actual production and actual businesses, you** end up with rent-seeking from the financial sector and effectively a transfer of wealth from the real economy, and from society, into the hands of a narrow few, the financiers. That really is one of the whole points of the regulation – to make sure that doesn't happen. Also, to make sure the financial sector serves its appropriate role in society, which is to support real economic activity rather than be parasitic upon it.

And by “parasitic” finance, you mean?

David: A great example is all the recent goings on in commodities. In 2003-2004, as you well know and as Mike has talked about extensively, all of a sudden you had commodities being touted as an investable asset class. You got a wave of financial investment – or so-called investment, speculation, really – in commodities and all of a sudden the prices of those commodities were being driven *not* by supply and demand, i.e. not in such a way as to allocate resources appropriately for the *real economy*, but instead by purely financial interests. So what you had – and have – is profiteering on Wall Street coming at the expense of the real producers and consumers of these essential materials that run our economy. And there you have a perfect example of an unregulated financial sector actually sapping value, sapping wealth from the economy, rather than helping to propagate it.

The spike in oil certainly got some people's attention, even in Congress, but the pushback against greater regulation of the “free markets” has been fierce.

Mike: What we're really saying is that, with regard to markets, regulation serves as the vote of society. In a democratic system, society has the ability to vote on other essential issues, but with regard to markets, the only real vote members of society have – if they're not direct participants in the markets – is through the regulatory process. The view of efficient markets fundamentalists has been, “Well, if people aren't involved in the markets, we're just going to ignore them.” But the problem is that everyone in society is affected by the markets – especially directly in the case of markets like commodities. So even though a person may not be a market participant, that doesn't mean that they don't matter. They are part of the market because they are affected by the market.

Well, in commodities, sure, because everyone is an end user in one way or another. But in equities or derivatives?

Mike: Yes, they're not as easily seen in the same way as someone who is on a trading desk, for instance, but everyone in society is affected by the markets. Yet typically what happens is that what rules that are made, are made by the folks that are intimately involved in these markets – and who benefit from them. But if the markets don't benefit society broadly, then ultimately we're going to have a problem with markets. We are just trying to help people under-

stand that these things affect everyone. Since we don't have – or want – central planning as our allocation device for society, we had better start paying attention to the allocation device we do have – the markets – and how these things are constructed.

David: What it boils down to is that markets are an essential pillar of the social order. The prices they set determine who can afford what, from essentials like food and shelter to leisure and luxury items. Through the information they disseminate, markets allocate society's resources, determining where businesses choose to invest, what is produced, and how. Because of this, markets help to determine the course of social development: how we relate to our environment, how equally wealth is allocated, how freely individuals are allowed to pursue their entrepreneurial ambitions, and the degree of comfort, stability and safety within which families can be raised. Because markets touch every area of our lives, then, what we are trying to do through *Better Markets* is wake people up to the fact that there is a great deal at stake in the design and operation of markets. In recent decades, this design and operation has been based on the ideology of market fundamentalism, which states that extreme deregulation of markets leads to greater efficiency, and that maximal efficiency leads to socially optimal outcomes. The recent financial crisis cast extreme doubt on each of these propositions, as the deregulatory policies based on market fundamentalism appeared to directly cause socially catastrophic outcomes.

Aren't you being a tad dramatic? The economy tottered, but didn't collapse, after all –

Mike: How many millions of jobs have been lost in this country? That's a social catastrophe, in my book.

Point taken.

David: That's why we decided it was quite necessary that an impartial evaluation of market fundamentalism be carried out, independent from the special interest-laden intellectual monopoly of the market fundamentalists themselves. Allowing the market fundamentalists to be the sole judges of the validity of market fundamentalism is equivalent to letting every firm act as its own rating agency, a course even more perilous than that actually taken in the run-up to the credit crisis, where financial institutions,

though never directly owning the companies rating their "innovative products", were nevertheless made their paymasters.

Your impartiality is certain to be questioned – as I'm sure you know – given Mike's visibility as a proponent of more stringent market regulation.

