

Summary of Blog Posts on the Workings of the Macroeconomy and the Origins of our Current Financial Crisis

John T. Harvey, Professor of Economics (j.harvey@tcu.edu)
Texas Christian University

1. PRODUCTION TAKES TIME

This seemingly innocuous statement is critical to explaining why the current financial crisis has hit us so hard. Keynes made this point in his *General Theory* in 1936: "Time usually elapses, however—and sometimes much time—between the incurring of costs by the producer (with the consumer in view) and the purchase of the output by the ultimate consumer." He, too, was terribly concerned about the effect of the financial system on output and employment.

To say that production takes time is to point out that 99.9% of entrepreneurs must go into debt in order to hire workers, buy inputs, rent or purchase physical capital, and so on. Only after the output is produced and sold at market can the entrepreneurs repay the debt and (hopefully) take home a profit. The process works as follows:

debt => purchase of working capital => production => sale of output => debt repaid

Unless profits were well out of line with what we normally observe in the economy, a new round, starting with debt, follows.

Notice, as Keynes did, the critical position held by banks. If they are unwilling to finance firms' purchases of working capital, the process stops. It doesn't matter whether the banks are correct or not: if they decide that conditions do not warrant the extension of loans to firms, then it doesn't matter how high output and employment could have been given our resources, technology, physical capital, and population—we will suffer an economic contraction (traditional economics, incidentally, spends little time discussing these issues since they view the financial sector as always accommodative to the needs of industry).

This begs the question of how banks make such determinations. Also left unsaid here is how the firms, themselves, decide what and how much they want to produce and, which is generally a much more critical issue, whether or not they would like to expand their operation by building new physical capital. That comes in part two, *Uncertainty*. If banks base their forecasts on well-documented, carefully considered data, then the fact that they play such a critical position is actually a benefit and not a problem.

But they don't, and nor do firms...

2. UNCERTAINTY and ANIMAL SPIRITS

The expectations of entrepreneurs and bankers play the key role in determining whether or not you can afford a new Xbox360, an upgrade to HD cable, a new car, a house, dinner, etc. Their forecasts decide whether or not loans are made (as explained in part 1 of this series), employees are hired, inputs are purchased, factories are built, etc. It is necessary, therefore, to understand how those forecasts are created.

First and foremost, they are made in an environment of what Keynes called “uncertainty” (Keynes’ master’s degree was in statistics and his thesis was a study of logic of decision making). By that, he meant that bankers and entrepreneurs lacked an objective basis for their expectations because they did not have, nor could they have, sufficient knowledge about the relevant circumstances. Roulette is not uncertain in that sense, it is “risky.” This is because you know all the possible outcomes and the odds of each. You can therefore make objective decisions since you have a mathematical basis for doing so. You can’t know for sure whether 18 or red or 00 will come up, but you can calculate the probabilities and use that and use the casino’s payout to decide whether or not you should place a bet.

Not so in the real world. Particularly when making long-term forecasts, Keynes says that we simply do not know. When a firm is considering building a new factory or an entrepreneur a new restaurant, they operate under the assumption that their enterprise will be in existence for five, ten, maybe twenty years into the future. They *might* have a decent sense of how events will unfold over the next year, but beyond that (and certainly past three or four years) it’s really not much more than a guess.

So why would anyone in their right mind put money down at a game where they had no idea of the odds? Because our “animal spirits,” or exaggerated sense of our chances of winning, make us say, “But it won’t happen to me—my restaurant will do great!” And thus at any given moment it is the precarious balance between uncertainty and our animal spirits that determine whether or not U.S. corporations are opening new facilities or laying off workers. Note that Federal Reserve policy in moving interest rates, which makes so many headlines, is of little consequence in this world. When firms are enthusiastic (and banks along with them), they will happily invest in new physical capital regardless of what they have to pay; but, when they are depressed, no amount of interest rate cutting will spur new spending. Firms would obviously prefer lower interest rates, but expectations are the key, not the federal funds interest rate.

This is not to say that recessions are simply the result of bad moods and could be solved by giving executives and bankers Prozac. There are underlying, real reasons for them to become depressed and these arise cyclically and are built into the way we have designed our system. Those reasons are the subject of part 3 of this series.

Next stop: Durable Goods!

3. DURABLE GOODS AND THE BUSINESS CYCLE

I implied at the end of part 2 that there are forces in the economy (at least as currently designed) that create a pattern to the balance between uncertainty and animal spirits. Indeed, there are, and they are created by the fact that it is very easy to saturate demand in a modern, industrial economy.

To make things simple, consider an economy that does not trade with other countries and has no government sector. That leaves only two groups: firms and consumers. Ultimately, the latter is the source of all demand for goods and services. Firms buy things, too (from other firms), but only because output will eventually be offered to consumers. Consumers buy two sorts of things:

Non Durables: Food, gas, electricity, rent, etc.

Durables: Car, refrigerator, computer, hot-water heater, washer, dryer, stove, microwave, etc.

The demand for items in the former category is, as you might imagine, fairly stable. People may buy more sandwich meat in bad times and steak in good, but you have to eat. On the other hand, when the economy is in good shape, people buy that new car they've been wanting; when it heads south, they put up with a lot of repair bills. But there's even more to it than that—the very fact that they buy the new car in good times helps create/perpetuate those good times and it hastens the arrival of the bad times. The reason is that **THE DEMAND FOR CONSUMER DURABLES CAN BE SATIATED FAIRLY QUICKLY**. You need food every day, regardless of how much you ate yesterday. But you don't need a new car right after you just bought one, particularly since you've got that payment to make. During expansions, consumers (particularly because they've been putting this off during the recession) load up on durable items. Banks, being in a good mood (because of all the sales), offer great financing plans. Firms gear up production and employment and this means rising incomes. Everyone gets their new washer/dryer. But once they have it, they stop buying and the cycle reverses—with a vengeance.

To reiterate, during expansions, consumer durables sales rise and this helps to propel the expansion. This encourages firms (pumping up animal spirits) and they hire more workers. Banks are happy to accommodate given how well the economy is doing. A multiplier process takes place whereby rising incomes lead to rising spending which creates more income and more spending. Happy days are here again! But, this is an unsustainable process. People will, without question, cut back on purchases of new cars, Xbox360s, furniture, boats, etc. Not only do they not need a second boat, now they have that damn payment, too!

You'd think all this was pretty obvious and that firms would be on the look out for it. A curious thing happens, however, and it seems to repeat itself time after time after time. During the run up, animal spirits go sky high. Consumers, entrepreneurs, bankers, policy makers, butchers, bakers, candlestick makers—all of them—become far too optimistic about the future. They start to think that this can go on forever (remember the talk of the “New Economy” back in the 1990s?). And so, as animal spirits are going higher and higher, the real prospects of further sales are actually going in the opposite direction. Not good in a world where people really don't have a firm grasp of what the future holds (recall

Keynes' concept of uncertainty) and thus can easily be panicked. And that's exactly what happens. At some point, sales start to drop and firms and bankers react with shock. Depending on the specifics, the ensuing recession can be a mild dip or The Great Depression: Part Two. Ironically, the firms were right to cut back on production (and the banks correct to stop approving loans) because consumers had the boats/cars/computers they wanted; but just not in the magnitudes that follow. Overreaction works both ways, on the way up and on the way down.

But wait, there's more! Part 4 follows, where I make an exciting confession: some of this is a fib!

