

Don't cry for me America.

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I would like to start this conversation by apologizing. I am so sorry, I am going to cause so much discomfort; and that I am going to insult so many; and more importantly that I am going to disappoint all of you. I am sorry I am the bearer of good news.

I know, you have come to expect that every economist nowadays talks about the destruction of the world, the catastrophic financial crisis that is leading the disappearance of human kind, and the almost certainty that dinosaurs will roam the world again, and that this time, they will really have the chance to eat us all!

I want to organize this conversation in three parts. First, I discuss the typical ingredients of any financial crisis. In this section I will devote some time to draw parallels between the current situation and the hundreds of crises we have experienced in the past. Second, I will discuss regulatory, fiscal, and monetary policy in this context. I will highlight some of the mistakes of this and the previous administration, and try to understand if the levers pulling the recovery have been already implemented or not. Finally, I highlight the great missing opportunities that booms and recessions cause.

I. **This is my crisis... this is your crisis... from California... to New York wasteland...**

Financial crises have happened since banks were created. And by the way, they will continue to occur. The very nature that justifies the existence of banks, leads them to be vulnerable to a collapse. This is certainly a topic for another discussion. It is a fact, however that banks have been collapsing for centuries; and because financial crisis have been so frequent it is always possible to draw some similarities across them.

Financial crises have three distinct stages: the excess optimism stage, the excess pessimism stage, and the recovery.

A. *Excess optimism: Implicit Insurance*

Before every crisis societies have some sort of implicit insurance. "The exchange rate will never depreciate" I think Argentineans and Brazilians have said that half a dozen times. "Foreign lending will never stop", so said the Mexican in 1982, or the Venezuelan in 84, or the Argentineans, Brazilians,

Peruvians, Chilean, Uruguayan, Colombian, and almost every Latin American in the beginning of the 80's. By the way, they were not alone, the Philippineans were saying the exact same thing. "Exports will never slow down, and growth will prevail". Every South East Asian nation said just prior to 1997. "The stock market will never fall", the US great depression and Japan's lost two decades. "Interest rates will never climb above 10 percent" the S&L crisis in the US. "The ERM is here to stay" so said every European country. If you pick 10 crises, you will find 10 different guarantees. The current situation in the US was driven by the fact that no one thought that real estate could drop everywhere at the same time.

This is not a true guarantee. It is just the belief that failure is unlikely. In this environment people feel "too safe"; and therefore, they spend too much, borrow too much, invest too little, regulate even less, etc. In the end, the false sense of security leads to an unsustainable expansion. What is worse is that previous successes generate more optimism, and exacerbates the irresponsible behavior.

In this world, asset prices are booming, real estate is booming, lending is free, consumption is rampant, growth is unstoppable. Things look so good that politicians declare the eradication of poverty and anything that is bad in the world. In fact, things are so good that even the Red Sox might win a World Series; and Boston, also known as loserville, might enjoy years of championship again.

One example I love about the excess optimism is the fact that even academics start writing models to explain why something that is absolutely unsustainable, is not. It doesn't matter how cumbersome the argument is, in the end, they find a way to justify the unjustifiable.

The implicit guarantee has always been there, and I actually think this is part of human nature. We need safety and security; and therefore, we cling to some ideal source of safety when presented to us. All countries had one, and this crisis is no exception. In the US we had two implicit guarantees: real estate will never drop in all cities at the same time, and the Chinese will continue financing whatever we want. This crisis was the realization that the first one was incorrect, soon we might learn the second one as well.

B. Excess Pessimism: The Crisis and the Two Fundamental Theorems of International Economics

I had the fortune to have great mentors in my academic life: Ricardo Hausmann and Janet Kelly when I was growing up, and Ricardo Caballero and Rudi Dornbusch when I was entering puberty. The situation that I have just described is a corollary of what Rudi used to call the two fundamental theorems of international economics.

The first theorem says: "shit happens". So true that I have seen it in T-shirts. The second one: "things always last longer than what you thought, but they crash faster than what you imagined".

Financial crises are just the natural outcome of Rudi's theorems. Individuals have an implicit insurance and they believe nothing will ever fail. Guess what? They do. And everybody looks disappointed and surprised, and academics all argue about a shock that is 40 standard deviations from the mean. Which mean and standard deviations? The ones computed during the excess optimism period?

The excess optimism face puts the economy in a vulnerable situation. When the crisis takes place? Nobody knows. I certainly do not know, and as a simple prove just check my wealth. I am not a billionaire – which means that even though I might know the direction I have the timing incorrect.

