

## Three Dimensions of the Current Economic Crisis

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*The United States and the New International Financial System*

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<sup>1</sup> The New York Conference on Nov.14, 2009 was an extension of Paris Conference on June 14, 2008. Both conferences were aimed to looking for the new international financial system during ongoing economic crisis. There were 18 invited speakers in New York conference, including James K. Galbraith (University of Texas at Austin and Chair of EPS), Joseph Stiglitz (Columbia University, 2001 Nobel Laureate), Pierre Calame (General Director of IRE), Marcellus Andrews (Columbia University), Allen Sinai (Chief Global Economist and President of Decision Economics, Inc.), Theresa Ghilarducci (New School University), Perry Mehrling (Columbia University), Gary Dymski (University of California at Riverside), Jeff Madrick (Editor of Challenge Magazine), Bernard Schwartz (Chairman and CEO of BLS Investments, Loral Space & Communications), Jack Blum (expert on financial fraud and counsel to World Bank and the United Nations), Bill Black (Executive Director of the Institute for Fraud Prevention, University of Missouri-Kansas City), John Jr. Barkley Rosser (Editor of Journal of Economic behavior & Organization, James Madison University), Paul Davidson (Editor of Journal of Post Keynesian Economics, University of Tennessee), Lord John Eatwell (President of Queen's College at Cambridge University, former economic advisor to the Labor Party), Ping Chen (Peking University), Luiz Carlos Bresser-Pereira (former Brazil Finance Minister), George Papandreou (former Greek Foreign Minister and President of the Socialist International). The conference was organized by EPS (Economists for Peace and Security), IRE (Charles Leopold Mayer Foundation International Initiative for Rethinking the Economy), and Levy Economics Institute of Bard College. The conference subject is "The Financial Crisis, the US Economy, and International Security in the New Administration," which was held at Schwartz Center for Economic Policy Analysis, New School for Social Research, New York, Nov.14, 2008. The conference proceedings were titled: "Looking for Solutions to the Crisis: The United States and the New International Financial System." It was published in Clamecy, France, in March 2009.

## The Highlighted Points<sup>2</sup>

**“The collapse of the derivative markets is not only just driven by greed; it also resulted from poor models of the stock market.”**

**“A new financial order can only be achieved if major economies build a system of stable exchange rate and coordinate their policies.”**

**Ping Chen**

I would like to discuss three dimensions of the current economic crisis: economic theory, economic policy, and the changing world order.

To start with the theory, mainstream economics is ill-prepared to handle the crisis.

If we want to adopt new economic policy, we also need new thinking in economics itself, since poor policy came from poor theory. As I see it, there are five influential theories that could mislead our analysis.

Number one is the exogenous theory of business cycles, such as the Frisch model of noise-driven business cycle<sup>3</sup>. This school believes that market economy is fundamentally self-stabilizing; any trouble is caused by external shocks. The best thing for this financial crisis is that people finally seem to realize that the causes of the crisis are to be found within the American economy itself. Since the discovery of economic chaos in 1985<sup>4</sup>, we know that business cycles are driven by endogenous forces<sup>5</sup>. The market economy is inherently unstable - that is the very reason why we need proper regulation and sound management.

Secondly, Friedman's theory of exogenous money gives an over-simplified account of how to deal with financial crisis. Friedman assumes monetary movement is exogenous, so central banks can do whatever they want. Friedman claimed expansionary monetary policy alone could prevent the Great Depression<sup>6</sup>, though there is no solid empirical evidence to support that theory<sup>7</sup>. It would be very dangerous for Paulsen, Bernanke and central bankers

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<sup>2</sup> Highlighted points were added by the editor. The following references were added by the author.

<sup>3</sup> Frisch, R. "Propagation Problems and Impulse Problems in Dynamic Economics," in *Economic Essays in Honour of Gustav Cassel*, pp.171-206, George Allen & Unwin, London (1933).

<sup>4</sup> Chen, Ping. "Empirical and Theoretical Evidence of Economic Chaos", *System Dynamics Review*, Vol. 4, No. 1-2, 81-108 (1988).

<sup>5</sup> Chen, P. "Evolutionary Economic Dynamics: Persistent Business Cycles, Disruptive Technology, and the Trade-Off between Stability and Complexity," in Kurt Dopfer ed., *The Evolutionary Foundations of Economics*, Chapter 15, pp.472-505, Cambridge University Press, Cambridge (2005).