Make sense? I hope so, because now we shift gears. Let me start with a shocking confession: the above is a bit of a fib. That's not really what drives expansions and recessions, but I thought it would be easier to follow given that it focuses on what consumers do and all of us are consumers. The above certainly happens (I have tables of pretty data to show it), but, generally speaking, it is not what is really at the heart of our ups and downs. That title goes to business investment.

4. PHYSICAL INVESTMENT AND THE BUSINESS CYCLE

To reiterate, what I was saying in part 3 wasn't quite true, but I figured it would be easier to follow the argument if I focused first on consumption. Really, business investment is the key to economic prosperity. The stuff I said about consumer durables is true enough and certainly adds to the problem, but it's secondary.

By investment, I don't mean buying stocks and bonds, but physical investment, or the addition to productive capacity. This can be something as substantial as building a new factory or restaurant, or as simple as a stapler or office chair. But in any event, it is THE driver of economic activity. There have been six recessions since 1970. The average increase in investment during those recessions was -13%. During the intervening expansions, investment rose by an average of 37%. In addition, declines in investment tend to occur just before recessions, consistent with the argument that they cause them. No major macroeconomic number is more volatile than business investment, a fact that fits well with Keynes' volatile uncertainty-versus-animal spirits view.

Firms invest because they think they can earn a profit from doing so. After the panic of an initial downturn wears off and a recession has hung on for a while, a number of factors combine to start the upturn by causing firms to think it's time to add to capacity:

1. Equipment wears out;
2. Technology changes;
3. Entrepreneurs' animal spirits recover as the memory of the crisis that led to the recession fades;
4. Entrepreneurs find themselves with less debt since they haven't been doing a lot of spending during

recession;

5. Bankers' animal spirits recover as the memory of the crisis that led to the recession fades;
6. Bankers find themselves eager to lend after the lean period represented by the recession;
7. Consumers have less debt and a junky old car they want to replace.

So, eventually, a new expansion starts as firms decide they'd like to add to capacity and banks are eager to accommodate. The new purchases create jobs and income and soon consumer spending is adding to the expansion. Everyone gets all excited and not only are firms investing with a vengeance, but the story about consumer durables from part 3 kicks in—as does the part about animal spirits getting well out of line with what is really reasonable to expect.

Eventually, firms no longer think it's profitable to continue investing. This is not to say that they don't think they will earn profits overall or that bad times are ahead, but that they just don't feel the need to build any more factories, etc., at the moment. They believe they have adequate capacity to meet demand and, besides, they are in debt from constructing them. However, laying off all those construction workers has an unintended consequence: now that it's possible to make more cars because they have a shiny new factory (for example), people can't afford to buy them! The construction workers had been laid off already, and as they weren't spending money then people at the shops they used to frequent also get laid off. It's no coincidence that the Great Depression followed right on the heels of the Roaring 20s—the latter caused the former. There was a massive increase in firms' investment over the 1920s and by 1929, we had the capacity to produce goods and services on a scale never before seen. But, with investment starting to fall and consumer durables sales declining, actual profits did not match what animal spirits had suggested they should be and the economy collapsed and people panicked. The 1930s should have been period of unparalleled prosperity in America if you went by how much productive capacity we had. Instead, unemployment reached 25%.

The lesson here is very similar to the one about consumer durables: we can quickly saturate the market for physical investment and when we do, spending in that sector declines and layoffs follow. Depending on how high expectations had risen, panic can result and firms, consumers, and banks cut back and the recession starts. The biggest difference between this story and that in part 3 is that investment turns out to be the critical factor, not durables.

As important as physical investment is, you don't really hear much talk about it. It's portfolio investment (stocks and bonds) that grab all the headlines. It's not unimportant, but it's really a reflection of what's going on elsewhere rather than a causal factor by itself. Sort of. You'll see when I get to part 5: **THE STOCK MARKET!**

5. THE STOCK MARKET: INDIVIDUAL FIRM ISSUES

For a part of the economy that really doesn't have any direct effect on production, it sure grabs a lot of headlines. In fact, we could operate without a stock market. But, we have one, and it acts as a barometer of our animal spirits, and a determinant.

First, I want to clarify my comment that it has no direct effect on production. It does when the stocks are first sold, but not thereafter. Let's say you start your own company making t-shirts for local concerts: Rock On Clothing Kompany, or ROCK. You go out and borrow the money to get started, the bank assigns a loan officer to you (who makes sure you follow the business plan you used to get the loan), you set up the company, and commence making t-shirts. Let's further say that ROCK does well—very well—and so you decide to expand operations. You are going to need more money. But the bank will only let you borrow so much (particularly if you are already in debt to them) and those scheduled interest payments could turn out to be quite a burden if ROCK struggles, even if only for a few years. Would that there were a way that you could get lots of money, never have to pay back the principle, and only make a payment when your company has done well. But what fools would be willing to enter into such an agreement?

STOCKHOLDERS!

In exchange for a share of the ownership of ROCK, they never ask to be paid back other than quarterly shares of your profits. Of course, they are hoping that the latter will more than cover what they paid for your stock, but the glorious thing for you is that if ROCK has a bad quarter, you don't have to pay out anything (of course, there had better be a nice note explaining why there weren't any dividends and how you expect that to change!).

So that is the advantage to you of stocks. You will very likely get a lot more money than you could from a bank and you only pay back when you've done well. And you are not in debt in the traditional sense. The drawback is that you no longer own ROCK—now you are just the manager, and you could be replaced if the stockholders are not pleased. Damn them! Don't they know that you built this company?! *sob*

Obviously, that did have an impact on production because it gave you the cash you needed to expand operations. But, such primary issues are a very small percentage of overall stock market activity. If one of the people who bought that primary issue decides to sell their share to someone else, you see exactly zero of that transaction. It's just folks trading ownership of ROCK for cash, and that's the overwhelming majority of stock market activity. So, if the value of the shares of ROCK fall, that doesn't mean ROCK suffered directly (though they may indirectly—more on that below). Rather, ROCK's owners, or all those who owned the stock whose value fell, suffered. There is no direct impact on ROCK whatsoever.

So why do we care? Several reasons. First, while ROCK won't suffer directly if its shares fall, it does make it more difficult to raise cash in the future. If you decide to sell more stock, for example, you can't

sell it for as much. If you go to the bank to finance a new expansion, you can be damn sure they'll look at those stock prices for an indication of how credit worthy you are. Since they've been falling, they'll charge you higher interest rates. If you depend on raising cash every month for operating expenses (see part 1 of this series: Production Takes Time), then that interest rate may go up, too. None of that is very pleasant. Furthermore, the lower your stock price, the more you may have to look for a new job as stockholders replace you. So, as the manager, you do care about stock prices. In fact, in our economy today, you probably care too much—but that's getting ahead of the story.

That's why one firm cares about its stock price, but it does not explain the role the stock market as a whole plays in the macroeconomy. For that, I need to do a new posting: 6. THE STOCK MARKET: PSYCHOLOGY AND MACROECONOMIC IMPACTS. Stay tuned!

6. THE STOCK MARKET: MACROECONOMIC AND PSYCHOLOGICAL ISSUES

I explained in part 5 how selling stock affects an individual firm, but not how the stock market affects the economy as a whole. First, if you've been reading along, you know that the initial sale of stock is done to raise money. Thereafter, sales simply transfer ownership from one economic entity to another—the firm does not benefit directly. However, there are important indirect effects. In general, firms with high stock prices are rewarded with managerial stability and cheaper funding of future activities.