David: Which is why we went to great lengths to be philosophically and academically rigorous and impartial in our papers, taking our evaluation of market fundamentalism and the various normative issues associated with markets all the way back to first principles. For us, this is no mere speculative exercise in abstract philosophy, divorced from the practical matters we face today. Rather, it is precisely because markets affect real daily life so dramatically that one must abstract to the highest principles of society in order to think clearly and correctly about their social role. Thus, to understand the value of markets in society, we must return to considering the very origins of social value. Some optimists have painted America as a society united at its deepest level by a single set of shared principles. Yet, the compromises of the initial founding and constitution, set out clearly in the writings of the Founding Fathers themselves, not to mention demonstrated by the early fragility of the union, and above all by the longstanding tensions between North and South that culminated in the Civil War, suggest that rather than a single people united by a common vision, the United States grew up as a mutually suspicious agglomeration of distinct peoples with competing interests and diverse values.

Amazing how much that sounds like a description of the markets–

David: Exactly. Nevertheless, it is impossible to deny the existence of some common thread that held the United States together. For how else can we explain the power of the Union to hold together in the face of such diversity and tension for nearly a full century from its founding up until the Civil War? And, as several scholars have argued, America has only become more united since the dawn of reconstruction. Perhaps, by some measures, inequalities have widened (though what could possibly be more unequal than the institution of slavery?). But ultimately, whether America has become more unified or not is tangential to the truly important question. Whatever we agree upon, or agree to disagree upon, there can be no doubt

that insofar as one can talk of “American values,” – as unavoidably one must – there is at least as much priority given to finding balance among competing interests and ideals, as there is to promoting what is common to all. In evaluating the social role of markets, therefore, **it is necessary not only to attempt to divine the shared principles on which our society is founded, but also the cleverly designed and indispensable procedures that exist to balance competing interests where no social consensus is present.** Society, for Americans and those of similar mind, is not premised on the maxim that “might makes right”. On the contrary, the whole point of social organization is to ensure that the interests of all groups are represented and protected in the face of potential domination by the most powerful elites. This was the explicit intent of the founders, enshrined in the Declaration of Independence, and it is a principle still embodied today within all strata of American society.

Mike: **Have you figured out yet why I hired David?** Let me reiterate why we’ve taken the trouble to set up *Better Markets* and write these research papers. It is pretty simple. Our view is that market fundamentalism and the “free market” ideology appropriated certain economic theories to build a cult of efficiency and a widely implemented program of financial deregulation. That deregulation led to a financial and economic crisis that caused widespread suffering for millions of people. Faced with this unfortunate reality, we believe we need a social program of re-regulation to correct the mistakes that were made and to protect against future repetitions, while at the same time enabling the economy to recover as thoroughly as possible – so that people can get their jobs back and recover a sense of safety, fulfillment and freedom from the fear of repeated crises.

Tell me again what you're referring to when you say “market fundamentalism”.

Mike: What we mean by market fundamentalism itself can be boiled down to three principles: that freedom and deregulation are equivalent; that maximizing them is the only way to achieve efficiency; and that the latter is the sole goal and ultimate end of markets. *Better Markets*, our organization, has been set up to attack and rejects all three of these principles. In their place, it proposes an alternative vision: **Deregulation simply concentrates power in the hands of a few large institutions that can use it**

to extract rents and otherwise harm all other participants; deregulation compromises efficiency; appropriate regulation is needed to craft optimal markets. Optimal markets are *balanced markets*, because a free society is built upon balance, and because imbalance is the surest road to self-destruction.

So your papers go farther than just attacking the status quo. You actually propose an alternative theory of markets, or a better way to run them?

Mike: Right, that’s the other part of our research. I’ll let David describe it, but we’ve talked about the idea of **Mandate and Mind, which is our alternative paradigm to efficient markets.** Our paradigm goes to great lengths to talk about the mandates of individual and institutional – but especially institutional – investors, both implicit and explicit. In other words, about the institutional framework of what they can and can’t do, about how they’re compensated and about all the issues with those incentive structures. Then, it also talks about the behavior of investors in general, the heuristics – shortcuts we employ in decision-making. Many times and in many cases these are in direct conflict with the “fundamentals” that the EMH’s “rational arbitrageurs” would be trading on or exploiting. They often have very little to do with rationality or with connecting the markets to fundamentals. So, to us, if you’re not looking at these issues of Mandate and Mind, you can’t begin to understand the markets. Especially Mandate, because there is a lot of behavioral finance literature at this point, but there is very little on institutional constraints and mandates; there is a lot that needs to be looked at there because those constraints greatly affect market prices – and in many cases have very little to do with the fundamentals of the businesses whose securities are being traded. With the advent of high frequency trading and as the speculators have gotten more and more influence in the market – as the market has become more and more a function of speculation, as I believe your last guest, Mr. **Mark Grier** from **Prudential**, illustrated pretty well in the interview in your last issue – the relationship between markets and fundamentals has become more and more tenuous. [w@w 7/30]. As people focus more **on Mandate – things that don’t have to do with fundamentals but have a lot to do with their compensation schedule or other incentives, then those things** – the “fundamentals” of incentives and structure that

