

# Where Markets Fail: An Imperfect Discounting Mechanism

By [Jason Voss, CFA](#)

Posted In: [Economics](#), [Equity Investments](#), [Fixed Income](#), [Future States](#), [Investment Topics](#), [Philosophy](#), [Portfolio Management](#), [Risk Management](#)



I am [an avid fan of capitalism as well as a critic](#).

While I agree that markets are generally better at discounting the future than individuals, there are inherent flaws in the markets that are difficult, if not impossible, to overcome. I point out these weaknesses because, just like with any [mental model and organizing principle](#), knowing the weaknesses is the first step in avoiding or discounting them.

## Imperfect Discounting Mechanisms

Many capitalists believe the markets are sacrosanct and, in their blind devotion, prove

why “pure” is the root of puritanical. They cite aphorisms like “the wisdom of the crowd” or the improved predictions that come from crowdsourcing. I accept, acknowledge, and even revere the truth in these observations. After all, markets derive prices by aggregating differing expectations of the future.

But even the agglomeration of crowd opinion cannot overcome an inconvenient fact: time. That is, time marches in only one direction — forward. Effects follow causes. To the degree that causes are repeated, probable effects can be charted.

But the future is capricious. That is why we turn to markets in the first place. Were the future predictable, there would be no reason to aggregate differing views of supply and demand for goods and establish market clearing prices. Only The Price Preeminent would exist — an omniscient price that represents the market clearing price not just for current supply and demand, but for all time.

For example, if we knew in the late 1800s what we now know about the effect of hydrocarbons on the environment, they would have been priced higher. Alternatively, what if we could peer into the future and see the complete trajectory of human existence? And suppose, in that perfectly transparent timeline, we could see that potable water would eventually become scarce

enough to result in the end of people? Obviously the signal from this All-Knowing Market would be very different.

But people are not seers. Yes, markets adjust to new information to balance supply and demand, but given our inability to predict the future, many goods and services are currently mispriced — perhaps dangerously so.

There are plenty of examples of markets doing a poor job of discounting.

A number of [Samsung's infamous Galaxy Note 7 phones](#) spontaneously burst into flames causing much mayhem. You could argue that this is not a failure of the markets. But it is. After all, there was a market for these phones. Samsung eagerly supplied them and buyers eagerly purchased them. Once the fire hazard became known and the replacements failed to rectify the problem, the market disappeared. This illustrates both the power of markets and their primary weakness. Yes, the phones are no longer for sale since the entire market for them vanished, but signatories to the market for the Galaxy Note 7, both supplier and demander, failed to see far enough into the future to prevent catastrophe.

Another example is the side effects of prescription drugs that are not fully appreciated until many years into the drugs' use. This despite the extreme level of scrutiny on the front-end of drug development.

### **Possible Remedies**

- Perhaps new products could be evaluated by their closeness to the natural world. For example, timber directly effects nature, consulting not so much. A proximity-to-nature continuum could also serve as a resiliency-monitoring tool. The closer to nature, the greater the need for systems thinking, scenario planning, and caution. This is not an argument for stifling regulation or for you to run out and hug a tree. I am saying that even when armed with market-cleared prices, people can screw things up. This means that any new product directly affecting the environment ought to be overpriced initially. This margin of safety could be put into a profit escrow account, assuming that the market still clears at the new price.
- Alternatively, as products are designed, they should have a built-in plan for the lifecycle of their components as well as contingency programs for how any potentially deleterious effects may be unwound. That is, what is the estate planning for a new product? How do you “put it to bed?”
- Perhaps a new product checklist should be developed, all the components of which must be addressed before a license to market is granted. A variation of the US Bureau of Consumer Protection could be the adjudicating body.

**This article is the first in the five-part Where Markets Fail series. Subsequent entries will consider how markets:**

- assume a context;
- assume fungibility;

- are not systemic; and,
- have “visible hands.”

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Image credit: ©Getty Images/erhui1979

About the Author(s)

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#### [Jason Voss, CFA](#)

Jason Voss, CFA, tirelessly focuses on improving the ability of investors to better serve end clients. He is the author of the Foreword Reviews Business Book of the Year Finalist, *The Intuitive Investor* and the CEO of [Active Investment Management \(AIM\) Consulting](#). Previously, he was a portfolio manager at Davis Selected Advisers, L.P., where he co-managed the Davis Appreciation and Income Fund to noteworthy returns. Voss holds a BA in economics and an MBA in finance and accounting from the University of Colorado.