Here comes a key point so play close attention!!! As a society, our hope is that the firms with the best management teams, marketing plans, products, machinery, workers, etc. are also those with the highest stock prices. If they are truly best, then we want them to have cheaper access to funding so that they can grow faster than their less-efficient competitors. Otherwise, we are rewarding the wrong people and the best firms don't have easiest access to resources. So here's what we want to see happen:

more efficiency => higher stock price => cheaper access to funds => faster growth

We can be pretty sure that the last three really do happen, so the question is, do the most efficient firms really end up with the highest stock prices? And therein lies the problem.

Ideally, before someone buys a share of stock they do lots of research into company. They should examine its history, its plans, its directors, its competition, the general market conditions, etc., etc. It should be a pretty rigorous undertaking. Then, once purchased, they'd hang on to that stock through short-term ups and downs, secure in the knowledge that over the long haul, their background research shows that these jokers know what they are doing. If this was the norm in the market for stocks, then, on average, more efficiency would, indeed, lead to higher stock prices.

But that's not what happens. The ease with which one can simply dump a bad decision means that in general, comparatively little research is done. In fact, rather than focusing on issues specific to the firm, stock market participants are far more likely to zoom in on psychological factors. It's more "what do I

think the other people in the stock market are thinking?” than “what do I think about this firm?” That breaks the all-important first link between more efficiency and higher stock price.

Some economists are quick to argue that if you are one of the people who does look at the firm rather than the psychology that your “smart” money will drive out the others and thereby rebuild that link. But this is not true if you are in the minority. The majority money drives the prices and determines who wins and who loses—you will find yourself in the latter group if you don’t play their game and so it is actually the smart money that is punished. Under these circumstances, there is simply no mechanism forcing those buying and selling stocks to focus their attention on what would be most important for the economy: the long-term profitability of the firm itself. Keynes half jokingly suggested that when you buy a share of stock, you would have to keep it forever—can you imagine how much research you’d do then?! Of course, we also wouldn’t sell many stocks.

What I described above has multiple consequences but I’ll just give you a couple here. First and already mentioned is that the link is broken. More efficiency isn’t creating higher stock prices, psychological factors are. Therefore, the wrong firms are getting easier access to funds. Second, the domination of the stock market by psychological factors leads to much shorter time horizons for the decision making of firms. Ideally, when you are thinking of building a new factory, you are planning around events that will occur 5 to 10 years in the future. Short-term variations in market conditions should not impact your long-term plans. But, when the stock market is so oriented toward short-term psychology and your funding and managerial stability depend on your stock price, you find that you are forced to react to factors that you know darn well are not worth worrying about past next month. This is a serious problem in the US economy and has been growing since the 1980s. Our preoccupation with finance and the stock market has superimposed on US industry a dangerously short-term view of the world. It’s like a football team that thinks in terms of plays rather than drives. What if the coach was forced to think that his team had to try to score a touchdown on every single offensive play, rather than being free to try to string together a series of plays (i.e., a drive) to accomplish that purpose? He might get lucky now and then, but I guarantee that the latter would actually score more points.

Hang on tight as we are now getting enough background to finally start entering into what’s happening now! In the coming days, look for...

Part 7: Minsky’s Financial Instability Hypothesis or, How People Go Crazy with Debt!

and

Part 8: Financial Crises.

7. DEBT, DEBT, AND MORE DEBT

Thinking back through the various posts and all the way to part 1, you may have gathered that debt is very important in an industrial, capitalist economy. Consumers need it to buy durables (cars, houses,

computers, etc.), firms need it for working capital (cash to pay workers and suppliers), and firms have to have it to undertake physical investment (expand capacity).

The economist Hyman Minsky theorized that all economic agents incur debt with an eye toward how much their current and expected income will allow them to repay. You get in your head, explicitly or implicitly, an idea of the level of debt you can safely carry. In addition, those extending you credit are thinking about the same thing. But, everyone inevitably gets carried away. Remember that spontaneous optimism/animal spirits from part 2? It kicks in again here because as people and firms find that they can repay debt, so they start adjusting their idea of “safe.”

Think about what would happen as we emerge from a recession. At first, everyone is still groggy from the high unemployment, low growth, bankruptcies, and defaults. However, firms (particularly) eventually decide that they want to start working on physical investment again (see part 4 for the explanation). And so the recovery starts.

Debt levels are low since people didn't take out many new loans during the recession and thus firms and consumers figure they can increase them safely. This is especially true as incomes and profits start to rise. Banks agree with the optimistic appraisals, loans are approved, and debt levels start to rise. Because the economy is growing at a healthy rate, loan payments are met with no problem. “Hey,” people and firms say to themselves as the balance between animal spirits and uncertainty swings towards the former, “I bet I could manage even more debt!!!” Banks are not immune to the spontaneous optimism and they agree and lend even more (and they start thinking about the subprime market and those to whom they haven't loaned much yet—but I'm getting way ahead of myself!).

Minsky says that this process of reevaluating what “safe” means continues until, inevitably, it isn't! Remember also that during the expansion we'll be saturating the market for consumer durables (part 3 of this series) and physical investment (part 4). The recession IS coming, and as debt levels rise so the financial sector puts itself in an increasingly precarious situation. Inevitably, someone defaults. If enough people do, then this can cause a chain reaction as banks and other financial institutions then default, too, since they were counting on that money getting paid back (starting to sound familiar?!). Banks both loan and borrow, and if they don't get paid back then they can't make new loans. And the panic begins, with the financial sector desperately trying to get their debtors to pay back while keeping creditors off their backs (creditors who are in exactly the same spot). Animal spirits collapse everywhere, and stock values fall, firms stop investing, and consumers stop buying. The credit crunch makes the last two activities especially difficult.

Of course, everyone now says, “Wow, I guess I was carrying too much debt!” (or the bank version thereof, “Wow, I guess we shouldn't have loaned to those people!”).

Minsky argues that this cycle happens over and over and over. People take on debt as the expansion starts, find that they can pay it back, and figure they can take on even more. Banks encourage this as they are people, too, and see it through the same animal-spirits colored lenses. This, by itself would lead eventually to unmanageable debt levels. In combination with the saturation of demand for

consumer durables and firms' physical investment over the expansion, and it is a recipe for system collapse.

Next in line: part 8, FINANCIAL CRISES!!!

8. WHAT MARKETS ARE AND WHAT THEY CAN DO (AND CAN'T)

I changed my mind on what this part would cover. One of my friends said the blog was depressing him and that made me realize I was painting an awfully grim picture. So I decided to stop the crisis story for a moment (which is necessarily negative) and take a quick look at the positives! But first, a little perspective...

The folks coming from my school of thought view the market as a tool. It is a means of addressing particular social problems in the same way that a hammer is a means of addressing certain carpentry problems. If what you need to do is to drive nails into a piece of wood, then a hammer is ideal. But if your job is to cut a large plank into smaller pieces, you're better off with a saw. Carpenters don't view the choice of whether or not to use the saw or the hammer as one fraught with philosophical, moral, and religious implications. They decide pragmatically which one accomplishes their goal with the least effort and I suspect that they lose very little sleep over it. They are also willing to experiment to determine which one works best.