have little to do with the fundamentals of companies – start to take over the pricing of securities. So now you get into a situation where your market is being priced based on those things predominantly rather than on corporate fundamentals – and now we have got a big problem.

With real consequences for real people and real companies, as Mark Grier pointed out.

Mike: Right. We actually started working on Mandate originally for our own use inside our fund – to better understand price behavior. But on a larger scale, from a public interest standpoint, understanding the impact of Mandate in the markets is very important. And it actually turned out, when David started looking into it, that there's an academic field – what's it called, David?

David: Economic Sociology. It talks in terms of Institutions and Cognition–

Mike: – in a way that's very similar to the way we talk about Mandate and Mind. So some academics have independently developed their own theory about how decisions are made in economies and markets. It's amazing to us – we didn't look at that their literature until after we had already worked out our own theory. But I'll let David take over.

I can't resist observing that it sounds like a discipline conceived in academic hell – economists and sociologists together.

David: It *is* a funny marriage, given that has always been a classic battleground, with fierce battle lines drawn between the economists and the sociologists. But I see a lot of people these days looking beyond all those artificial academic divisions; a lot of people can see strengths in each and weaknesses in each. So it's not surprising that if you look at the economic sociology literature, it actually manages to marry a lot of the strengths of those two traditionally distinct disciplines. But, as Mike says, we really hadn't gone into that literature before we developed our own Mandate and Mind paradigm, which is a basis, as Mike mentioned, for a lot of proprietary stuff in the fund. So we have been working on this paradigm for years. But when Mike started testifying in Washington and so on, he came to me and said, “We really should be using this understanding of markets, which has **proven so successful from the private profit standpoint, for social benefit now.**”

What's so new and improved about it?

It's funny, but our way of looking at markets is something that very many market participants – I'd go so far as to say the vast majority of informed market participants – would agree exactly with, if it were explained to them. You could go out and take a poll to find out who actually still believes in the Efficient Markets Hypothesis and I think maybe find a few people who believe it, but plenty more who do not.

Even most of the believers, today, will concede that in real life markets are only imperfectly efficient, so they tweak the theory in various ways.

David: Right. And even though a lot of economists today say they don't believe in the pure traditional Efficient Markets Hypothesis, they're still living with the hangover from that pure theory and it still infects their thinking. So it's rational expectations with a bit of fear and greed thrown in after it. In fact, it has become quite trendy over the last maybe 10 years to start thinking of markets in terms of concepts like fear and greed. That's great as far as it goes, but **we don't think that rational expectations cuts the mustard if you really want to understand how the markets operate.**

Behavioral finance has made some important contributions to our understanding of markets and those are really encapsulated in our Theory of Mind, which we think is an important component of markets, and an important component of all human behavior. But the other element you need to look at is the make up of the institutions in the market. As Mike said, you need to examine what peoples' incentives are. And that has tended to be less well-documented and less talked about. This is our Mandate component, which includes all of the institutional constraints placed on behavior, as we've said. Ultimately, this theory goes back to what the determinants of human behavior are.

What we say is, okay, there's some fear, there's some greed, there's some rational decision making, but if you really want to understand how the markets operate, you'd better look at the make-up of the institutions in it. You have to look at what people's incentives are. Even the economists, who with their right hands sign off on rational expectations, with their left hands also want to sign off on the idea that incentives are the key to understanding behavior. More often than not someone's compensation structure, someone's need to closely approximate the benchmark by which his performance is evaluated, is going to

rank higher in his incentive structure than his view of the fundamentals in the economy or in any given company.