#### **Ethics Statement**

My statement of ethics is very simple, really: I treat others as I would like to be treated. In my opinion, all systems of ethics distill to this simple statement. If you believe I have deviated from this standard, I would love to hear from you:  
jason@jasonapollovoss.com

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## 26 thoughts on “Where Markets Fail: An Imperfect Discounting Mechanism”



1. [Brad Case, PhD, CFA, CAIA](#) says:

[7 December 2016 at 09:25](#)

Jason, please pardon my directness, but this post is weird.

Individual people cannot infallibly predict the future, as you point out. But (1) you seem to blame that on markets rather than on people, and (2) you seem to think the failure of people to predict the future correctly can be corrected by designating a few of them to control the others according to their own equally fallible predictions of the future.

If we could correctly predict that potable water will become scarce, then its current price would be higher—and, conversely, if we could correctly predict that it would become even more abundant, then its current price would be lower. The thing is, the current price (of everything traded in efficient markets) is based on the BEST currently available information about future conditions. The fact that water is priced on the basis of the BEST currently available information (in an efficient market) is what makes water correctly priced. As we get better information (in the future) the “correct” (market) price will adjust accordingly.

Oh my goodness, you actually think replacing the collective judgment of many fallible people (the market) with a tiny number of fallible people (a new variant on the Consumer Financial Protection Bureau) would improve on that?

One more thing: “discounting” means “attaching less value.” We discount future costs and benefits because they are uncertain and will happen in an uncertain future, whereas what happens today is known. “Discounting” is not a synonym for “predicting” or “avoiding.”

## [Reply](#)

1. [Jason Voss, CFA](#) says:

[7 December 2016 at 10:25](#)

Thank you for your answer Professor Case!

I love direct. Also love that you found the post weird. Let me do my best to respond to your thoughtful comment. Though, in no particular order...

First, I understand the concept of discounting. Thanks for ensuring that everyone else does. I guess I am guilty of assuming limited resources, and therefore of assuming cost of capital should always be positive, and therefore, that the future should always be discounted. Were you imagining a different world?

Second, the very point I am making is that markets are clusters of people, and therefore they have inherent flaws. Yet, many ascribe a deity like quality to their functioning that flies in the face of their many mispricings, especially over long periods of time. What I am arguing is that for certain ‘goods’ they are actually ‘bads.’ In the examples that I gave I referenced things that may permanently alter the environment to the detriment of all. I was arguing for caution. Which leads me to my next response...

Third, point taken about people not being good prognosticators and then turning it over to another group of them. How do you go about correcting for possibly poor assessments of value? Margin of safety? I note the CAIA after your name, is it legit to include a margin of safety in your vol estimate?

Yours, in service,

Jason

[Reply](#)



1. *Brad Case* says:

[7 December 2016 at 14:00](#)

Hi Jason,

That's cool: I think I was just a little confused by the contexts in which you were talking about "discounting." And no, I would never suggest a negative discount rate.

Maybe my main difficulty is with the concept of "mispricing," so here's how I think of it. The "value" of any asset is the present-discounted value of its future stream of net cash flows. Many assets will have a different future stream of net cash flows depending on their owner: think, for example, of any stock (or bond) held by an activist shareholder, or any management-intensive asset such as a sole proprietorship or an income-producing building. The future stream of discount rates will also differ by owner, too, based on borrowing costs, other investment opportunities, etc. That means any asset has an owner-specific "value" in the hands of each potential owner. The "market value" of the asset is bracketed by the two potential owners with the highest and second-highest owner-specific values. In an efficient market those will collapse to a single market value, which is the transaction price, while in an inefficient market there may be a large range of transaction prices within those two owner-specific values. My point is that each potential owner takes into account all available information regarding future net cash flows and future discount rates in determining her/his owner-specific "value," and therefore the market value will reflect all such information. Any market participant may do a poor job of forming expectations regarding future net cash flows and future discount rates. If the future turns out to be worse than expected, then whoever bought the asset will be disappointed—that's where the "winner's curse" comes from. Conversely, if the future turns out to be better than expected, everybody who didn't buy the asset will be disappointed—that's simply a different form of regret.

But it seems to me you're implying that errors in predicting the future are all going to be in one direction—and there's simply no basis for reaching

that conclusion. One way to think about it is that there's a "margin of safety" built into the process: each person's owner-specific "value" is, in effect, the expected value of a distribution of possible future scenarios. Philosophically, your argument reminds me of "Pascal's wager." Pascal said that we should all believe in God because if God exists then our failure to believe in God would have enormous negative consequences, whereas if God doesn't exist then there would be no consequences. The problem with Pascal's wager is that he didn't consider the possibility that we could be sentenced to hell (or something along those lines) for the crime of believing in God. So yes, we could be making big mistakes in the sense that future environmental conditions could be far worse than we realize—or, alternatively, we could be making big mistakes in the sense that future environmental conditions could be far BETTER than we realize.

