

IMF MACRO CONFERENCE  
SHENG TRANSCRIPT

I'm the least qualified to talk about the subject this morning, because I'm the least academically qualified amongst all my peers—my teachers, on my left-hand side in front of all of you. But I thought I could be slightly controversial, and that's why I've been invited. My subject is this: Is the Chinese growth model replicable? I'm going to throw some ideas out there for thinking—and although I'll refer to the Chinese growth model, I'm really talking about the Asian growth model more generally.

The views that I express have to be understood as my personal ones as an academic and should not be associated with any official organization that I'm affiliated with.

I think you've heard brilliant ideas from Dani Rodrik and Paul Romer, and I'm sure Mike Spence will chip in on this area. But the real issue is that the global financial crisis has challenged our thinking about growth, about equity distribution, industrial policy, and the role of the markets. What are the key lessons going forward? Going forward—some of you may have heard this before—we're facing not just a financial crisis, we're actually facing a global climate change crisis. One is immediate, the other one is longer term, but both have the same origin: excess consumption financed by excess leverage.

The real problem is that, as Paul said, we've always had crises every 10 years. If we go back 20 years ago, when we had the failure of the Soviet system, the problem with the Soviet system was that there was no hard budget constraint. My contention is that the present financial capital market has no hard budget constraint. The banking system can leverage itself to whatever size possible and then, when banks fail, the losses are underwritten by the state. So there are similarities regarding this problem.

Regarding “too big to fail”: When does finance leverage itself in such a way that it moves into a predatory algorithm? As Adair Turner said, it's a question for which we don't have academic answers. We don't even have a practical answer to this hard budget constraint issue. But this is not a regulatory issue. All the regulatory reforms can't deal with this problem. This is a political problem that we haven't particularly solved.

The real issue before us is, if we recognize that we're facing a global climate change problem, that if all developing countries live the lifestyle of the advanced countries, there are no natural resources left. The average Chinese and Indian cannot live the average American

way of life without destroying our natural resources. And it's not just the Chinese, it's the Indians and all the emerging markets, five billion people. If they live the average life of the average American and consume the same natural resources per capita, we have a serious global crisis on our hands.

Changing lifestyles is a major problem that we need to address. Emerging markets also need to shift from an export-driven model of growth to domestic consumption-led growth. These are the critical issues.

Now, we've moved the growth models from the best policies, the best ideals, what's good and what's bad, to a more practical standard, namely what works. Dani has made this point very well. We've also seen the mistakes of monoculture. If we have one standard for the whole world, and then if that standard is wrong, the whole world pays for it. Diversity is actually very important, differences of view are very important. The reason why I'm standing here making what are probably, to you, very controversial statements is that I think that diversity needs to be heard.

What's the crucial problem as I see it? The crucial problem is what Joe Stiglitz has always pointed out in financial markets: information asymmetry and agency problems.

One problem that we've discovered is that fragmented academic disciplines and fragmented bureaucratic structures are preventing us from seeing a systemic problem, and this crisis is a systemic problem. If we're seeing only part of the problem, and the part we are seeing is somebody else's problem -- we have global markets but national regulations, national policies that doesn't add up at the global level. Right? Everybody says it's everybody else's problem, but it's actually a systemic issue.

Another problem is, if finance—the agent of growth and development, the agent of fiduciary trust—becomes five times larger (in assets) than global GDP then it's no longer an agent, it's a principal. Proprietary trading is about finance acting on its own behalf, not on behalf of the real sector.

We need to rethink all this and need to understand it, and then ask, was the Asian growth model wrong? Of course, we had an Asian crisis and the model needed to be modified. But if you think through it, the Asian model appears to be more successful though less elegant in its ability to explain itself. Essentially, what Asia has done is to move after the Asian crisis to become a self-insured adaptive-growth supply-chain model. This was

essentially invented by our Japanese friends because they basically copied the Henry Ford assembly line, added just in time inventory management, expanded the supply chain to include clusters of suppliers, and then extended that supply chain to the Four Dragons and then the Four Tigers. Today that supply chain is in China, India, Vietnam, et cetera. That supply chain has become global.

If you think about it, supply chains are networks, and financial markets are networks, so we're dealing with a global network system in which there are fragmented national laws and national thinking. Growth is about adapting global experience and practices to local conditions. That's innovation, right? The concept of the global supply chain now is very well accepted in the business community, but it is very rarely used in the ideas of economists. If you listen to what the World Bank is doing, though, think about cities and geographical space, think about the Coasian reduction of transactions costs. All of these are essentially about networks and supply chains.

Here we come to the Chinese model and the replicability question. Barry Naughton, who is probably the best Western thinker about Chinese state enterprises and growth, has written in the American Economic Review about this singularity versus replicability issue. Essentially, he says China has so many unique features, it's not replicable. But there are some process innovations in China that can provide many lessons about the nature of institutions and interaction between institutions in the development process.

I think his intuition is right, but actually the Chinese growth model is about the process of growth. The Washington consensus's problem was that it confused an ideal with the journey of getting to that ideal. That journey has huge information asymmetry. How can you form rules, as Paul Romer says, when nobody knows what that rule is? If we've gone into a path where nobody understands what this unknown unknown is all about, can you have rules? Can you formulate the proper rules if you don't understand what is going on? The only way you can proceed is to move very pragmatically along a search and experiment basis. It's all about networks, markets, and adaptive systems.