Which is why benchmark hugging behavior is a hallmark of institutional portfolio management –

David: That is exactly right. We'd even go so far as to say, yes, economic or corporate fundamentals absolutely drive prices at times, but probably one of the largest reasons for that is because market participants are actually focused on those fundamentals at those junctures. So when market participants are focused on fundamentals, prices will track fundamentals. But if market participants chose to track a different set of fundamentals, then prices would reflect those different fundamentals. The reality is that prices simply reflect whatever the market participants are focused on – and often that is determined by their institutional reward structures far more than by any objective rationality – if there even is such a thing – and also more often than it is by fear and greed and other behavioral concepts. You can see microcosmic effects of this that are very clear.

For instance?

David: When a stock moves between market cap levels, it's explicitly written into the legal structure of a lot of managers' mandates that they have to get out of that name. Now, what relevance does that have to the supposed economic fundamentals that underlie asset prices? It has absolutely none. You can get as arbitrary as you like with these things. But really all we're saying is that markets are composed of participants and it's the buying and selling behavior of those participants that determines prices. So if you want to understand prices, then you have to look at the determinants of those decisions. And far from those determinants always being fundamentals or even just magically somehow cancelling out to reflect fundamentals, there are certain identifiable trends that dominate that come precisely from institutional concerns.

Such as – or is that too close to the fund's proprietary investment research to detail?

David: There was a slight balancing act to tread there but we have basically tried to make as much of this public as possible in order to apply this knowledge and understanding that we use for private profit to serve the greater good. So, for example, benchmarking by institutional managers is obviously a huge dominating

incentive. Another great example is that a lot of large funds reallocate annually or maybe twice a year, so a lot of activity happens in these very circumscribed periods of time. Now, can any efficient markets believer tell me in good faith that it just so happens that these kinds of arbitrary decisions about when in the year pension funds should rebalance in some way reflect the flow of fundamental news? Can they really tell me that the reality is there is just more fundamental information materializing in those periods than at other times during the year? Here you have a huge amount of institutional money that really is allocated over relatively short periods of time. Why should it be that it's allocated then, rather than at other times? Show me a fundamentally based reason for that. Clearly there isn't one. This just stems from some institutional consideration; when everyone is not going to be on vacation or whatever.

Or when a new performance measurement period starts.

Mike: Right, exactly. It's all those kinds of things. Any arbitrary period where you're talking about how people trade or are paid can be what we call "The Trump Rule" for a period of time. It can greatly affect the prices of a security and that really matters in markets. But it has little – basically, nothing – to do with any rational, purely objective (if that's possible) participant would describe as the fundamentals of that security. Markets have an enormous amount of variation around these kinds of events that have very little or nothing to do with fundamentals. And if, therefore, they are priced based on something other than fundamentals, then there are all sorts of ramifications for society. In other words, if the price isn't right for X, Y or Z, then we need to look at markets and understand them better so that we can have a better framework for understanding and regulating markets. So the market fundamentalists' idea of saying the price is always right in the market because it purely is 100% reflective of fundamentals is very dangerous. It leads to all sorts of problems with regard to capital allocation. Classically, that happens in a bubble, but it can happen at any time. In a bubble, you get price moves that drive much, much more investment than would be warranted on a go-forward basis. Which means that in a bubble you have a lot of resources used by society in ways that they shouldn't be used; that aren't really justified by the fundamentals. That's also the problem with regard to volatility: You need enough volatility

to get people to act, to do things, but you don't need so much that you get excessive action and excessive investment. That's the problem in bubbles. When you get a bubble, you get a crash and that's a horrible misuse of resources. So to better understand markets, we need to better understand behavior and the institutional frameworks behind prices and the causes of bubbles. And we need to understand them as well or better than the actual fundamentals behind the securities, commodities and other things we're trading. We have to understand what component is derived from what, at least in a generalized way; we're never going to understand it specifically. But that's especially crucial for policy makers so that they're making decisions based on what is best for society in general, not necessarily on what is best for a very small group of speculators.

Come on, Mike. Financiers are innovative and have some of the few vibrantly growing businesses in this economy; speculators provide needed liquidity to the market. And you might be exhibit No. 1.