<sup>6</sup> Friedman, M. and A.J. Schwartz, *Monetary History of United States, 1867-1960*, Princeton University Press, NJ: Princeton (1963).

<sup>7</sup> Temin, Peter. *Did Monetary Forces Cause the Great Depression?* Norton (1976).

around the world to follow Friedman's theory in dealing with the current crisis. On the contrary, we have solid evidence supporting the Austrian theory of endogenous money and rejecting Friedman. In 1998, China had to confront severe deflation in the aftermath of the Asian financial crisis; it managed to maintain sustained growth mainly by fiscal policy, by large investments in infrastructure.

Third misleading theory is the Lucas theory of micro-foundation and rational expectation<sup>9</sup>. As you know, there is a fundamental debate between the school of micro-foundation and the school of macro-foundation for firms' behavior. Some people today blame Wall Street greed for the financial crisis. But let me ask you: why did American investors like Goldman Sachs behave much better in China in the United States? They don't make their decisions in a vacuum, but in a certain macro-environment. It was American macroeconomic policies and deregulation that encouraged financial speculation and manipulation.

Lucas ignored the "principle of large numbers", according to which the driving force of business cycles comes mainly from financial intermediate and industrial organization, not from household and firms<sup>10</sup>. We have a large number of households and their fluctuations would neutralize each other. But we have many fewer giant firms, and their decision will generate much larger macro fluctuations than households or small firms. This means that the financial crisis was caused by failures of major firms in financial sector. In dealing with failed giant financial firms, you have a tough choice to make: either you break them up into smaller entities, and encourage competition, or you merge them into even bigger ones, and create even more concentration. American government is encouraging big firms like Citi group and Bank of America to take over weak financial institutions. China made a similar mistake in 1980s, but changed its policy in 1990s. You may soon find out that the larger the firm, the more difficult it is to reform. China's new competitiveness is mainly based on open competition rather than on concentration.

The fourth misleading theory is the Black-Scholes model in option pricing theory. Some people blame rocket scientists for the meltdown of derivative market, but few realize that the problem lies in the equilibrium theory of option pricing. We found out in 2005 that the

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<sup>8</sup> Temin, Peter. *Lessons from the Great Depression* (Lionel Robbins Lectures), MIT Press, MA: Cambridge (1991).

<sup>9</sup> Lucas, R. E. Jr. *Studies in Business-Cycle Theory*, Cambridge: MIT Press (1981).

<sup>10</sup> Chen, P. "Microfoundations of Macroeconomic Fluctuations and the Laws of Probability Theory: the Principle of Large Numbers vs. Rational Expectations Arbitrage," *Journal of Economic Behavior & Organization*, **49**, 327-344 (2002).

Brownian motion model, the base model in derivative trading, is explosive in nature<sup>11</sup>. The collapse of the derivative markets is not just driven by greed; it also resulted from poor models of the stock market. When you don't know how to evaluate the price of derivatives by empirical data, you had to count on the so-called efficient market model. However, these equilibrium models completely ignored market instability generated by collective behavior<sup>12</sup>.

The fifth misleading theory is the Coase theory of transaction costs, which cast even more doubt on market regulation<sup>13</sup>. We found that it ignored the issue of economic complexity<sup>14</sup>.

Combined, these five theories in mainstream economics created an illusion of self-stabilizing market, so that policy makers are ill prepared for the situation we have today. And yet, since the 1980s we have empirical and analytical support, not just philosophical arguments, to prove they are erroneous<sup>15</sup>. I would specifically mention the “principle of large numbers” used by Schrödinger, the founder of quantum mechanics, applied to micro-macro relation in biological structure, but ignored by economists like Lucas. It says the magnitude of aggregate fluctuations is in the order of  $\frac{1}{\sqrt{N}}$  for a system with N independent elements. Let's

say we have 1,000 banks and merge them in 10 big ones. You think that a bigger bank is more efficient or more stable? On the contrary: its aggregate fluctuation will amplify by 10 times. That's exactly what has been going on in the United States for the last 20 years, ever since financial deregulation stimulated a wave of merger and acquisitions.