It is thus incredible and just a little frightening to me and my colleagues that there are schools of thought in economics that practically worship the market as a gift from the gods while others see it as a manifestation of evil. That's a little weird. What if there were carpentry guilds dedicated to "hammer principles" and who thought that those using saws were corrupting the natural order of carpentry (or who thought hammers were the work of the devil)? We'd probably lock them up. But, I was at graduation last year and the speaker (I can't remember who it was—a state politician of some sort) made the statement, "And here in Texas, we still believe in the free market!" Not only did I sit there trying to figure out what in the hell that even meant or how it was relevant, but the whole stadium broke into spontaneous applause. I felt a bit like Indiana Jones in *The Temple of Doom* when he sees the worshipers at the altar! It was a little creepy.

What I make to make clear from all this is that economists from my perspective neither believe that markets are a natural and benevolent force allowing humans to be truly "free" (as do the Austrians, Libertarians, and, to a large extent, mainstream economics in general), or that capitalism is exploitative and in the process of self destructing (as do the Marxists). We take the pragmatic perspective that we have social goals and that some of those are addressed very effectively by using Adam Smith's invisible hand, while others are not.

Having said all this, the market is a wonderfully effective tool for the creation of consumer goods and services. It allows budding entrepreneurs to try their hand at being restauranteurs, clothiers, cobblers, educators, etc., and it makes their success a function of whether or not the general public is willing to

give up their cash in exchange for their goods and services. That works very well in terms of making sure that which consumers want gets produced (of course, firms also try to make us want their products with all kinds of slick advertising, but that's a different story). One of my favorite things has always been how smoothly the system adjusts to change. If customers decide that they no longer want to eat seafood, seafood restaurants go bankrupt. You don't need a new law to be passed, there are no forms to fill out, no five-year plans to adjust, no marketing surveys to conduct. It happens because the cash register till takes in less money than it costs to run the restaurant. And, whatever consumers now want instead of seafood is what becomes profitable, thereby allowing that industry to expand. The philosophy of pragmatism, you may have gathered from the above, encourages experimentation to find the best way to achieve a goal. With consumer goods and services, markets allow just that. It creates an avenue for people to be creative and it is conducive to social welfare.

The market isn't terrible for investment goods (productive capacity) as it operates in a similar fashion as that described above for consumers, but it's a little more complicated due to the animal spirits/uncertainty stuff I reviewed earlier. Still, if the consumer-goods market is working well, then those firms should be the ones with the profits that allow them to invest. It's not quite that simple and of course I'm not arguing that capitalism is perfect, just better than the known alternatives.

So, as you are reading my commentary on what created the current crises do not assume that I am bashing markets in general. There are tasks at which it is quite good, just as there are carpentry jobs for which hammers are perfect. However, what the market doesn't do is create a job for everyone who wants one, sometimes on a very large scale. It is prone to periodic, serious breakdowns. But, it can be fixed. Remember, it's just a tool—we just need to take it back to the forge and reshape it!

9. PUTTING THE PIECES TOGETHER: BUSINESS CYCLES AND CRISIS

I was thinking that I would need to lay in more background at this stage, but I guess we've really covered everything necessary to give basic explanation of the business cycle and crisis. So, this post will try to tie together the various strands from parts 1 through 7. Also, I'm going to try to do my first graphics in WordPress!

Check out the figure at the bottom (assuming it shows up!). It breaks the business cycle into four segments: early recession, late recession, early expansion, and late expansion. In addition, it focuses on a limited number of factors: animal spirits, demand for investment goods (firms adding to productive capacity) and consumer durables, debt levels (measured as the ratio of total debt to income), actual profits, and expected profits. I decided to make the key factor in each half cycle the contrast between what firms expected to make in profit and what they did make. All of this is a major simplification but I think it will give you a feel for what generally happens (and what just happened!).

Let's start with the early recession in the top left. The shock of collapse is fresh and thus animal spirits are low, too low to effectively offset the uncertainty that exists. Low animal spirits lead firms to expect only low profits, and firms, consumer, and banks are willing, in this depressed environment, to take on

only a little debt. Meanwhile, the markets for physical investment (factories, etc.) and consumer durables remain saturated from the expansion. Therefore, not only do people expect low profits, they get low profits. The pessimistic expectations are confirmed and there is little change in animal spirits.

As the recession continues, the natural tendency of animal spirits to be propped up by spontaneous optimism starts to kick in. Still, however, they are low and thus little is expected of profit and debt levels remain low. Productive capacity and consumer durables are starting to wear out (plus new technologies and tastes come along), however, and thus there is a mild recovery in their sales–profits are moderate but increasing. This is a pleasant surprise and animal spirits move upward, but only cautiously.

Eventually, the recovering sales and rising animal spirits lead to an expansion. Expectations of profit are moderate but rising, and firms, consumers, and banks undertake increasing levels of debt to finance their activities. Because it's been a long, barren recession, however, lots of factories and consumer durables need to be replaced and thus profits turn out to be high. This is a pleasant surprise and leads to a rapid increase in animal spirits.

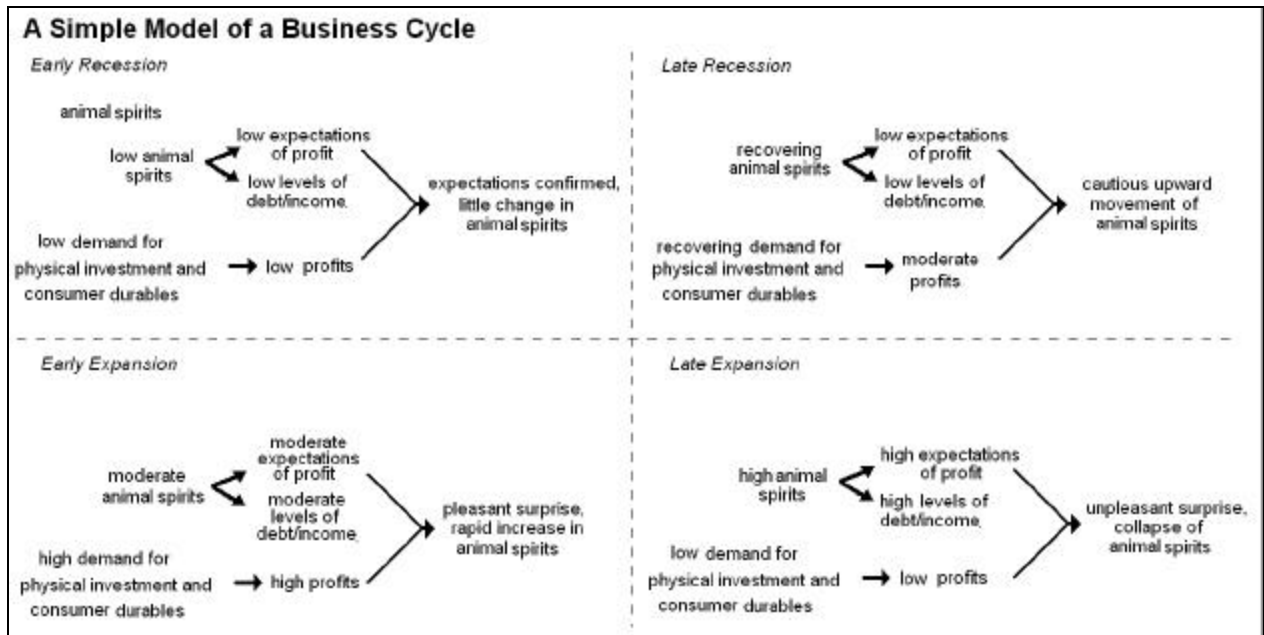
However, the expansion cannot continue. Demand in the markets for physical investment and consumer durables can, given our technology and resources, be met in a short amount of time (several years). Once you have rewired your company for high-speed internet, you don't want to do it again next week. Once you have built that new store in Dayton, you may be done expanding your presence in Ohio (or the Midwest or the USA or the world). Once you have that new XBox360, you don't need another one for a while (wait, given their failure rate you might!). Profits inevitably decline. On top of that, you've gone into debt to finance all this and so you are right at a point when you want to stop spending and start paying back. Ironically, however, animal spirits and profit expectations are at their highest point. We are already spontaneously optimistic, and the rise in our enthusiasm was fueled by the pleasant surprises of higher-than-expected profits during the Early Expansion. Because expectations and reality are moving in opposite directions, we are now ripe for shock, disappointment, and collapse. And the cycle is complete.