Thanks.

### [Reply](#)

1. [Jason Voss, CFA](#) says:

[7 December 2016 at 16:25](#)

Hi Brad,

What an incredibly thoughtful reply. Thank you for authoring it.

I can summarize my response to what you have written with, "Sounds like you are saying markets are imperfect discounting mechanisms." Did I get that right?

Separately, I didn't mention any securities markets specifically in my article. I intentionally mentioned things like oil just after its discovery, because it is at these moments that there is an opportunity to insert some consciousness.

Yours, in service,

Jason

### [Reply](#)

1.  *Brad Case* says:

[7 December 2016 at 16:28](#)

Oh, that's absolutely true—but it's equally true to say “but I can see literally no better way.” There are some problems in the world that simply cannot be solved, and imperfect knowledge of the future is pretty high on the list.

2. *Chuck t* says:

[7 December 2016 at 11:18](#)

One lesson we should have learned from this past election. Humans cant estimate, assume, forecast, project, predict, expect, model or calculate the future. Thats why all possible scenarios need to be considered. That makes a good case for diversifying a portfolio.

Good article.

[Reply](#)

1. [Jason Voss, CFA](#) says:

[7 December 2016 at 16:32](#)

Hello Chuck t,

Thank you for taking the time to share your thoughts. I really like your examples, and your conclusion. By the way, I see you used the word ‘scenario.’ That is one of my favorite words, and scenario planning I believe is a very robust way of solving some of these problems with markets that I am attempting to illustrate in this article, and the series. You can see some of the information I crafted with my colleague William C.G. Ortel about scenario planning in our Investment Idea Generation Guide.

Yours, in service,

Jason

[Reply](#)

3. *Joanne Ott* says:

[7 December 2016 at 21:40](#)

Jason thanks for your blog and stretched me greatly to think differently.

I really liked the 'resiliency-monitoring tool' for resources close to nature. Finance as a tool is evolving, amending methodology where gaps exist. It seems even more essential now to develop sustainable valuation tools.

As to your example of pricing for prescription drugs and side effects – I'd rather see a sort of ROI that is adjusted FOR the side-effects – similar to the Sharp ratio = Expected outcome of the drug / std dev of side effects.

[Reply](#)

1. [Jason Voss, CFA](#) says:

[7 December 2016 at 21:54](#)

Hello Joanne,

Thank you for taking the time to share your opinion about the piece. I really like your idea about the adjusted ROI for prescription drugs. Tell me more, please, if you wouldn't mind thinking out loud on it.

Yours, in service,

Jason

[Reply](#)

1. *Joanne* says:

[7 December 2016 at 22:15](#)

I have thought it odd that, in general, the side effects in prescription drugs are not factored into the pricing, or rather the net effect. We have all seen the commercials, often the side effects take up more time than the benefits. Simply thinking the Sharp Ratio as an analogy for normalizing the pricing.

[Reply](#)

4. *Ashok M, CFA* says:

[9 December 2016 at 06:33](#)

Every resource we deal on earth has a perishable quality to it.

How do we therefore price

a) Milk, when the number of cows at the farm have a life span

- b) Electricity, when coal mines are quantifiable to a reasonable extent
- c) Medicines, when side effects arise
- d) Education – for fun let's take the CFA certification; when capital markets expand and shrink because of regulations, biz cycles etc.
- e) Wheat – when harvests suddenly hit the market causing a flooding

Attempts to pad up prices with innocuously appealing objectives like 'unfair markets', 'inefficient nature of markets' etc have come and gone in different avatars. If you want to try price setting in a different system then we can look at Russia where complex math was used to 'price' resources.

The only workable system – is the prices set by free markets. The millions of individuals voting every day, and the crawling of those prices through the layers of productive activity.

Instead, we should be addressing distortions in the functioning of free markets such as

- a) Oil – global prices influenced by cartelization
- b) Interest rates – Fed and Central Banks sit in judgment on the price of money that should rule in the economy
- c) Lobbyists – lobbying lawmakers to protect their industries or pass laws against competing industries (impose a tariff or tax or limit expansion)

The romanticizing with algorithms to fix prices that claim to take into account factors, that presumably, the market ignores shouldn't be taken too seriously.

I say presumably because how do we presumably know that oil at \$50 doesn't take into account its 'limited' supply nature? How do we know that oil at \$50 isn't discounting the low price of batteries as a source of power 50 years from now?

Also, who is going to pay for the padded up portion of price above the natural market rate? Does the producer get to pocket the higher price? In which case it's a market distortion. More producers will arise, resulting in stress on input resources. Will the government pay? If yes, that means the taxpayer will be burdened. These are questions which came up instantly in my mind as I was reading this.