Mike: We would make the argument that it is like anything else – I happen to like pizza, but if all I ate were pizza, ultimately I would have a problem. They say that all philosophy comes back to Aristotle and that is sort of the case here. Yes, speculation is fine. It helps the markets work; it greases the wheel. But when you have too much speculation – and you can have too much speculation – you end up with all sorts of other effects that aren't necessarily positive. I would say High Frequency Trading is a direct form of that, and I know that you've interviewed Joe Saluzzi and Sal Arnuk from Themis Trading, among others, about that in your magazine [w@w 6/14]. To me, that's a real issue. The index funds in commodities which really are taking liquidity rather than adding liquidity, are another. All these things are good up to a point, at which point they switch and become detrimental. But of course the securities industry is going to say, "the more speculation, the better". Because the more speculation there is, the more business we do. And companies in the securities business have a fiduciary responsibility, as they see it, to say that to people; to encourage speculation. But it is wrong, because more speculation is a benefit to society only to a point and after that point, it's a detriment.

Even if you're right, that point is very

hard to define – and a moving target – which works to Wall Street's advantage.

Mike: That's right because nobody can go back and say how much of the market price was related to the fundamentals and how much was related to the speculative behavior and to the mandates and the minds of speculators. It's impossible to reverse engineer. So people say we can't prove that speculation is having an effect on the market. But neither can you prove that fundamentals are having an effect on the markets. You can't prove either. All you can really say is that both have an effect. So regulators have a tough job. The idea is that you want to have enough speculative liquidity, but not too much. But again, that goes back to our ideas about achieving a balance between competing values. There is a limit to all of this stuff. I think it is really crazy that somehow Wall Street has sold everyone on the idea that innovation in markets is always and only good; that every product they develop is always and only good. The reality is that the process of innovation in markets or in anything else is full of trial and error. There is more innovative stuff that actually doesn't work than does work.

And market innovations are as fully capable of spawning unintended consequences as are regulations or legislation.

Mike: Right, so there needs to be people looking very carefully at these "innovations" prospectively. That's why we have an FDA, even though not having an FDA might lead to more efficient drug discoveries, in the sense of more drugs, faster. By placing strict testing and independent review conditions on pharmaceutical companies, our society slows down the drug production process and raises costs for those companies. A more efficient solution would be to allow companies to release drugs with no testing. If the drug in question were unsafe, we would soon know. The innocent people debilitated or killed by taking it would provide ample evidence. Demand for the drug would then instantly decline, leading to an efficient transference of resources to new and promising lines of research. Such a maximally efficient drug market is quite evidently at odds with our society's commitment to transparency and safety. We believe a drug should not go on sale until it has been extensively shown (as far as this is possible) to be safe. We are willing to hold to this course even when it reduces efficiency, and I don't think any rational person would want to pursue the maximally efficient route for drug

producers. In like fashion, there are mal-effects spawned in markets from unbridled innovation. That's why people – especially policy makers and politicians – need to look at them very closely before they just say, “Okay, we'll allow you to do this or that.” But that really wasn't being done in the markets – at least until very recently, when we have looked at markets and said, “Wait a minute.”

So something has changed?

Mike: Yes and I think that broadly the reason is that people have realized, “The markets haven't necessarily worked for me the same way they have for some folks. The S&P hasn't done anything for 10 years, I haven't made money in stocks, I'm in a situation where I have seen huge moves in the prices of food and energy that I can't deal with and maybe I've lost my job. I'm really not sure the markets are perfect.” That's to a certain extent what we have been harping on. Don't get me wrong. We are believers in markets. But markets, just like anything else, need to have some stop signs and some traffic rules, if they are going to work for the broadest swathe of society that is possible.

The level of populist disgust, out beyond Wall Street, seems to rise with each regulatory slap on the wrist or CEO buyout –

Mike: That's right. Ultimately, if markets don't work for people, we won't have markets – we'll have some other system. We think we're actually arguing for a very pragmatic approach, in the sense of having markets but having some rules so that there is a balance of interests in markets. Because otherwise, ultimately, they'll self-destruct. Society won't tolerate them.

What's your take on the role of derivatives in all this?