Let me stop for a moment and reiterate. By late expansion, our animal spirits and expectations of profit are at their high point. This means stock prices are sky high, too, and stock holders' tolerance for poor quarterly reports very low since they are used to hearing about successes. Banks are every bit as excited as everyone else and they have been approving loan after loan, accommodating the rising debt levels. In fact, banks are seeking out the high-risk customers now and, in the heady days of peak expansion, aren't looking all that closely at credit-worthiness. Consumers are offered lots of good financing deals and those who did not partake in the buying before will now decide, "What the hell—if the Smith's can afford a new plasma TV, so can we!"

At some point, someone somewhere says, "Whoah! Sales are way off of what we expected!" If the gap between expectations and reality is big enough, this can evolve into a full-blown crisis. The level of debt everyone is carrying makes us even more susceptible.

There are several other complicating factors (including some historical developments) that I'm dying to put in here at this stage, but let me stop. This gives a basic sense of what causes the business cycle and crisis. Not every recession evolves into crisis and the expansions can be quite long. But, the way our system is currently designed, it lends itself to periodic crisis. What just occurred in our economy is hardly a surprise. I think I have now given enough background to go over some historical developments that will allow you to understand where we are today.

I don't think that will be part 10, however, as I think I need to stop and say a word about policy. I said above that the way our system is currently designed, it lends itself to periodic crisis—does it have to be designed this way? No. Stay tuned!



10. POLICY

What I've given you so far isn't a comprehensive analysis of the macroeconomy, but I think it's enough to a) explain the basics of our current situation and b) offer some policy prescriptions. I would like to go ahead and do the latter first (and save the former for part 11). Bear in mind that these policies are being suggested as applicable even without the current economic problems. I would have argued for them even if we were in the midst of an expansion.

Economics is ultimately about policy. Recommending policy requires first deciding our goal. On this, you actually won't find too much disagreement among economists. Our hope is to help the average person; we want that person's life to become more and more comfortable. This requires increasing growth, rising productivity, and low unemployment (a broader analysis would need to consider low inflation and production of those goods consumer most want to buy—I hope to get to this eventually). Fortunately, these all seem to vary together so that encouraging one should encourage all three. That

will make the following a little easier.

A couple of preliminaries. First, we aren't going to come up with some perfect set of regulations, institutional structures, organizations, etc. Unfortunately, that's not the way life works. In fact, even assuming that we could for this moment in time, the economy evolves. It will be necessary to, as the Marines, say, adapt, improvise, and overcome, time and again. We should be in a constant state of evaluation of our current system.

Second, it is necessary to understand that the market is not the natural or default system for human society. It evolved and is a human, social invention. It is not, as I have heard people say (including some of colleagues!), the way we act when there are no rules. Capitalism is a particular set of rules. Because they are our rules, however, they feel natural to us, just as one's native language does. Capitalism does some things very well and some things very poorly. Capitalism should serve us and not the other way around, so when we find something we don't like, we should feel perfectly free to change it without upsetting some "natural" order. This is not to say that we shouldn't be careful to think through the secondary and tertiary impacts of any policies, but that's true regardless of what our topic is.

According to my analysis so far, where does the market let us down in our quest for output and employment? I have identified three specific problems:

1. The short-term focus of the stock market means that resources are misallocated and prices are overly volatile (see parts 5 and 6);
2. Because of the fact that the market for physical investment and consumer durable goods can be saturated, we get the irony of the fact that at the very moment when we should be enjoying the highest standards of living, the economy slips into recession (see parts 3 and 4);
3. Overconfidence leads people to take on too much debt (see part 7) and causes shock as agents panic when the economy turns down at the top of the expansion (see part 9).

I will explain each in turn, tell how it interferes with our goal, and how to stop it. I won't waste your time with a complete review of each section, but if you need a refresher I have listed the relevant posts in parantheses above.

SHORT-TERM FOCUS OF STOCK MARKET: The stock market prices are driven by psychology rather than in-depth studies of which firms are really the most likely to earn profits. Are we to truly believe that the variables that determine Microsoft's profitability change on an hourly basis? Certainly not on the scale we witness every day. It just doesn't make sense. The consequence is that the best firms are not really the ones who experience rising stock prices because the primary players in the market, those setting the prices, don't really care which firm is best? They aren't going to hold the stock all that long and all they need to do is guess how everyone else is going to react. Sometimes "best" and how everyone else reacts is the same thing, but given the extremely weak incentive to bother to do

research this is very unlikely over the long run. This is inefficient and retards growth. Furthermore, the obsession we have with finance has forced firms to think far too short term, working to raise stock prices today rather than profits tomorrow. This, too, is inefficient and retards growth.

A policy to address this is very simple and straightforward—and doesn't stand a chance in hell of passing given the strength of Wall Street in Washington. We don't want to stop everyone from buying stock, but we need them to care about the firm and not about market psychology. Keynes said in the General Theory, what if once you bought a stock you had to keep it forever, earning only dividends? You would sure do one helluva lot of research! You'd know that company and it's competitors forward, backwards, and sideways, and the stock prices would reflect what they really should. This would encourage efficiency and growth.

Of course, making people hold the stock forever is a bit much, so how about a sliding scale of taxes instead? You could charge a rate of, say, 50% of the selling price for any stock sold within one month of purchase, 40% within two months, and so on down to 0%. We thereby discourage the hot money and encourage long-term investors. It doesn't have to be a tax—anything that punishes speculators and rewards research is good (I kind of like the idea of a tax so we can get some of the bailout money back!).

SATURATION OF INVESTMENT AND CONSUMER DURABLES: This is a serious issue that creates a terrible irony in our economy: just when we should be enjoying the fruits of our productivity, large segments of our population find themselves unable to join the party. We have the massive buildup in investment and consumer durables in the expansion, only to have that plenty lead to layoffs and recession.

Most people's first reaction to learning this is to assume that the solution should be some sort of thinning out of the expansion. If only we didn't build all the factories and sell all the cars so quickly, then the expansion wouldn't end so soon. I thought the exact same thing when I read the relevant section of Keynes' General Theory some twenty years ago—and he immediately says, "No, dummy, that doesn't make sense!" Oh yeah. Why would we want an economic system that encouraged us to not use our productive capacity to our fullest? If, in terms of our capacity and efficiency, we can afford for all of us to have big-screen TVs (or houses or health care or interstate systems or whatever) today, why should we, as a society, have to put it off because our system is screwy? Who is in charge here, us or the system? US! So we change the system.