The reason is very simple, as the excess optimism stage is the outcome of some social agreement about an implicit guarantee, the crisis is the social unraveling of such. The second theorem states that we do not know the timing, but when it occurs it will be catastrophic.

This crisis has just followed that pattern exactly. Even though many thought the US path was unsustainable for years (and see Obstfeld, Rogoff, and Roubini just to indicate some of the classics) they were clearly expecting the crisis much sooner.

How do crisis look?

What is interesting about the crisis period is that decisions are made mostly based on fear. During the crisis agents tend to amass cash. That sense of safety and security that existed during the boom comes to an end and depositors need their deposits back, banks need the cash back, consumers need their savings back, etc. In the end, there is a tremendous disintermediation in the economy and savings rates are increased significantly.

In the US the private saving rate last year was 0.6 percent, and the last quarter went up to 5 percent. This is a massive contraction of the aggregate demand. Banks that were holding 15 billion dollars in September in excess reserves have more than 800 billion at the end of January. This behavior is present in the US, as it has been in all crises. The SEA crises in 1997 are perhaps the best example. Those countries that had massive saving rates to start with, increased them even further. Moreover, after the recovery was on their way they decided to increase their national savings in liquid assets – hence the enormous reserve accumulation we have seen in Asia. Again, in the search of safety, countries have hoarded cash – some of them for long periods of time and at a very high internal cost – which in the end just points out to the essential need of safety.

C. Recovery

The recovery takes place at some point in time. In general the speed of recovery depends on the size of the liquidity provided, on the size and effectiveness of the stimulus, on the degree of pragmatism of the government and the private section, and also on how market sentiment adjusts. How and when is hard to predict, but in the end every single country that went through a financial crises recovers. Because I want to discuss the US policy later, let me just highlight what are the typical early signals of the recovery.

In general, cash has been hoarded by banks, consumers, and foreigners. At some point the very low asset prices in the economy represent an investment opportunity some can't afford to pass on.

This decision to shift from accumulating cash to start investing has three possible manifestations: one is pure mergers and acquisitions. This is very common in emerging markets. Foreigners find domestic asset prices at a fire sale and take the opportunity. If you look at portfolio flows in emerging markets they

collapse after the financial crisis (or during it), and those flows are replaced by FDI. During the Asian currency crises, and in all the Latin American crises FDI plays a crucial role in the ignition of the recovery. After all, how else could have Banco Santander recolonize Latin America? Just by buying after crises.

The second indicator is that interbank lending re-starts. This is the most common mechanism in Europe. In fact, UK is already expecting interbank lending to re-start in the second quarter of this year. Almost all financial crises and currency crises in Europe have had interbank lending starting way before any loans are given to any agent outside the financial sector. One feature of the interbank lending is that the total cash in the financial sector remains constant. What it does is to start circulating it across banks, but not from banks to firms and consumers. Interbank lending is easier to re-start if the central bank, for instance, provides some insurance. Europe loves to provide insurances to whatever imaginable activity and therefore, providing it to interbank lending – that actually is welfare improving – is the right policy. Wow! I can't imagine I'm saying something nice about Europe. I apologize.

Finally, the true signal that the third stage of the crisis cycle is under way is when the cash in hands of the financial sector start to decline. How do you know this is happening? By looking at the accounts in the central bank's balance sheet. There is one account called either excess reserves, or deposits of the financial private sector in the central bank. By the way, this is public information! Go to Wikipedia, type federal reserve, and when you go to the bottom you have the summary of the balance sheet of the federal reserve. Wikipedia has a delay of a week or so, but it is quite good. If you want you can also go to the federal reserve where they have the same summary updated daily or weekly. So, if you want to know, you will be able to do so.

Pragmatism and good policy are important ingredients for the recovery. I'll discuss them in the context of the US right now.

II. The US

In this section, I discuss the policies implemented and their appropriateness, and I try to describe where I see the US in this cycle.

A. *Monetary Policy*

I know that I'm going to sound like a homer. Sorry, but I think the central bank of the US has acted fabulously! Yes, they could have done some things differently. But criticizing with wisdom after-the-fact is only done by ignorant. Conditional on the information they had at the time they were acting this has been an incredible effort. They have avoided a financial meltdown, and in the end, the recovery is already in place. So, another short recession for the record books.

Let me be more precise. When there is a financial crisis central banks have to go to the rescue of the banks. They do so by providing guarantees to the depositors, by providing liquidity, and by taking control of the situation.