Mike: Derivatives can be a great benefit for people, so we're not arguing against all derivatives. What we're saying is that too much use of derivatives ultimately has its own issues. Likewise, when people don't understand derivatives, when the pace of financial innovation so outpaces the ability of regulators and the broader public to understand them, you end up with all sorts of issues that haven't been considered. For instance, there was an article on the front cover of *Bloomberg BusinessWeek* a couple of weeks ago about the problems with commodities ETFs. You could probably do a survey of the retail investors who own commodities ETFs and find that very few of them actually even know what a contango

is – much less know that it has been the primary determinant of their returns over the past three years –

Or more accurately, of their losses. Institutions, too. They've been sold a bill of goods. So what else is new?

Mike: They're horrible vehicles. A direct transfer of wealth, mostly from retail investors to Wall Street commodities desks that do the cash and carry. It's just incredible to me that they are even allowed in many cases. If you are going to trade commodities, you should have to understand what a commodity is. Understand the commodities derivatives markets, understand the ideas of storage cost and convenience yield and understand the ideas of contango and backwardation –

But that's precisely the marketing genius of the commodities ETFs; they're supposed to relieve investors of all that drudgery.

Mike: Right. They say this is just a security. But how many of these folks who own these ETFs know that they have a swap on with a counterparty? Know that there's counterparty risk embedded in that swap? Know that what they really have is a swap that has a hedge that's part of it, which is repriced everyday? Or know that there are lots of issues with regard to its repricing every afternoon, which causes all sorts of other volatility? There are all these things the public doesn't know – and I think that is ultimately going to result in a lot of liability for some of the folks who have promoted these products.

How so? All that is usually disclosed in the fine print no one reads, if for no other reason than to escape liability.

True enough. But the language of the CFMA specifically excluded the retail investor. The institutional investor is included in the sense that they're not supposed to be able to sue, believe it or not, with regard to fraud and manipulation under the CFMA. But I think there is an enormous amount of potential liability at the banks that have promoted these commodities ETFs to retail investors. Just take a look on your *Bloomberg* at a chart of the price of next-month crude oil, from 2006 when the USO [United States Oil Fund] came out, and then grab a chart of the USO itself over that same stretch and display it directly below it. The USO is in the 30s and the price of crude is \$82 as we speak. They both came out at around \$65. That whole difference is contango.

Exactly, The *BusinessWeek* piece did a good job of explaining what's been going on. But that's only one example of the mischief embedded in derivatives.

Mike: Right, there are all sorts of issues. How many municipalities that were buying over-the-counter derivatives really understood the pricing inherent in those derivatives, knew the actual bid and offer, knew that “mark to model” was a great way of ripping people off, given the opacity of these markets? How many people really even thought about the idea of opacity in these markets or why municipalities should even be doing these kinds of transactions? The list goes on and on. Why do we need all this?

The classic response is, “buyer beware”–

People can say that, but at the end of the day Wall Street is actively promoting this stuff. And whether you think about food or drugs or other products in a modern society, there are all sorts of warning labels required on potentially harmful things. In my view, there is a large class of fiduciaries – non-profits, folks like that, large state pension funds – that shouldn't have anything to do with any of these speculative markets. They are public-purpose entities and being involved in these markets serves very little public purpose, especially for tax-advantaged investors.

That brings to mind a whole other aspect of many derivatives, especially the over-the-counter variety: They're quite often designed merely to avoid taxes, manage earnings or such, which seems, shall I say, counter to the public good, in an economy straining under enormous deficits –

Mike: Right without question.

You spent a lot of time in Washington as financial reform was being debated. How disappointed are you with the massive new set of laws that emerged?

Mike: It's 2,200 pages long, and everyone is still struggling to digest it. Section 7, I believe, is the derivatives section and that's the area we really concentrated on. We can't claim a lot of knowledge on the others. **I'd like to say that a lot of our handiwork ended up in the final bill, despite an enormous amount of effort on Wall Street's part aimed at eviscerating it. Roughly \$1 billion worth, as I figure it. But it's an ongoing process.** The next thing the banks are going to try to do is eviscerate it by watering down the rules written by the committees being set up to implement the new laws within all of the various regulatory

agencies. They're going to go in there with their lawyers and fight. I can tell you there are 40 law firms on the Hill right now, trying to sign up clients to do just that. Our hope is that *Better Markets* will be involved in those debates going forward. We want to try to take the other side, in terms of saying we need to do this and we need to do that so that the new rules actually benefit a broader constituency and society. Specifically, with regard to the derivatives markets, requiring over-the-counter trades to be cleared by a clearing house and to have increased transparency are very significant benefits of the new law, for society and ultimately for market participants. Position limits, separating out credit from trading, these are all very important aspects of the new law. The idea that the CFTC *shall* enforce – and that's the word, “shall” – position limits to prevent excessive speculation in the energy and agricultural markets, including over-the-counter markets. There was good stuff left in the final bill.