I don't want to call this Series a prelude to a new 'communist manifesto', but coming from India, which experimented with socialism for the last 60 years, and having seen the benefit of free market capitalism since 1990, I know for sure which side I want to stand on.

[Reply](#)

1. [Jason Voss, CFA](#) says:

[9 December 2016 at 08:46](#)

Hello Ashok!

So nice to hear from you, and I am so glad that you have commented. Thank you for your extended, and thoughtful comments. Future posts will demonstrate that markets are never “free,” and having nothing to do with those dreaded central planners; governments; their agents, such as regulators, and the like. I am not wed to the possible remedies I suggested. But in a world with growing population and growing environmental degradation, I believe we need to be more circumspect about some of our choices with resources. I also think, as an investor, we frequently have a schizophrenia about markets. On one hand we trust them as arbiters of value as cold, steely capitalists. But on the other, we think that they misprice securities and therefore justify active management. I believe pointing out markets’ imperfections is healthy for those that participate in them.

Do you have any suggestions for prescriptions? If not, maybe this is an opportunity to stretch yourself and stretch all of us by putting your brilliant mind to work.

Separately, the language in your last paragraph worries me. This is far from a ‘manifesto,’ don’t you think? I know you tried to soften those words, and I recognize my article has flamed your passions, but I request more thoughtful comparisons, if possible.

Again, thank you for taking the time to comment.

Yours, in service,

Jason

[Reply](#)

1. [Joanne Ott](#) says:

[9 December 2016 at 09:45](#)

This commentary is enlightening and suggests that there is no direct ‘pill for the ill.’ As to scientific discovery in the pursuit of knowledge is ever evolving, so is the evolution of financial theory, tools, and market pricing.

While grounded in ‘free-market-principles’ in setting prices, there is one caveat worth noting here – especially in light of the commentary statement “the only workable solution is prices set by free markets”. This theory is grounded in ‘utility theory.’ The presumption under “utility theory” is that market participants only seek to maximize their wealth for a given level of risk. Yet this is hardly true in reality.

While there is much to be said about this from the behavioral finance perspective (i.e. behavioral bias to emotional intelligence), the discoveries in neuroscience blended with human behavior is much more enlightening (i.e. cognitive brain function- unhealthy stress cortisol releases vs gratitude/giving happy hormonal releases), and thus helpful to where financial theory needs to explore.

This influences pricing and valuations as financial tools. AND, this is quite NOT the ‘communist’ or ‘socialist’ manifesto, but blending the knowledge from science with finance to create better financial tools that reflect the sustainable functioning future of society. Quite frankly, humanity was given two sides of the brain and our design is not to operate under just one side – presumably how ‘utility theory’ denotes. Ignoring this also ignores a distortion in finance theory. (Check out Robert Shiller and John Coates to name a few).

Often, in discussion with finance folks, the conversation begins with acknowledging these misgivings of finance theory and then circles back to the status quo. For the most part markets work efficiently as argued, yet we can always improve upon our tool box by being open to new ideas from multiple perspectives that work towards resolving the misgivings of finance theory.

This is the challenge we need to embrace – thanks all for sharing your perspective.

### [Reply](#)

1. [Jason Voss, CFA](#) says:

[9 December 2016 at 09:58](#)

Hello Joanne,

Beyond brilliant. Very well said. I agree. Let’s chart new territory. So impressed with the thinking contained herein. Agree that the mental models developed in the 18th century can be updated.

Very big smiles,

Jason

[Reply](#)

5. Pingback: [Thất bại của thị trường – BlackBerry | Economy](#)
6. *Bradley Parkes* says:

[10 December 2016 at 18:09](#)

If markets are infallible towards correctly predicting outcomes why would the same participants in markets be infallible in creating regulation?

What about the unintended consequences of trying to regulate the unknown unknowns?

As Yogi Berra stated predictions are difficult, especially about the future, however, prediction markets have done quite well versus human forecasting.

This is because once more than 3 variables are put into a model its is difficult to determine the weighting for each variable and then there is the unknown variables. This is why most regulation fails to deliver what it promises.

Consider the following counter examples...

What if the world was entering an ice age during the last 100 years (as believed by GreenPeace co-founder and PhD biologist Patrick Moore) and the fossil fuels we have burned have warmed the earth enough to keep it out of an ice age, should hydrocarbons then have been priced lower?

There is a movement called the Right to Try, or something like that. It is made up of terminally ill people who are pressuring the regulatory authorities to let them experiment on themselves with yet to approve drugs that may extend their lives. I believe your ROI and unintended consequences of pharmaceuticals is only relevant or minor conditions. This is not a failure of the market but a misjudgement of risk by people too busy or lazy to do their own research. The side effects suffered by those who take pills for minor conditions are either risk adverse people did not calculate risk properly or are risk takers. This is not a market failure but a market success and failure of individual understanding of risk tolerance.