On September 15th of 2008 the balance sheet of the central bank showed the following figures. Banks had 12 billion dollars in cash, the central bank had assets held in treasury bonds for the amount of

roughly 500 billions, and the total liabilities of the central bank where of the order of 750 billions. By December 2008. Yes, three months later. The fed has printed huge amounts of cash to provide liquidity to the banking sector. The liabilities on December 5th were at 2.2 trillion dollars! They printed 1.5 trillion dollars in three months! They printed that cash by purchasing assets in the private sector and by lending to foreign central banks. In fact, they even reduced the amount of treasuries – they had less than 300 billions, and only 100 where truly useable for monetary policy purposes. 800 billions where allocated in the US financial sector, and another 800 elsewhere.

This is massive provision of liquidity! Unparalleled in history, extremely effective, and without too much fanfare. Did you know about this effort? No? who cares! You are not supposed to know, banks did. And those are the ones that matter.

Furthermore, the fed is ready to print 1 trillion more. Their commitment to stabilize the financial sector has been followed by the other central banks in the world, and I believe this crisis will be a minor event because their incredible actions.

The FDIC and the FED also increased the guarantees on deposits which is also needed to stop a bank run (see the notes on financial crises).

By the way, the Bank of England is also very high in this list of superb banks. The ECB has been a little timid, but I think they are learning, and the BoJ is still taking some strange siesta.

B. Fiscal Policy

Fiscal policy has had a lot of holes. First, let me talk about message and then policies. And the reason is because I think the rhetoric is extremely important during a financial crisis. After all I have been saying that the psychology of the agents is crucial in the transmission of the crisis, so, marketing is equally important.

1. Rhetoric

AQs I said before, during the crisis stage decisions are driven by fear. So, in this world you cannot have messages from the administration that are full of fear! In fact, how can you reduce fear with fear! Since when that has worked?

The Bush administration was all about fear, so, it is hard to ask them for something different. Maybe if they would have promised to invade the homes of the bank CEO's that type of fear and hate would have worked, but they missed their chance. The Obama administration, on the other hand, was also using fear as a tool for policy. In December and January they continuously had messages such as "if we do not do X we are doomed". How are you going to instill confidence with such messages? Horrible policy. I know, it is effective in forcing congress to approve some additional expenses, but it just bad economic policy. You see, the proper procedure is to work harder, and think harder, not to scare more.

In any case, the rhetoric has been shifting – slowly – but certainly in the right direction. The Obama press conference on April 2 in London was a master piece. It was informative, sincere, and showed control – something that has been lacking for a while.

In any case, the administration should not lie. It has to say that things are difficult, that more bankruptcy is going to happen, especially if your initials are GM, and that we all have to work harder. The message, at the same time, has to indicate that things are going to improve and we are working toward that goal, and show that you are in control and have some idea of what has to be done.

I want to give an example of the rhetoric and pile a little bit on this because it has been the biggest mistake so far. To do so, let me talk about nationalization of the banking sector.

First, let's talk about theory... In the midst of a crisis nationalization is an extremely effective tool. It has its disadvantages, trust me, big one; but it also has tremendous advantages. Let's see.

In a financial run – as discussed in the financial crises notes or class – we have that panic makes every bank unsustainable; regardless if they were solvent or not before the bank run. What are the correct actions? Guarantee deposits and clean up the banks. This means that all financial crises always imply a transfer from the society to the banks. Let me put this in different terms: if there is a financial crisis, there is a social loss and somebody has to pay for it. We can certainly punish the stock holders, but imagine that after punishing them 100 percent still there are losses – which is quite typical in financial crises. Then tax payers – or in other words the depositors – have to take the hair cut. The question for the depositors is NOT how they can collect 100 percent of their money. That is not possible. Period! There is a social loss and they are going to get only 90 cents on the dollar – for example. Therefore the question is, do you want to get the hair cut on your checking account, or on your taxes. The banking sector needs a subsidy and needs to restructure their assets – as it is the case in the US.