Alongside lots of loopholes.

Mike: True enough. But the final version of the bill actually gave the banks fewer than were in the House version, which was particularly poor. The original Senate version that came out of the Sen. **Blanche Lincoln's** committee actually was pretty strong and the final product was certainly better than many thought possible. I've heard people from Wall Street characterize it as no big deal, but there are some significant changes in it that I believe will be beneficial to lots of different constituencies.

You pushed hard – and the banks pushed back at least as hard – to try to increase the transparency of OTC derivatives transactions. Clearly, there's big money at stake.

Mike: Absolutely. The first thing that transparency does is bring costs down for different participants, because people can see where things are trading and the bank structuring the transaction can't claim prices are somewhere else. Just having transparency will reduce bid and offer spreads – which of course reduces the dealers' profits, which is why Wall Street was against it.

Didn't you also make a big point in your paper about transparency being essential if markets are to properly disseminate information about supply and demand?

David: Yes. Friedrich Hayek, one of the favorite philosophers of many market fundamentalists, argued in “*The Pure Theory of Capitalism*” that one of the central functions of markets is their

capacity to disseminate information. The buying and selling actions of market participants cause changes in prices. Therefore, each transaction generates a piece of information – the clearing price – which reveals information about the relative position of the transactors: They were willing to do business at that price. This information is publicly available to all who choose to observe it (assuming markets are relatively transparent). It therefore broadcasts information about market conditions (i.e., about supply and demand). All of which makes the OTC markets a particularly interesting structure because these markets are specifically designed to avoid the transparency requirements of more public markets. OTC markets shield prices, enabling dealers to offer different prices to different consumers. As such, they provide a profitable informational edge to the supplier or intermediary. For example, a bank may profit from the “spread” between the price of an option to buy some commodity, which it negotiates with a producer, and an equivalent option to sell that commodity, which it negotiates with a consumer. The producer thus pays a higher price for its put option, and the consumer receives a lower price for its call option, than would be the case with transparent pricing. But the bank, acting as a speculator, profits from the margin it creates via the spread.

Eliminating the middleman would seem the obvious solution –

David: Traditionally, the argument for OTC markets – made by the banks that profit from them – has been that the flexibility required to create customized options is only possible through the mechanism they provide. They argue that clearinghouses, and the standardization they bring, compromise flexibility for the sake of unnecessary transparency. They further argue that if customized options are unavailable, businesses are unable to buy and sell the contracts they need to optimize their operations, so efficiency is lost. But this argument glosses over the fact that the information loss for society from opaque OTC markets more than overrides the benefits to privileged participants of added flexibility. Banks are mandated to seek the largest possible spreads, and so are explicitly incented to use their informational edge to give customers the worst possible deal in what is essentially a zero sum game. So it’s no surprise to me at all that some of the most catastrophic losses to institutional investors during the financial crisis came from OTC derivatives. OTC markets, in my view, are only efficient at transferring resources from the larger econo-

my onto the balance sheets of banks. If there is truth in the time-honored comparison of financial markets to a casino, then OTC markets are like a casino in which the house gets to set different rules for different players in order to maximize its own profits.

Mike: Having OTC derivatives cleared on exchanges – assuming the new law isn’t gutted in the regulatory rule-making process – is critical for reducing “systemic risk”. Obviously, there are significant problems today with the exchanges and all the things that are going on in terms of them selling their “souls” to the people who front run institutions. But even so, the derivatives *exchanges* didn’t go down during the financial crisis. By contrast, had it not been for the U.S. bailing out AIG, I think there’s no doubt the OTC derivatives markets would have collapsed. They were certainly well on their way to doing that – and dragging the rest of the economy into the abyss with them. But we don’t need to ever be in that situation again, where people suddenly get huge margin calls. *We should* be in a situation where OTC derivatives are priced every day and anybody that loses puts up more money and anybody who wins gets money back – daily, at the close – just like in the markets for commodities and listed derivatives. Providing, like I said, that the banks don’t manage to get their way with the rules-making committees.