Instead of your ideas for solutions a study of risk tolerance should be encouraged and then let markets do their jobs. It is simpler and likely more successful than what you have suggested.

Bradley Parkes

[Reply](#)

1. [Jason Voss, CFA](#) says:

[12 December 2016 at 08:02](#)

Hello Bradley,

Thank you for your comment.

First, I think you meant ‘fallible,’ and not, ‘infallible’ in your first sentence. Am I right? Assuming that I am right, this point was raised by one of your fellow readers; see the comments above this one.

Yes, there are always unintended consequences, but some can be undone, whereas others cannot.

Regarding your Yogi Berra quote. There is actually quite a lot of work being done exploring what ‘Superforecasters’ do that others do not.

Rather than offer up counter-arguments to your points. Let me ask state that, if markets cannot be criticized, then they cannot be improved. Do you believe that they are above improvement? If you side with the ‘absolutist’ camp on this – that markets are above reproach – then you are helping to support my point that there is a contingent of people that have a blind-faith, almost religious devotion to markets. Their criticisms take on the tenor of a middle ages European Catholic defending their Faith by saying that if those danged monarchs would just let us practice everything would be perfect. Then came Protestantism, to demonstrate another way to view the same situation.

If, on the other hand, you believe they may be improved, let’s have that discussion. That’s the one I am interested in. With emerging topics that is the state we find all of ourselves in.

Yours, in service,

Jason

[Reply](#)

7. [Ashok M, CFA](#) says:

[12 December 2016 at 03:35](#)

Voss- Thanks for going through my comment and responding.

Let me begin with a quote – “It has drowned the most heavenly ecstatic of religious fervor, of chivalrous enthusiasm, philistine sentimentalism, in the icy water of egotistical

calculation. It has resolved personal worth in exchange value, and in place of the numberless infeasible chartered freedoms, has set that single, unconscionable freedom – Free Trade. ... it has substituted naked, shameless, direct, brutal exploitation”.

Sounds sophisticated and convincing? This is a direct quote from Marx and Engel’s Communist Manifesto.

My purpose of invoking the Manifesto (earlier and now) is to draw similarities in the language and intellectual predisposition of this article and to another commentator’s response. It wasn’t meant to kindle memories or thoughts of the bloody aftermath, which I presume has prompted your defense.

However, I do think I should be free to comment and bring to the table all sorts of ideas. Therefore, I don’t agree with you asking me to tone down or prodding me to choose an alternate set of words etc.

The discussion of Communist Manifesto and other failed ideas should be part of everyday conversation. And I presume one doesn’t feel offended to use words like ‘blind’, ‘schizophrenic’, ‘bloody’ or ‘degraded’ prefixed to capitalism while discussing free market capitalism.

Free market capitalism is usually the orphan that needs to be defended in any context setting where words are freely thrown around. Especially, anyone who calls ‘environmental degradation’ or ‘global warming’ or ‘scarce natural resource’ usually has the attention and empathy of the crowd. And he wins half the argument already.

The ones who plead for the efficiency of price (as an input resource optimizer, as divider of labor, as an allocator of capital, as a mechanism to auction etc) is branded a ‘usurper’ or an ‘evil’.

My simple point is, all that we are doing today is simply throw around terminologies. There is a need for deeper discussion on an epistemological basis. But any attempt at beginning one amounts to stepping into touchy areas. For instance, comparisons with socialist doctrine is repelling.

Someone says ‘neuroeconomics’ and ‘two sides of the brain’ and that person is like a God-sent economist to the earth. And someone professes care for timber or coal and he is welcomed with “Sharpe”, ” Cape” and what not supporting appendages. These are not evidences. Except, ideas in the mind of a coterie of Nobel prize winners (that prize which shouldn’t have been given to Economics in the first place, but that again is obviously for discussion for another day) and it’s avowed followers.

Thank you Voss for reading through patiently. I look forward to your articles and opinions.

[Reply](#)

1. [Jason Voss, CFA](#) says:

[12 December 2016 at 08:10](#)

Hello Ashok,

Thank you for offering up the quote from Marx. I actually thought it sounded blind, foolish, and ignorant of the power of markets. As I responded to one of your fellow commenters, and I will quote here again:

“Let me ask state that, if markets cannot be criticized, then they cannot be improved. Do you believe that they are above improvement? If you side with the ‘absolutist’ camp on this – that markets are above reproach – then you are helping to support my point that there is a contingent of people that have a blind-faith, almost religious devotion to markets. Their criticisms take on the tenor of a middle ages European Catholic defending their Faith by saying that if those danged monarchs would just let us practice everything would be perfect. Then came Protestantism, to demonstrate another way to view the same situation.