What we can do is the sort of thing we are doing right now with the stimulus, but I have reservations in terms of that being a long-term solution. It's too ad hoc and susceptible to political maneuvering. What I suggest instead is an agency along the lines of the Federal Reserve, but whose responsibility is maintaining full employment: the Full Employment Commission, or FEC. It would work like this. Like the Fed, the FEC would be charged with certain responsibilities. Central would be keeping unemployment at a particular level. When it exceeded that level, the FEC would have the power to immediately start projects in the states most needing them (not in someone's home state because they want to be reelected). This agency would constantly research to see what sort of projects could be

undertaken in each state, just in case. In this way, they don't have to waste three to six months figuring out what could be done as they already know. Furthermore, these projects should be unprofitable (profit is the realm of the private sector and we don't want the government competing with them) but of social value. This could be schools, infrastructure, long-term research, cleaning up the environment, military spending, etc. When we run out of social problems then we figure out what else we can do! Last, I would envision these projects as being based on grants. These individuals so employed would not become government employees, but employees of private sector firms paid by the government. The idea here is to supplement the private sector, not replace it. Note, too, that any such spending creates a multiplier effect. When the workers so funded take their pay checks and go to WalMart, that creates another job. The FEC would be in charge of monitoring the impact of their spending so that they know when to scale back.

A quick word about the debt and the deficit—there is no better way to get a huge deficit than have lots of unemployment. Tax revenues fall precipitously and government social programs shift into high gear. Economic expansions, on the other hand, generate surpluses. So, if you want to pay down the debt, don't bitch and complain about the deficits we undertake when we are in recession (I wish I had more time to go into this, but this entry is getting long—maybe in a later entry)!

OVERCONFIDENCE: Overconfidence leads to firms and households taking on too much debt, making the financial sector increasingly fragile, and it causes expectations in general to get out of line with reality. We get tangible evidence of the latter in the rise of stock prices and other assets (real estate and commodities, for example).

What we need to address this are trip wires and speed bumps (an idea Ilene Grabel of U of Denver develops in one of her articles on financial markets in the developing world). Trip wires are signals that something may be getting out of line. For example, we could take a look at historical stock prices (and crashes) and set a target rate of appreciation that, once reached, acts as a warning to the Federal Reserve and Securities and Exchange Commission. Other rates could trigger speed bumps, or policies that kick in to slow the process (by closing the market or other such means). These could be employed in other markets and with respect to debt levels, too. The idea is to build into the system signals to ourselves that something may not be right so that we can act BEFORE a crisis, and not after. And I don't mean just looking at the rate of appreciation or depreciation over the course of hours or days (which we already do to an extent), but over months and years. It isn't fool proof, but it's better than what we have now.

Here are the core set of recommendations for how to keep unemployment at a reasonable level, growth high, and productivity rising. There's a lot to add and specify, of course, but it's a start. The central idea is to keep and encourage those parts of the market system that work very well while suppressing those that don't. Sorry this one ended up quite a bit longer than my usual installments, but there was a lot to say!

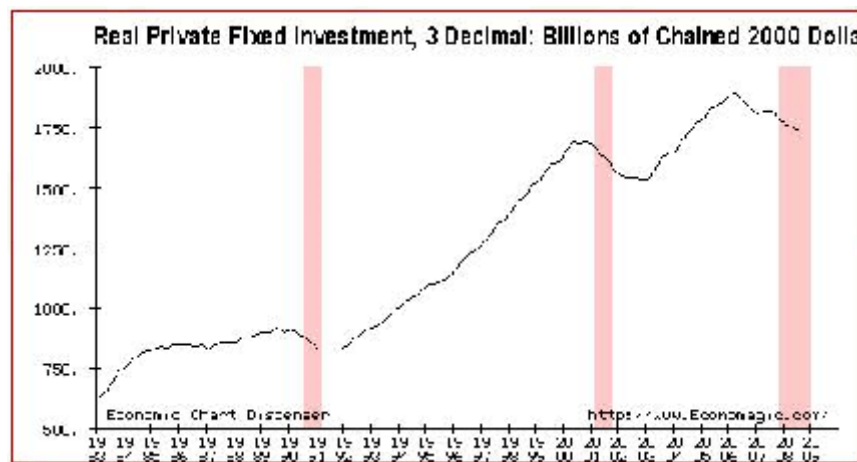
11. THE SUBPRIME CRISIS: SYSTEMIC FACTORS

Finally, I'm going to talk about the current crisis! In this installment, I will focus on the systemic factors that I've been reviewing to this point. In the next part, I'll go into what was unique.

Most of what is going on right now occurs over and over in the economy. If you go back over parts 1 through 10, you'll see that I focused on investment goods, consumer durables, rising debt, and panic. I'll cover each of these in turn and offer evidence in terms of charts I made using the www.economagic.com web page. On each, I set them for 1983 to the present (I went that far back to give you three recessions, so you could see if the patterns really do show up time and again). Also, the shaded regions are the recessions. Here we go!

Investment

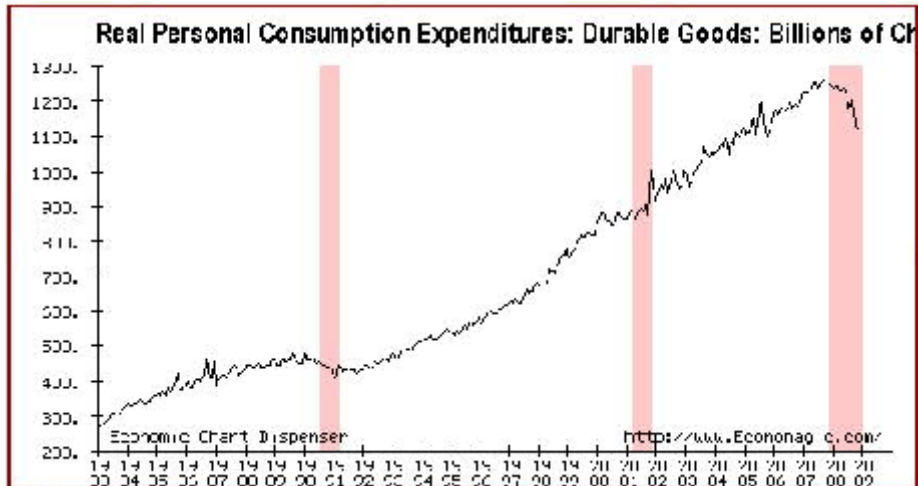
I said that this was the big driver of both expansions and recessions, the number one factor. As you see below, sure enough, before every recession there is a dip in investment.



The only weird thing about the current downturn is how long it took for the recession to hit after investment started falling. Otherwise, it fits the typical pattern.

Consumer Durables

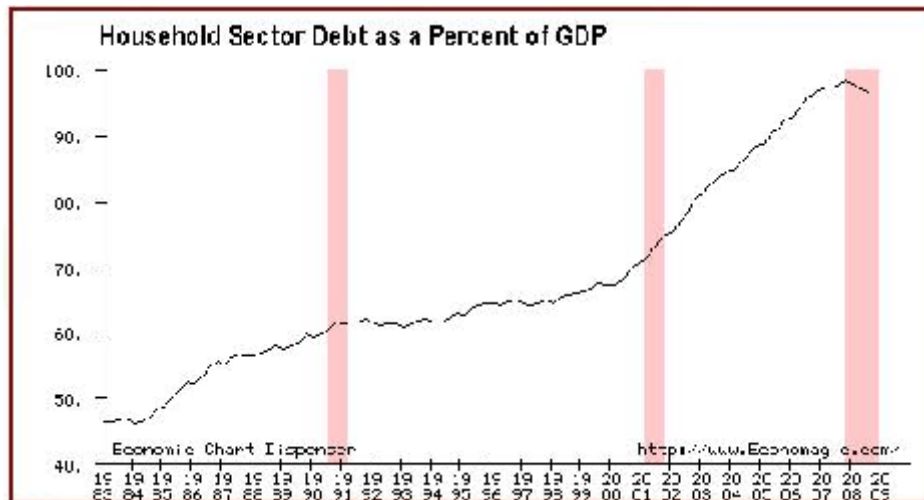
As I have suggested, while durables react somewhat like investment, they don't play as big a role. Nevertheless, for two of the three recessions shown, a fall in consumer durables did lead the recession (see 90-91 and our current one on the chart below).