I would also add that Charles Kindleberger's theory about the Great Depression is much more relevant to understand our situation than Milton Friedman's. Friedman believed that the Great Depression was triggered by one simple event: the death of New York Fed Governor Mr. Strong, which left a vacuum in the Fed's monetary policy. Charles Kindelberger pointed

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<sup>11</sup> Chen, P. “Evolutionary Economic Dynamics: Persistent Business Cycles, Disruptive Technology, and the Trade-Off between Stability and Complexity,” in Kurt Dopfer ed., *The Evolutionary Foundations of Economics*, Chapter 15, pp.472-505, Cambridge University Press, Cambridge (2005).

<sup>12</sup> Zeng, W. and P. Chen, “Volatility Smile, Relative Deviation, and Trading Strategy – A General Diffusion Model for Stock Price Movements Based on Nonlinear Birth-Death Process,” *Economic Journal Quarterly* (in Chinese), 7(4), 1415–1436 (2008), Peking University.

<sup>13</sup> Coase, Ronald H. “Payola in Radio and Television Broadcasting,” *Journal of Law and Economics*, 22(2), 269-328 (1979) ; Coase, Ronald H. *The Firm, the Market, and the Law*, University of Chicago Press, Chicago (1988).

<sup>14</sup> Chen, P. “Complexity of Transaction Costs and Evolution of Corporate Governance,” *Kyoto Economic Review*, 76(2), 139–153 (2007).

<sup>15</sup> Chen, P. “Equilibrium Illusion, Economic Complexity, and Evolutionary Foundation of Economic Analysis,” *Evolutionary and Institutional Economics Review*, 5(1), 81-127 (2008).

out that the world depression was caused by the collapse of a globalization based upon Britain leadership<sup>16</sup>. The three world powers after World War I – the United Kingdom, the United States, and France – were kicking ball among them and eventually provoked a collapse of the whole global system. We have a similar situation today, since the United States has lost its world leadership by excessive military expansion and excessive consumption. The world order has changed since 1980s: unless the United States, Europe, and China coordinate their efforts, we may face another world great depression.

Before discussing policy issues, we need to address the problem at hand from a global perspective. There are three questions to be asked:

First, what vision do we have of the American economy? Should we treat it as a closed system or as an open system? People used to think that only small countries need to ask this question, not the United States. But we can no longer ignore the interaction between the American economy and globalization.

Second, what is the international background to current financial crisis? Bernanke once suggested that American imbalance was rooted not in excessive consumption but in China's excess saving. I have a different view on this. The U.S. is much more powerful than China and the other Asian economies combined. Its financial power is still dominating international financial order. But what we see today is the result of President Reagan's contradictory economic policy in the 1980s: on the one hand, Reagan launched a tremendous military expansion; on the other, he made substantial tax cut and deregulated financial sector. The budget deficit that resulted was financing by growing public debt, which drove up both interest rates and the dollar and ruined the competitiveness of American manufacturing industry. As we know, the response to this was outsourcing, first to Japan and East Asia. The U.S. push Japanese to appreciate the yen, but that did not solve its trade deficit. Instead, it threw the manufacturing industry out from Japan and the "Asia tigers" into mainland China. Ever since, the U.S. keeps putting pressure on the Chinese government to appreciate its currency, but this time with no success.

The fundamental problem of the U.S. is that the financial sector has replaced the industrial sector in the "driving seat" of its economy. You cannot cure that disease by playing currency games or monetary games. Since the 1970s, no matter how exchange rate fluctuates, America

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<sup>16</sup> Kindleberger, C. P. *The World in Depression, 1929-1939*, Revised and enlarged edition, University of California Press (1986).

has a persistent trade deficit, while Germany and Japan have persistent trade surplus. It has nothing to do with exchange rates, but with American foreign policy. The United States have strong technology and abundant resources, but you continue to waste immense resources on military spending and financial speculation. What you need is a fundamental change in your foreign policy.

As for China, of course it suffered from the American foreign policy, but it has also benefited from it. Let me explain this.

During the Asia financial crisis, China did follow the American recommendation not to devalue its currency. Both before and during that crisis, mainstream American economists had one single policy recommendation to offer Latin America, Hong Kong, and China: dollarization, dollarization, and dollarization!! Remember that most Chinese reformers tried very hard to learn market economy from American textbook. They all considered the American Treasury Bill as a risk free investment compared to risky stocks and corporate bonds. So the Chinese government decided to target China's exchange rate to dollar and buy American Treasury bills. He thought that this was the best way to preserve the value of Chinese savings, or at least a much better way than to invest them in China's own enterprises. However, once China had chosen that road, American treasure bills turned out to be a trap. And in that situation, China has fewer options than Japan and European countries in the currency game, because of the asymmetric policy adopted by the United States. When the dollar goes down, Japanese or Europeans can buy American assets, but Chinese cannot, blocked as it is by the American security policy. At the same time, American banks and firms are invited to be strategic partners for China's state-own firms. Do you think China is blind and will sell their security interests to American firms?