“If, on the other hand, you believe they may be improved, let’s have that discussion. That’s the one I am interested in. With emerging topics that is the state we find all of ourselves in.”

Also, no one is asking you do not bring forth your ideas. I asked you to be careful in how you characterize my thoughts. You need not infer anything about them, as I am right here to provide you with them. I reject being compared to Marx, as a trained economist. But again, do you believe markets are perfect? If so, that is a strong standard, and then you would also have to justify why you are an active manager.

As for free-markets being defended...I believe that human behavior is the source of markets. I note with great interest that in communist and socialist countries that the urge to trade naturally emerges. In the former U.S.S.R. those that wanted cigarettes from the west traded toilet paper for them. Those that wanted jazz records found something to trade. I believe markets are a natural extension of human behavior. So is war. Just because something is the natural expression of human behavior does not mean it cannot be improved. In the case of war, we have realized its deleterious effects. Even when you win, you have lost; if nothing else, by measuring it by its economic costs. One question for the pure markets in the absolute sense folks: if there are suppliers and demanders for nuclear weapons should these markets be allowed to function? What about biological weapons agents? If you agree that there is a role for disabling these markets then you need to roll back your absolutist stance. In response to this kind of an issue, we have created a solution that is outside the context of war, but tangent to it: diplomacy. That is in the same vein of what I am pointing out here. What is the solution that is outside of, or tangent to, markets that may improve them? Again, I don’t

pretend to have the answers. But I do know that markets fail sometimes, and I want to improve them. Are you on board with that?

Yours, in service,

Jason

[Reply](#)

8. *Ashok M, CFA* says:

[13 December 2016 at 03:39](#)

I think we are talking about

- a) Markets in general
- b) Function of prices
- c) Stock Markets
- d) Policing

In your article, you suggest that (b) is out of whack and you seem to suggest or nudge people to think about more ‘elegant’ solutions. Which, in my opinion is a ‘done and dusted’ area of argument. I don’t wish to argue something of that epistemological topic in a blog. Now, just because I may not know how the engine works, or have a bare idea of an engine, doesn’t mean I am a bad driver. I could lift the hood and look underneath it, if necessary.

But apart from stating my understanding of prices and markets at a high level, I don’t wish to engage in a back and forth convo on whether prices should be allowed to function as a free, natural phenomenon between agents or whether someone thinks he is clever enough to construct optimal prices in an excel sheet.

About markets. Markets in general are never perfect. The price is the ‘vessel’ that carries ‘blood’ to all parts of the market. There could be frictions at junctions. Health hazards, unfair competition, import dumping etc. We also need Taxation to build out more parts of this ‘body’ inside the market. Some of these frictions are addressed through less than perfect tools. For example, anti-trust rulings are usually unfair. Because they define the ‘market share’ so narrowly that the ‘monopoly’ is more often seen as a predator. Be that as it may.

On nuclear weapons, I think the trigger-happy nations in this regard are the centrally planned socialist countries. This example goes against your stance. Even at a national level, nuclear warfare is a lose all situation because of capitalism. Because nations

depend on industries and free markets, a nuke kills the cash cow! Therefore, a two-way nuke threat only results in an equilibrium (Ind-Pak). If the world was comprised of only centrally-planned-no-respect-for-prices-market nations, nuke warfare could be an everyday affair. The equilibrium is also because of the experience gathered from a one-time use. (a case of post facto price adjustment)

Policing of nations, detecting nuke secret transfer etc is necessary. How is that connected to the first three parts above? And how does it weaken the concept of free markets?

Free markets stand on effective laws, regulations and policing. The more effective the laws are that govern free markets, the greater the efficiency of free markets. I don't see any inconsistency that you seem to vehemently portray as the 'clinching' evidence against capitalism.

Laws are the grossbody that support the functioning of free markets. The grossbody is only a scaffolding that supports a vital free market. If you substitute the grossbody for the vital 'organs', then you are mistaken.

About stock markets. Stock markets are the microcosm of prices, reflecting the prices in the real economy. The stock prices are claims on ownership of capital goods, that is, the producers in the real economy. If an oil field is worth \$100 Million, the piece of paper that says 'ownership in the oil field' should also trade at \$100 Million. Albeit, at that moment. No one is saying the \$100 Million is the value written in stone. A guy named Rockefeller transported oil by barrels (a term which we still use today despite there being no barrels in the real world of oil transportation) and made profits applying his ingenuity. The stock paper that 'rode on his back' too increased in value. Why do any of these examples portray 'clinching' evidence against free markets and capitalism as it were? I simply don't understand.