So, our most recent troubles were caused by both a fall in investment and consumer durables spending.

Debt

Another factor mentioned in the blog was the run up of debt. Take for example household debt, shown below (measured as debt/GDP, where the latter gives a sense of ability to pay so that as debt/GDP rises, households are closer to being unable to manage).



While debt rose pretty much over the entire period, note the rapid increase in the slope right up to this recession. Not good, as it put us in an increasingly precarious position.

Panic/Animal Spirits

The last thing I mentioned was the panic, and though that's awfully hard to see in general, the stock market should give us a general idea. Here is a plot of the S&P 500 as divided by GDP.



Note that as this rises, it means that the stock market is growing faster than the rest of the economy. Think about that for a moment—how can the value of the firms in the economy grow faster than the economy? They can't, it should be exactly the same (though to be fair you could expect stock prices to rise a little faster since only the biggest, fastest growing firms would tend to sell stock). So most of the reason for the excess of stock prices over GDP growth is just animal spirits/spontaneous optimism. Note the incredible slope you see in the 1990s expansion. It's ridiculous, and yet even economists were declaring it a "New Economy." No it wasn't, it was the same one we had all along—and you can see what happened. Furthermore, it is no coincidence that investment and stock prices tend to fall at about the same time. If the S&P is a barometer of our animal spirits, it sure didn't look good around that 01 recession and it doesn't look good now.

Conclusion

Everything that has been argued thus far about recessions being a function of the current organization of our system holds up, including for the crisis we are currently experiencing. Investment and consumer durables fell, debt rose, and panic set in, making us four-for-four. We do not need to look for unique factors to explain what is going on. This is how our market economy works.

That said, there were some special circumstances that are combining to make it worse. More on those next time!

12. THE SUBPRIME CRISIS: HISTORICAL FACTORS

I'm writing while watching the Superbowl, so I hope this comes out clearly!

I covered the cyclical stuff in post 11. There, I said that investment, consumer durables, debt, and animal spirits contribute to the business cycle. I also said that these are common and so in that sense,

this recession is not unique. However, one of my friends (Opsman) read the post and pointed out that there was something different: unlike any of the other recessions shown, all four came into play at the same time. Good call! I hadn't thought about that, but it makes sense.

But wait, there's more!

I list below three other factors that made this one particularly bad:

Financialization: I'm going to start with a factor that is probably not very well known, but which has been vital and a long time in development. Financialization refers to the trend wherein our economy has become increasingly oriented toward managing financial wealth as opposed to the production of commodities. This started in the 1980s, with encouragement from both the economics discipline and the government. The former gave their academic blessing by telling everyone that markets were rational and efficient and latter responded with deregulation of the financial industry and an increasingly hands-off approach to economic policy. It both contributed to and was in turn encouraged by the massive run up of the stock market in the 1990s (see the 4th diagram in post 11). The consequence of financialization has been an increased role played by animal spirits and a shift in industry from thinking long term to thinking short term. Both of these reduce growth and make our economy more fragile. Let me explain in a bit more detail.

If you read parts 5 and 6 of this series, then I suspect that you can probably work out most of this for yourself. If the stock market, dominated as it is by psychological factors, becomes a larger part of the overall economy, so animal spirits and other irrational factors become drivers in the macroeconomy. Financialization means that people come to look on stock prices as the ultimate indicator of firms' and the economy's health. But, as you know from part 6, that simply isn't true. This has become a terribly important factor in our economy and has forced firms to pay more attention to transitory factors that can drive stock prices rather than to the true determinants of their long-term growth and profits. If I may quote myself from part 6 (particularly given what I just got done watching—great Superbowl!):

“ It's like a football team that thinks in terms of plays rather than drives. What if the coach was forced to think that his team had to try to score a touchdown on every single offensive play, rather than being free to try to string together a series of plays (i.e., a drive) to accomplish that purpose? He might get lucky now and then, but I guarantee that the latter would actually score more points.”

We are now spending more effort trying to drive up stock prices than laying the foundation for increased productivity and growth. If stock prices truly reflected firm efficiency, it would be no problem. They don't and yet we are tying an increasing amount of our economic future to how they move.

Subprime crisis and the housing market: Financialization meant (and continues to mean) that there were billions of dollars roaming around, looking for financial investments that would earn a high return. When the stock market collapsed before and after the 2001 recession, that money had to look elsewhere. One of the places it went was real estate and the housing market (it also went into commodities and oil,

driving up gas prices, but that's another story). As a consequence, those values were bid way up. As you can imagine, positive-feedback is common in such situations:

People buy in anticipation of appreciation => actual appreciation => additional purchases

So that fed on itself, with animal spirits providing the core driver. Meanwhile, banks were running out of customers for loans as investment and, to a lesser extent, consumer durables were getting saturated. In the rising real estate market, mortgages looked like a great idea. Of course, it was all speculative and there was no real foundation for it. Mix in some questionable business practices as mortgage writers really didn't do too much work in figuring out if the borrowers were credit worthy (as they were going to package and sell off the mortgages at first opportunity), plus some outright fraud, and you have a collapse waiting to happen. Even worse, folks who had nothing to do with the mortgage industry were buying up the mortgage-backed securities so that the impact, when it came, was spread across the economy.

(As an aside, I've read a few places where they place the lion's share of the blame for the subprime crisis on Freddie Mac and Fannie Mae because the latter were ordered to make more loans to lower-income families. I'm sure that events there did not help, but it was the private sector that was in the forefront in offering risky mortgages and then quickly passing them on to others. It was like a game of musical chairs—so long as you weren't last, you won.)

Income Distribution: Income inequality has been growing in the US for almost 40 years, with the effect that the core demand for goods and services is being eaten away. Capitalism needs demand, and the fact that the rich spend a smaller percentage of their income than do the poor is reducing demand. The reason is very simple: the poor have to spend a higher percentage to feed, clothe, and shelter themselves. Thus, the same amount of income spread over more people leads to greater consumer spending. But we've been going the opposite way for decades, to such an extent that even Alan Greenspan, former chair of the Fed, has commented on it. This is not a fairness issue, it's a question of the health of our system. Capitalism grows from the bottom up, not via "trickle down." It is illustrative that during periods when income distributions have become more even, so our growth has been higher. Rising income inequality is yet one more reason for our current debacle.

(I wonder, too, how much immigration has been a problem here since it has meant adding even more poor folks than we already had. The fact is that at any given moment, we have a finite number of jobs. If we add more people, that means higher unemployment, whether it's the immigrants themselves or those they replaced. I would favor a guest worker policy wherein we can welcome these folks when our unemployment is low, but let charity begin at home when unemployment is high.)

I think that pretty much covers all the major factors that led to this recession/crisis. Next, I will talk about whether or not the proposed policies will get us back on track.