Still, I would claim that this asymmetric trade policy has in fact done more good to China than to the United States. It did not resolve the American deficit problem, but it did accelerate the economic integration of East Asia. How did that happen? If world trade was free and based on rules of symmetry, China will be buying much more American technology than it actually does. But since the United States does not allow exporting high-tech products to China, China can only import second-hand technology. However, the U.S. does export high-tech to Japan and other East Asian countries, and this difference in trade policy has created arbitrage opportunity for these countries. It is not by accident that since 1970s, China had persistent trade deficit with Japan, then with Korea and other Southeast Asian countries. In fact, these deficits are quite comparable to China's trade surplus with the United States. And

what does it mean? It means that the U.S. is given away a huge trade opportunity to China's neighbors.

But what are the actual results of this policy? After the Asian financial crisis, all these countries realized that China is a more reliable partner in international trade, since China did not devalue its currency in spite of crisis. They also realized that their economies greatly benefited from China's rapid growth. So, geopolitically speaking, these countries, once China's opponents, become its close friends and their economies became more and more integrated into the Chinese economy.

East Asia is today the third largest economic zone in the world, with stable exchange rates to dollar, which also helps to stabilize American dollar. If U.S. policy makers realize that this is a base for closer economic cooperation, I would say that our future is bright. But if they consider it as a challenge rather than an opportunity, it would signal troubling future ahead.

This is the geopolitical heritage of the Reagan revolution and the American imbalance. If the U.S. was able to maintain its financial power in spite of increasing deficits, it was because China's exchange rate policy was targeting the dollar as an anchor. So far, both the Chinese and Americans are happy about the past but worry about the future. Unlike their Asian partners, China did not get any credit from American policy makers; instead, they only get China bashing. American leaders should focus on winning people's trust more than financial profits.

Now my third question, the one about China's high savings rate. Why do the poor countries end up subsidizing the rich ones? My observation is that China's high saving is resulted in part from the monopolistic power of multi-national companies that dominate China's domestic market. More than half of China's exports come from foreign firms, and most export channels were controlled by firms like Wal-Mart. Chinese companies and Chinese government have no pricing power in international market. For any Chinese product sold in the United States, Chinese companies get 2 to 5 percent of the sale value. As the result China's domestic market is more open and more competitive than the United States, Japan, or any other country in Asia and Europe. If we look for instance at China's car industry, we see that the market is not dominated by the "big three" as in the U.S.; you have more than a hundred companies competing with each other. Their profit margin are very thin compared to giant foreign - in order to survive, they have to upgrade their technology by self-financed investment, and this gives very high saving rate in Chinese firms.

Since China launched its reforms some 30 years ago, its annual growth rate in residential income and consumption has been about 7 and 6 percent. China's high saving puzzle cannot

be explained by household but firm behavior. If we look at the composition of China's immense bank deposits, residential deposits represent some 50%, more than 30% coming from firms. China's interest rate in the domestic market is also much higher than US Treasury Bills offer. In rural industry, grey interest rate may reach more than 30-40%. Clearly, strong market competition leads to strong competition in technology investment among all industries and firms. The Chinese government has very limited means to cool down investment boom since public investments are much smaller than the private ones; in addition, regional governments have strong incentives to promote manufacture industry.

I would guess that if the U.S. government adopts new anti-trust law and break up monopolistic firms as it did with AT&T, American industries would become more competitive and American households would behave more like Chinese households, investing in education and technology rather than big house and cars. In the end, you would see more balanced trade in the world market.

When Bernanke points out China's high saving rate, rather than the low saving rate in the U.S., as a possible source of financial instability, you have to reply by posing a more fundamental question about the driving force of growth. It should be consumption, or new technology or new industry. American policy for economic stimulus in developed countries is about encouraging consumption, especially about buying new houses and new cars. But can you recommend the same measures in the case of developing countries, saying "if spend more money you drive up your economy". You must consider this question from the point of view of the international competition. Let's say that one country spends most of the money on consumption, while another country spends more on innovation. Which country do you think will win the international competition? That's a very simple question, is it not? No matter what natural resources and property rights we take into account. You don't need a grand theory; common sense will do to answer this simple question.