The debates of active vs passive are shallow terms that mean different things in different contexts. Just because purchase and sale of stock paper is intermediated by a less-intelligent person, it is a case for passive investing. If it is intermediated by a more-intelligent person, it is a case for active investing. These terms don't marshal any merit when we are discussing about price setting in free markets. (There is more institutional rivalry than any economic merit in these discussions)

Regards  
Ashok

[Reply](#)

1. [Jason Voss, CFA](#) says:

[14 December 2016 at 09:16](#)

Hello Ashok,

Thank you for your extended and thoughtful reply.

I think you keep thinking that the only alternative to unfettered free markets is central planning. Or, I am getting the impression that you believe I think that. I do not. What I think is that for goods and services that have the potential for great harm, which is now often obvious given our superior understanding of many things based on science, that we ought to be circumspect about granting them free-market access. As an investor, I would add this understanding to the risk assessment of a business before I invest. An example currently is that oil and natural gas companies should have their share prices discounted at higher costs of capital because reserve replacement ratios are declining. Markets have not priced this, yet.

Regarding my nuclear weapons example. I am not sure how I see my example as not serving my point. My point is just because a market can form, does not mean that it should form. There is a reason why nuclear weapons and their proliferation are controlled. This is a stellar example of my point. That centrally planned economies with these weapons are more dangerous, does not support your point either. That you pointed out that capitalism needs rule of law is important. How did we come to form these laws, some of which run contrary to free-market capitalism? That my specific remedies for how you deal with the imperfection of markets as discounting mechanisms did not agree with you, does not mean that it is not possible to remedy this problem. See above for my point about discount rates and reserve replacement ratios.

An additional point that I have made is that we CAN foresee negative consequences if some goods and services are allowed to enter the market. In the case of nuclear weapons, societies globally have agreed to the wisdom of this, both free-market and centrally planned. Also, as a citizen of the U.S., a mostly free-market, capitalist society, we are the only nation to actually use nuclear weapons. I can think of other goods and services which we should also be circumspect about, given the possible deleterious effects of them on people, and on the environment.

Regarding the active versus passive, I do not believe you answered this very well. To be an active manager requires that you disagree with the market price, presumably, to borrow your term, because you are “a more intelligent person.” If you believe markets are perfect discounting mechanisms, then there is no advantage to buying anything but the market. That is the strong-form of the efficient market hypothesis. It sounds like you reject that thinking, yet you defend free-markets as perfect discounting mechanisms. To me, this is not institutional rivalry, as it goes to the heart of whether you believe markets are perfect or not. I do not think they are perfect; which is what I am going to continue to demonstrate in the next four articles, too. Again, my motivation is to help analysts and investors to do a better job.

Yours, in service,

Jason

[Reply](#)



9. *Brad Case* says:

[14 December 2016 at 10:02](#)

Hi Jason,

I think the basic disagreement is this: you believe that the price set in the market for certain goods is not correct, and you believe you know the direction in which it's incorrect (for example, the market price of fossil fuels is less than it should be), and you ascribe the difference between the market price and your judgment regarding the "correct" price to a failure of the market; the alternative, of course, is that it's your judgment that's incorrect.

To be clear, I've literally never met (or heard of) any human being who believes that any market is "all-knowing" or a "perfect discounting mechanism," or that markets "cannot be criticized" or "are above reproach," or even that any market is perfectly "free" or "efficient." Still, the most important question is whether any superior mechanism exists, not in theory but in the real world given that human beings are fallible, exhibit cognitive biases and other behavioral imperfections, and may even be stupid.

As with democracy (see Churchill) the answer very clearly appears to be "no." Various ways have been proposed to supplant ("improve") markets, just as various ways have been proposed to supplant ("improve") democracy: what they all seem to have in common is substituting one person's judgment for the very definitely fallible collective judgment of others. And I'm not talking about central planning as the only alternative: even the smallest "nudge," intended to move the market price back toward somebody's idea of the "correct" price, will be done by somebody who is no less fallible than any of the other participants in the market, and no less subject to cognitive biases—and who was given the power to adjust the markets through a different collective decision-making process that was subject to its own problems (for example, democracy). That's the problem: not that markets aren't imperfect, but that there's no way that is actually likely, in the real world, to improve on them.

To address the active/passive debate as an analogue, there has long been empirical evidence that many active managers are, in fact, able to outperform the market on a gross-of-fees basis. Again, I've literally never met anybody who thinks that it's impossible to beat the market. Where active management fails—if it fails—is that clients can EXPECT to underperform the market on a NET-of-fees basis. Translation: the market price is not perfect—but there has never been evidence that it can be beaten without giving up something of even greater value.