Which is why you, and *Better Markets*, aren’t letting your guard down?

That’s right. People need to continue to pay attention. The bottom line is that there is going to be an enormous amount of money and effort expended by Wall Street’s lobbyists and law firms – I estimate probably 5-10 times what they spent on the Hill trying to influence the legislation – to try to sway the regulators actually writing the rules.

What’s that equate to in dollar terms?

Mike: Probably \$5-10 billion over the next couple of years.

That sure says something about the profits at stake.

Mike: No question. I can make an argument that a lot of the big banks, without derivatives – they’re not much.

Which, without being a conspiracy theorist, likely explains why the Treasury and Fed weren’t exactly leading the charge to rein in

OTC derivatives, despite *AIG, et al.* They've simply been doing their utmost to resuscitate the banks.

Mike: I would absolutely agree in the sense that behind the scenes in many cases, though not in all cases, that seemed to be the Treasury's view in regard to certain aspects of the financial reform bill. In other words, the idea at the Treasury and the Fed was to get the big banks back to health as soon as they could. So if the banks can make money trading derivatives and ripping off institutional investors – and that gets their capital ratios back to a better levels – then, so be it, and they will deal with the other issues later. Now, they didn't win on all those issues, but certainly there was that aspect to some of the arguments.

What about the institutional investors who are often the ones you say are being ripped off – or their clients are? Have you gotten any indications of support for your efforts or for *Better Markets*?

Mike: There are a lot of good folks out there that do care about financial reform and do care about markets structure and do care about markets working for the broader constituencies. I think in a lot of cases they just have to re-learn what they learned in business school about how markets actually function. They have to start thinking about the markets in ways that haven't been fashionable for a decade or two. One of the purposes we organized *Better Markets* for is to reach out to a lot of these institutions and the people who run them. We have already reached out to a lot of consumer groups and non-profits and had a lot success generating interest. One of our next steps will be to reach out to some of these institutional investors. The bottom line is that there are people out there who care about these issues; there are people that we need to talk to. We hope we can develop a large alliance. To a certain extent, the reason you have an IEA [**International Energy Agency**] today is that you had **OPEC**, a producer organization, get so strong that it dominated the market. So along the way people said, "Wait a minute, we need to have a consumer organization to take the other side. Likewise, there needs to be an organized counterweight to Wall Street. Just because the Street says something doesn't mean that they are the end all and the be all with regard to economic thought. Yes, there are a ton of

smart people in Wall Street, but that doesn't mean that they are thinking up things in the public interest – or even in their clients' interests. So institutions, which have a lot more money under management than the Street does, need to be educated. Institutions have to be able to look at all of these products and practices that Wall Street employs and ask: "Do I want to do business with a firm that does these kinds of things, or do I not? As a fiduciary, do I want to engage in buying these kinds of products or trading these kinds of products – even though my traditional consultant (which very well may be owned by some Wall Street entity or greatly conflicted by Wall Street interests) says that I should? Is that consultant acting based on a very constricted view of the world, based solely on the maximally efficient allocation of capital and so forth, and is that really the right thing to do? Is following that consultant's advice really fulfilling my fiduciary duty, especially if I'm a large public institution with a public purpose?" That's the message that we are carrying to folks. We're having some early success and I think we'll have more as time goes on.

So *Better Markets*' next step is to broaden its support?

Mike: We're out hiring folks and the next thing is to reach out to folks. Getting the message out is key. But in the short-term, meaning over the next year, focusing on the regulatory reform process will be absolutely critical. Both the SEC and CFTC are getting big increases in their budgets and they're ramping up their staffs. I know the CFTC has already formed 35-40 different committees that will be looking at various rules that they have to determine. I think they have a total of 90 different large decisions to make, which were thrown to them by the legislation, and the SEC has a similar number. The regulators are clearly gearing up for that effort, but so are Wall Street and its lobbyists. And so *Better Markets* is determined to be there, too, to advocate for the public interest, when that's needed.

Thanks, Mike – and David.

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