13. WHAT MUST BE DONE? POLICY RECOMMENDATIONS

As I mentioned in part 10, economics is ultimately about policy. At the end of the day, the reason for all the graphs, equations, charts, data, etc., is to decide how we should organize the economy. In order to make such a determination, we have to know 1) what we think should happen, 2) what is happening, 3) why there is a difference between 1 and 2, and 4) how that can be corrected. With respect to 1, let's say this boils down to low unemployment and high rates of economic growth. I'd figure acceptable unemployment to be around 4% and a decent rate of GDP growth to be 3% or so.

What do we actually have? As of this writing (February 8, 2009), we have 7.6% unemployment (January 2009) and a rate of real GDP growth of -3.8% (fourth quarter 2008). The former is the worst in sixteen years and the latter is our lowest in over twenty-five years, and forecasts are not optimistic. Those unemployment numbers mean we have 11.6 million people who are looking for jobs—more than the entire population of Cuba, Greece, or Belgium (in fact, more than most countries). Note, too, that the way unemployment statistics work, it's actually rather easy to count as employed (one hour of paid work in a week means you are employed) and that folks who have given up looking don't count in the numbers (which will occur as this drags on but probably isn't a big factor at the moment).

Part 3, has this happened? This was already covered in parts 11 and 12 and can be boiled down to the following:

Systemic Factors (Part 11)

Fall in Investment

Fall in Consumer Durables

Increase in Debt Levels and Consequent Default

Panic and Collapse of Animal Spirits/Spontaneous Optimism

Historical Factors (Part 12)

Financialization

Housing Market Bubble

Income Distribution

These are the reasons why we find ourselves at the opening stages of one of the worst economic downturns since the Great Depression. That just leaves part 4, how to fix it. Following the pattern established above, I want to break the factors into those addressing systemic factors and those fixing the historical factors.

Systemic Factors

DOH! I didn't realize that I'd already done this in part 10 and consequently spent several hours writing and rewriting section, always with a strange sense of *deja vu*. Let me salvage from my wasted efforts an overview that I did not include in the previous installment.

At any given moment, there is a finite number of jobs the private sector can profitably support.

Critically, there is no guarantee that this number is equal to the number of folks who actually need a job. In fact, as productivity increases and we need fewer people to make the same amount, so it becomes even less likely that the number of potential jobs is equal to the number of people in the workforce. This long-term process is exacerbated when activity in the investment and consumer durable sectors declines at the end of the expansion. It is the great irony of capitalism that at the very moment when we should be enjoying our highest standards of living—when all the factories and restaurants are built and everyone has a new car, new kitchen appliances, additions to their homes, etc.—is when we suffer. Just two years ago, our unemployment was 4.4% and represented only 6.7 million people. Why not now? Because even though we have at least the same productive capacity as then (more, actually), entrepreneurs, quite reasonably, don't find it profitable to employ people. When you employ someone, they get those little green pieces of paper that entitle you to a share of the stuff we can build and that in turn make it profitable to have made that stuff.

What we therefore need to offset these systemic problems is some source of those little green papers that do not depend on entrepreneurs deciding they can make a profit—the Federal Employment Commission (FEC) mentioned in post 10. The profit motive has done all it can, so the government sponsors employment that can fill the gap in the meantime. When the economy recovers, the government pulls back.

Before I move on to the historical factors, let me quickly mention that the way government spending is structured, we already have some built-in automatic stabilizers. I'd much prefer something along the lines of an FEC, but even now, when the economy goes south, government spending automatically increases (in terms of unemployment insurance, welfare, food stamps, etc.) and the average tax rate and tax revenues fall (since incomes go down). This has definitely had an impact. Before WWII, when the government was tiny and the free market was given greatest freedom, the average recession was around 21 months and the average expansion was roughly 25 months—almost exactly the same. Since, WWII, recessions have lasted 10 months and expansions...wait for it...52-months!!! The latter number is heavily influence by the 120 month expansion in the 1990s, but even dropping that out gives a very respectable 44-month duration for pots-WWII expansions. This is certainly a successful record, but I believe that there must be more careful consideration and monitoring of the programs we undertake so that we can better position ourselves for future challenges. This is particularly so given that the orientation of the private sector has become so short term, a problem created by the historical factors discussed next.

Historical Factors

Of the three items listed here, financialization and the housing market bubble can probably be addressed together. They are a function of the slow but steady shift in our economy from a focus on producing goods and services to managing financial wealth. This is discussed at length in part 12, and we saw the consequences play out over the past year. Increasingly complex and opaque assets were created by people who had no long-term interest in whether or not the assets would be profitable in the long run because they wouldn't own them any more. The goal was to make a quick buck without really adding anything of value to our pool of goods and services. Furthermore, we are outsourcing low-profit activities in order to raise stock prices. Those activities are typically the ones that employ the most

people.

We must reverse the trend of financial market deregulation. The rules limiting the ability of financial institutions to take risks (the costs of which fall upon others) were originally implemented around the Great Depression and because of events very much like those we are witnessing today. Policy makers decided starting in the 1980s that we didn't need them any more since we hadn't had any serious issues for many years. That's a bit like saying that we no longer need seatbelt laws because traffic deaths have declined! They were encouraged by economists who argued that markets were rational and could not consistently make errors.

Finance should be the servant of output and employment and not the other way around. Stock prices and banking news should be a footnote, not the headlines. This is going to be a bitter fight and I am frankly not optimistic because those in the financial sector have a vested interest in keeping things as they are. Let me close this section by quoting from an excellent article in the New Yorker (http://www.newyorker.com/talk/comment/2008/02/04/080204taco_talk_cassidy):

The greatest need is for intellectual reappraisal, and a good place to begin is with a statement from a paper co-authored by Minsky that "apt intervention and institutional structures are necessary for market economies to be successful." Rather than waging old debates about tax cuts versus spending increases, policymakers ought to be discussing how to reform the financial system so that it serves the rest of the economy, instead of feeding off it and destabilizing it. Among the problems at hand: how to restructure Wall Street remuneration packages that encourage excessive risk-taking; restrict irresponsible lending without shutting out creditworthy borrowers; help victims of predatory practices without bailing out irresponsible lenders; and hold ratings agencies accountable for their assessments. These are complex issues, with few easy solutions, but that's what makes them interesting. As Minsky believed, "Economies evolve, and so, too, must economic policy."

Very well said.

As I suggested in part 12, economies with uneven income distributions have weaker economies. There are several reasons for this, but one is the fact that the rich don't spend much money. The same \$10 million dollar salary spread over 100 people generates much more spending than it does if it's all one person. Income distributions have been deteriorating for the past 40 years and they did the same thing before the Great Depression. Economic growth, when it comes, must be directed toward wage earners and not those scraping the profits off the top. As I mentioned in part 12, this is not a fairness issue, it's a question of the survival of our system. We can address this through the tax structure, health care reform, and education. If the poor continue to get poorer, the core set of people of create demand for goods and services will be made impotent.

We also have to think seriously about controlling immigration. With a limited number of employment opportunities, they are not only taking some of those jobs, but they are driving wages down because they are increasing the supply of labor. Mexico certainly has no incentive to help in this process since the status quo provides for them a release valve for their myriad and increasingly serious social, political, and economic problems. Ideally, the best immigration policy would be a strong, healthy

Mexico and we cannot forget that. But, that's not going to happen overnight, and so we need to think seriously about finding some stop gaps while at the same time encouraging long-term reforms that help the poor work their way up (something about which those currently in power don't care too much about).

That's it for now. I'm giving exams all week so I may not have another update for a while, but what I want to do next is review the policies currently being discussed and talk about how they fit with what I've recommended here.