—Brad

[Reply](#)

1. [Jason Voss, CFA](#) says:

[14 December 2016 at 10:51](#)

Hi Brad,

Thank you for your carefully considered and extended comments.

I actually don't think that I know better than markets all of the time. But I do think that it is possible to have expert opinion, and that some people do have more knowledge than others. Some people ARE more educated about future outcomes. Again, within investing, every active manager ought to believe this. I also think that with the growing sophistication of science, that we can be circumspect about many things that we previously could not be. And here is the real disagreement. I also think from a purely mercenary investment point of view, if you talk with a management team of a business and you believe they are delusional about their prospects, then you can short their securities. I can think of multiple contexts in which recognizing that markets are imperfect discounting mechanisms has a means of either increasing return, or avoiding loss.

Yours, in service,

Jason

[Reply](#)



1. *Brad Case* says:

[14 December 2016 at 10:59](#)

Well, I certainly don't disagree with that—but all you're saying is that the market is a mechanism for encouraging anybody with superior information to reveal that information to other market participants by engaging in transactions, thereby moving the market price more closely toward the true value of whichever good is traded in that market. In other words, that's not an example of an imperfect market, but of a perfect one.

[Reply](#)

1. [Jason Voss, CFA](#) says:

[15 December 2016 at 08:58](#)

Hello Brad and Ashok,

I truly appreciate the level of engagement you both have for this topic. We are going to have to agree to disagree. I think that markets do fail, and frequently, in terms of discounting. I think this is a hole that should be explored and thoughtfully, especially when effects can be irreversible. You both believe that I misunderstand markets and their functioning, and that my criticisms are unwarranted.

I am certain that regardless of what I write in this comments space, or what you write, that we will not approach agreement. I hope to engage you as thoroughly with the next four posts, too : )

Again, thanks,

Jason

[Reply](#)

10. *Ashok M, CFA* says:

[15 December 2016 at 04:24](#)

Hello Jason..

Firstly, I want to address the Active-Passive debate. This is not one of my favourite debating points and I only said that the Active-Passive debate doesn't marshal much evidence for or against unbridled free market capitalism. Reason being, look, this is not a physical science that one controls for all the assumptions and looks at the effects of one changing factor on the output and see it 'happen' in a laboratory. Your conclusion, either way, I think rests on some studies which rely on tenuous assumptions.

I will weigh in briefly on the active-passive topic. Before reaching a conclusion, I think the active-passive research should ideally control for

- a) Market maturity
- b) Fund manager age and experience
- c) Across different time periods
- d) Consider a long time interval

In the Indian mutual fund experience, 90+% of the assets under management handsomely beat the benchmark. Even taking fees into account the alpha is significant. So does the Indian experience apply universally? In contrast, should the US experience apply universally?

As fund managers age and gain experience their ability to beat the market increases. Do any of the current research studies control for age and experience factor? How does one control these factors? Is the age of the managers alive now enough to draw conclusions?

Do any of the studies consider data from the 80s, 90s and 00s? So if Peter Lynch could beat the market during his time, does 'active management' apply today? I mean, if active management is proven once, does it need proof every year?

If active management fails today, does it mean there are no managers of Peter Lynch mettle currently? Or is it that managers of PL mettle exist, however, markets have got lawfully difficult to beat unlike before.

I have seen many of the research that try to settle the active-passive debate, focus on short time intervals, say post-2008. Why not a longer period? Is there a standard time interval in the first place?

There are no perfect answers to these questions. Which is why either way I think pulling this subject into the wider debate of market pricing or 'discounting' adds more confusion to what is being discussed already.

Back to the market pricing/discounting..

See, one of the fundamental problems with planners or anything top-down is that firstly such people are far removed from actual market dealings. If not now, they eventually become. Like, you used the phrase 'suppliers versus demanders' at a certain price. Traditionally, economists carry a certain disdain for consumers who they think act without brains, ethics and philosophies.

One of the failures of classical economists was trying to concentrate their efforts on Producers and Government whom they respected and presumed their research could find a buy. Whereas consumers were a scattered mass with no hearts. While you say I am absolutist, on the contrary, I am saying, consumers too have non-materialistic considerations. They are not an automatic order-matching cold-hearted object grabbers. The price-signal is tested against basic needs, ethical, philosophical and religious considerations. The 'subjective valuation' as traditionally defined is a bad economic theory. Buy Low Sell High, works in stock markets and it applies to businesses. But it fails to apply to consumers.

I am stressing on the need to understand human action because your proposition appears to be top-down and is far from reality. And the language certainly appears severely from the Top. Which is why it prompted the USSR examples (like the price of milk per gallon was decided by bureaucrats a few hundred miles away).

I am willing to wait and read the full series to comprehend your views properly.

Thanks for reading and responding to all comments.