Here the nationalization is a wonderful tool. But because it has tremendous costs – I'll discuss that in a second – the nationalization has to be used mostly at the onset of the panic – and not in the end. Let me be more precise. When the central bank nationalizes a bank (let's assume it is the central bank for simplicity) I pay zero for the stock, I remove management, I guarantee the depositors all their stuff, and once I restructure the assets, the central bank keeps the bad assets and sells only the good ones. In this transaction they have paid the least amount for the bad assets that guarantees solvency (This is not super easy to see but I'll have a little accounting exercise on the board explaining it... be patient and wait for me). In this transaction we have also punished the stock holders the maximum – zero for their stock – and management the maximum – no chance they pay bonuses (as they did in US) or dividends (as they are doing in Spain) and they are fired. Therefore, all the morally loaded discussion in the US does not happen, and we can restructure the fastest.

In fact, this is extremely good to stop panic. The UK got rid of the panic after Northern Rock, and Europeans have been extremely good dealing with it by taking over the banks.

What is the cost? Exactly that one, that government suddenly becomes bankers! I do not know if there is empirical evidence but I'm sure banks managed by government are much worse than banks managed by inept and dishonest managers... oh wait, those are the strides of politicians... in any case, the huge cost of nationalization is that they are managed by the government.

So, if you are going to use nationalization it should be used at the beginning of the crisis, where stiping the panic is the most important thing. It is a horrible idea when you use it after the panic has happen, and after the stockholders have lost 95 percent of their value! Which is more or less when the discussion appeared in the US.

The administration, if they had anyone that actually had seen a crisis before, should have known that the time for the nationalization had passed, and it should have announced immediately that there was not going to be nationalization, that it was useless, and something like “we are not going to nationalize”. That is clear enough. But the Obama team said nothing! That is the worse! Either you do it, or you don’t. but what were they doing? Thinking about it? Guess what happens... more fear, more panic... a disaster.

Thank god things have changed. Maybe an Argentinean or a Brazilian has been hired by the administration...

2. Public works and subsidy to the banking sector

As said before, part of the fiscal stimulus is a subsidy to the banking sector, the other aspect is some form of expenditures. Tax cuts are not very effective when consumers are depressed. In this case a significant proportion of the expenditure is saved, and therefore, little impact in the economy is observed. Also, expenditures devoted to increase the long run productivity are less effective. In the short run, the objective of the fiscal stimulus should be to help those households that are ready to declare bankruptcy, or to help firms that are on the brink of laying off more workers.

Public works is a magnificent way of helping the first. Europeans are extremely good at this. They build a new road, or ramp, they build a new school, etc. if someone asks “do we need that school?” they answer correctly: “Who cares about the school. We just want to employ some people”. If the school system improves, it is just an unintended consequence. In the end, public works are very effective to keep individuals out of bankruptcy, and some subsidies to large corporations ready to lay off is another one. Again, the objective is not efficiency or growth, is to stop the vicious cycle.

In this case, the Obama package has only a third devoted to public works. Probably it is going to be enough, but not because it is well conceived.

By the way, just for the record, I think GM should not exists. But I think it is a bad idea to get the bankruptcy going at the worst possible time.

3. Guarantees and Public Insurance

Finally, other important aspects of the recovery are guarantees and some form of public insurance. Again, individuals will stop hoarding cash only if they feel they are safe enough. In the world we indeed increased the deposit insurance, and we have provided some insurance and subsidies to some sector. I do not want to continue piling on, but the few subsidies and support provided to the sectors has been excessively arbitrary, inconsistent, and just plain badly managed. In any case, there are aspect that could have been better...

C. Where are we?

You might be surprised that with this huge critique to the package and the communication policy I am, probably, the only professor in economics not in the administration that is positive. In fact, I'm more positive than the Obama advisors.

Why? First, I think the ingredients for the recovery are there: monetary policy gets an A+, and fiscal policy probably a B+, while communication was getting an F but has been improving. So, the policy is there in some form or shape. But what I'm mostly positive is about the degree of pragmatism and dynamism of the US private sector. I have seen countries in worse shape, with complete exclusion from international markets, with weaker institutions, and with worse policy recover in a year and a half. We have good policy already in place, access to foreign financing, great institutions, and probably the most dynamic private sector. We will be out of this quite soon – again, you can use the second theorem of international economics (but with a positive spin).

I do not think interbank lending is going to start anytime soon. Especially with the horrible rhetoric that surrounded the nationalization of the banking sector. I think the path of recovery in the US starts with M&A, and from there straight to the reduction of the cash holdings by the financial sector. In fact, from December to January the cash in the financial sector increased by just a couple of billion dollars. And we have already seen some M&A.

I imagine that the US growth will stop falling about the third quarter, unemployment will stop increasing at that time, and we probably will see signs of relief already at the end of the year. I know, too positive probably... we'll talk in December.