The Western theory of complex adaptive systems is a very good way of explaining Chinese and Asian growth. I'm not using your policies -- capital adequacy, capital models, export models, et cetera -- but instead it's the idea that you think about the growth model as an adaptive system within a global system. And the Chinese actually work on this on a very

pragmatic basis.

A lot of you may know, when you read the common books on China on growth and think about them—*Crossing the River by Feeling the Stones*, *Black Cat/White Cat*—they sound as if the Chinese model is idiosyncratic and not replicable. The real issue is that in a common law system, you actually have very micro rules decided by the magistrates and the judges until it comes up to a common law principle. In China, it's very much administrative, but it also accumulates into major policy decisions (at the highest level). It's actually the building of the national supply chain and the linkages with the global supply chain, with what I call *orchestration*, that matters. I'm going to go into this idea of orchestration later.

If you listen to Tom Peters on the subject of competition, you will know that you have what you call tight and loose policies. Tight means you have a very clear vision of where you want to go, and in China that was the "Four Modernizations," which were launched in 1979 by Deng Xiaoping: modernize agriculture, modernize industry, modernize defense, modernize science and technology. That's very clear. But at the lower level, you need to ask, how does the man in the street know what these modernizations are all about? They've never done this before. So you have very tight rules, decision rules. What decision rules? "Never mind whether it's a black cat or a white cat, as long as it catches mice." It's not theory--it's about practice. As long as it works, do it. It's about experimentation, about open-mindedness.

The middle stage is the complex part. That's when you need to be loose. You don't care whether the supply chain is foreign owned, locally owned, state owned, or whatever. As long as it works, you follow that supply chain. And the most important issue is that they didn't invent this. The Chinese copied it from the Japanese, the Japanese copied the idea from the Americans, and the Koreans and Taiwanese have copied it from the Japanese. Everybody's learning and adapting. The competition within China is between cities and it is about adapting these supply chains.

The Chinese innovation in this process is that the Chinese suddenly realized that the supply chain may be the private market sector, but the government is the one that's sitting in the middle. The government's processes could either add transactions costs to supply chain inefficiency or they could facilitate the chain by implementing the rules, the infrastructure, the telecommunications and so on. Actually, that evolved within the Chinese system into the

way you integrate Chinese small and medium enterprises (SMEs) and large clusters of multinational corporations into the global supply chain. The growth strategy becomes one of picking your supply chain. If your supply chain is dead or it's a closed supply chain, you don't grow it. But if you pick the winner, you grow with it.

It's this very pragmatic, adaptive system that is crucial. What has happened in China, partly because of scale, is that China has evolved special market cities whereby the state reduces the transactions costs of SMEs and enables them to latch on to the multinational supply chain. Competition today is no longer one of company versus company or nation versus nation. It is about supply chain versus supply chain, and that supply chain is cross-national, it's not just Chinese.

When people talk about China, they tend to forget that a large part of that supply chain is actually owned by foreigners. It's multinational. The challenge for the supply chain, based upon what my good friends at Li and Fung have adapted, working with Wal-Mart and all the others, is that it requires orchestration.

The word "orchestration" is perfect, because that's the difference between the current free-market model versus what you would have called the authoritarian model. With a free-market model, which says that in an orchestra every single player is free to play whatever he plays, can you have good music? You won't have good music. You won't have good music because you need a conductor, right? Now, if the conductor is too strong and the musicians don't like it, you can also get very bad music. Actually, it requires an echo, that is, feedback mechanisms, between the conductor and the player.

Now, the current regulatory system of free markets assumes this: If every single player is safe, or if every single player is a very good player, you will get good music. But it's not true. It's not inevitable. It's not preordained. It requires a very good relationship between the conductor and the orchestra, and a context in which the orchestra can move to make good music. How that music comes out depends partly upon the musicians, partly upon the conductor. That's the relationship between the supply chain and the state, whereby the state learns how to play with very good feedback mechanisms to gauge whether the system is working or not, in order to create that growth model.

Basically, what I'm saying is that the model requires an interactive feedback mechanism between the conductor or the state and the market players. It's not an either/or

situation, where either the free market says “everything must be market-based” and you have minimal government or else it’s a total state-controlled situation. It is about the proper feedback mechanisms between the state and the market, including the global market, to ensure that the overall supply chain works very, very well.

What are some of the problems? The conclusion, in my view, is actually that growth as a process is replicable. There’s no such thing as an ideal bunch of policies that are optimal. We’re all crossing our rivers by feeling the stones, and the stones in each river are very different. The distance between my river and the shore is also very different from what it is in someone else’s river, so we need to use complex adaptive systems in thinking about this. If you think along this line, suddenly you realize there is no difference between macro and micro. The macro depends upon the micro. The micro depends upon the macro. What is aggregate micro does not add up to a macro. We need to understand that interactive action between the two.

I hope it’s useful to think about this. Don’t presume that the Chinese system is unique unto itself. There are many processes which we can learn from. I’m not saying that it’s applicable to everybody, because the context could be very different, but hopefully this will be a very useful conceptual process to think about how growth goes.

Thank you very much indeed.