Finally, I would like to discuss some policy issues. I have lived in the United States for 28 years now. I consider myself as a student of American and European civilization. I learned a great deal from Americans. But the time has come for Americans to ask themselves if they can learn something from others people, from the Europeans, from the Japanese, from the Chinese, or the Brazilians for American interests. I have some suggestions for American friends, based on China's experience in economic reform.

Mutual understanding is the most important thing in building mutual trust in international affairs. As I see it, China has no intention to even trying to Americans or Europeans as world



leaders. Chinese philosophy teaches that you lead when you are modest and you lag behind when you arrogant. China did achieve some prominent things during the Tang dynasty in the 7 and 8<sup>th</sup> centuries, and the Ming dynasty in the 15-16<sup>th</sup> century, and Chinese people understand very well that the rise and fall of great nations are historical events that are beyond the human will.

We all know China's economic problems are more severe than yours. So what lessons can we learn from China's reform?

I would suggest: growth first, reforms and redistribution second. If you have a shrinking economy, you have little space for institutional reform. A lot of people say we have to increase our pension funds, save this save that. Where will the money come from? You should identify growth opportunity first, then you may convince people to make sacrifice for a better future. Invest in infrastructure, green technology, and attract foreign investment are better measures than layoffs and bankruptcies.

Second, the United States must change its consumption-driven growth to export-led growth. What you can export? Exporting treasury bills or inflation is a destabilizing strategy both for the U.S. and for the world economy. But you can export, let's say, the all-electrical car of General Motors. In fact, some of your products may not sell well in the United States but very well in China and Asia, where the population density is much higher and traveling distance much shorter. And then, the most competitive U.S. firms are universities. Many Chinese families, including poor farmers, want to send their children to American universities to learn. You may accept more Chinese students by developing partnerships with Chinese provinces or cities. They may invest in American education system and infrastructure, and you help China develop better education.

Third, cross-investments will develop mutual trust and culture exchange around the world. You might ask: why American needs Chinese investment? China asked the same question before. Financially speaking, in the 1980s and 1990s we did need foreign investment, but in the 21<sup>st</sup> century the situation is different because of our large domestic saving. However, China still accepts large foreign investment if it bring in new technology, new management, and new marketing channels. China's open door policy is open for long-term investors, not for short-term speculators. True, Americans have better technologies than the Chinese. However, a lot of patents and technologies controlled by large firms are rarely used. If Chinese firms are so eager to open business in the US, it is mainly to improve their business image, not so much for the profits. They consider American as a world stage. Operating in the U.S. market symbolizes a transition from local business to an international business. On the

other hand, if American companies open to Chinese investment, they may find new markets for existing technologies. To build a long-term partnership and change cold war thinking we need national governments acting as political insurance for mutual investment.

Forth, competition policy is more essential than financial consolidation. In almost every American crisis, you observe a wave of mergers and acquisitions leading to concentration, which is the root of current financial crisis. For example, since AIG is the largest insurance company; as soon as it gets into difficulties it enacts a chain reaction that affects the macroeconomic level. I suggest that you break monopoly firms into smaller competing firms, so that you can diversify risk and encourage innovation. If you let Citigroup take over Merrill Lynch and Bank of America take over another big bank, then you'll see more troubles ahead. I learn this lesson from transition economies: Russian privatized its state monopolies without breaking them into competing companies; while China split state monopolies without privatizing them. You can see the result today.

Fifth, flexible exchange rates since are inherently unstable for globalization. Fixed or relatively stable exchange rates are essential for effective fiscal policy and international division of labor. Uncoordinated monetary policies conducted by the United States, the European Union, and Asian countries may trigger a wave of competitive devaluation, which will hurt most and destabilize countries without enough foreign reserves. The new international financial order can only be reached if major world economies build a common system of stable exchange rates and coordinate their macroeconomic and trade policies. Then other countries could create a basket of major currencies to achieve a relatively stable exchange rate. In other words, we need a new Britton Woods System, not based on a single currency, the dollar. This would be done only if the big three financial powers (the United States, Europe, and China), create mutual trust and a long-term partnership, without any of them acting as a self-appointed world police or judge.

In other words, we need a new vision of the world order, a vision that will help us to build sustainable globalization. Without this vision, we may see three regional markets emerge and divide the world between them.