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# China and the Global Economy: Challenges, Opportunities, Responsibilities<sup>1</sup>

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China's rapid economic growth has had great impact on the global economy, but this is not a 'zero-sum' game as some worry. Rather, China's success can contribute to a more prosperous and stable global economy. China's accession to the WTO creates opportunities which include access to international markets, capital and technology. But globalization and China's move towards a market economy also entail a need for changes, such as enhancing the social safety net, promoting domestic demand, and changing the role of banks and financial institutions.

As China assumes increasing importance in the global economy, it will have to take on new responsibilities. China will have to play a central role in reforming the global financial and trading systems. China, already an important role model for the developing world, will have to work hard to ensure that the evolving global finance and trading systems are fair to these countries and help promote their development. And China will also have to assume new responsibilities towards the global environment – she will have to adopt stronger measures for protecting the environment and conserving scarce natural resources.

### **Introduction: we live in a positive-sum World**

I would like to first describe the new landscape in the global economy. Then I will talk about several aspects of policies related to enhancing China's growth, and to its entry into the global economy. I will conclude with a brief discussion of one of the central problems facing the international community – the global environment – and China's growing responsibilities.

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I want to begin by talking about some aspects of the current global economy. It's important to understand these, to appreciate some of the major changes that are occurring.

China has succeeded in generating rapid growth in the last four years, even when other parts of the world only had moderate growth. It has become one of the engines of growth for much of the rest of the world, and especially for Asia. The impact of China on the world economy has been enormous. For instance, when I was in Athens last summer, talking to a group in the shipping industry, people were jubilant about China's growth because as a result of China's demand for steel and other commodity imports, shipping prices had increased six fold. They had never had such an era of prosperity. They were hoping I would tell them that this would continue.

China has had large impacts on many other prices as well. Oil prices today are over 50 dollars a barrel and China no doubt plays a major role in that. It is not so much that supply has been reduced. In fact, supply has remained more or less steady. But China has increased its demand, resulting in an imbalance that has led to record prices.

There is a basic premise that is very important to understand. It is that we live in a *positive-sum world* where China's growth and success can contribute to a more prosperous and stable global economy. I emphasize this because in many parts of the world, there is a zero-sum mentality: it is simply assumed that China is growing at the expense of other countries. That's the mentality that arises when many people in the United States or in Europe see their jobs disappear. They see jobs being created in China while their jobs are being lost. They have regrettably come to the conclusion that it's a zero-sum world. But their jobs are being lost in part because there is bad macroeconomic management in the United States, Europe and elsewhere. It's not a problem created by China. If these countries' macroeconomic policies were well designed and implemented, then China's economic growth would unambiguously contribute to their well-being. While I emphasize the positive-sum nature of China's growth, I want to emphasize that there is nevertheless going to be very serious strain on the advanced industrial countries, and on many of the developing countries as well.

### The challenge for the US and other nations

China's development and integration in the global economy is putting particular strain on unskilled workers in the United States and in other advanced industrial countries. Consider what would happen if the US and Europe added an extra five hundred million unskilled workers to their labour forces. That would put enormous downward pressure on wages. If you have minimum wage law to prevent this adjustment, you'll have high levels of unemployment. One or the other would inevitably occur.

wage law

There is a long-standing economic theory that trading goods is a substitute for movements in factors. In fact, my teacher Paul Samuelson proved a theorem called the Factor Price Equalization Theorem, which says that when there is free trade, then factor prices will get equalized. That's a really scary thought to a lot of people in America, because it means wages of unskilled workers in America would be the same as those in China. There's another economic theorem called the Samuelson-Stolper Theorem. It says that even when factor prices are not fully equalized, there's a tendency to move in that direction.

This is now standard and accepted theory. Yet these predictions have not come true – so far. Economists have been a little bit puzzled over why there hasn't been more wage equalization than there has been. There are a number of reasons. One of them is that an assumption in the standard theory, that the technology is the same in all the countries, is not true. Technologies in the advanced industries are not the same as technologies in the less developed countries.

Globalization has meant, however, that technologies now do move quickly around the world. Multinational companies have been very effective in transferring technologies from one country to another.

#### **Strains on the American and European economies**

We used to emphasize 50 years ago that the distinction between developed and less developed countries was a disparity of capital. The objective of the World Bank was to close that disparity. But disparities of knowledge and technology are now equally recognized. These disparities have become enormously reduced in the last 10 to 20 years, because of globalization. This means that the predictions of the standard theory are more likely to be evidenced in the future, as China and India are integrated into the global economies. Consistent with this, while the US GDP overall has grown over the last five years, the real income of the median (typical) American household has actually fallen by 1500 dollars.

The resulting downward pressures on wages and increasing inequalities will impose enormous strains on advanced industrial countries; and all the more so because the increased pace of change provides little time for the developed countries to adjust. The advanced industrial countries obviously will have to undertake policies to help their workers adjust. If they don't, there will be enormous protectionist pressures.

Yet the kinds of policies that the United States has embarked on in the last five years are precisely the wrong policies, because those policies are increasing the already growing inequalities and reducing the role of the government in helping adjustment. If our diagnosis is correct, the US should be trying to increase the progressivity of the tax system and the quality of the safety net. Yet both the quality of the safety net and the progressivity of the tax system have been reduced: The US has become less well prepared for these strains rather than more prepared.

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### **Strains on the global economy**

Another important aspect of the current global economy is that America's fiscal and trade deficits are imposing enormous drains on global savings. The US is using up a very large fraction of total global savings. It's an irony that the world's richest country (the US), is borrowing from countries, most of which are much poorer, at a rate of more than 2 billion dollars a day. Some of these imbalances are giving rise to exchange rate stability.

The trade deficit largely is a result of the fiscal deficit, but the Bush Administration clearly does not want to take the blame. Just as Reagan sought to blame its deficits on Japan, Bush seeks to blame its deficits on China, and on its foreign exchange policy. This debate over who is to blame for the deficits – and what is the right foreign exchange policy – has become one of the central issues in international economic policy.

### **The new geopolitics following China's accession to the WTO**

I want to turn now to what I might call the new geo-politics of trade and finance.

China's entry into the WTO is extremely important both for China and for the world. Let me first talk about the implications for China, and then turn to the new role in global political leadership that China must play. One of the things that WTO accession does is give China greater access to the world's markets. I described earlier some of the strains that will take place in the global economy as a result of China's integration into the global economy. The increase in income inequality and the rise in unemployment almost surely will give rise to protectionism, or at least to protectionist sentiment.

The good news is that the Uruguay Round created the beginning of an international rule of law; and even if the 'rule of law' is unfair, some rule of law is better than no rule of law. Without a rule of law, only economic power matters. With a rule of law, America's ability to respond to the strains imposed by China (and India) through increased protectionism is restrained. We have already seen this in the steel sector, where following the East Asia crisis, there were marked increases in imports. The US domestic steel industry tried to deal with the problem by imposing tariffs on steel. In 2003, the WTO ruled that the US' steps were not allowed under WTO rules.

China's entry into the WTO is important for another reason. It puts new demands on China, and China will have to learn how to respond to these demands if it's going to maintain robust growth with equity.

### **Managing China's integration into the global economy**

The foremost examples of sectors in which adjustments will have to occur are: agriculture and financial services. The agriculture problem today is a

reflection of, among other things, the inequity and unfairness of the last round of WTO trade negotiations. The Uruguay Round left in place a legacy of large agricultural subsidies. After the Uruguay Round was completed in 1994, there was an understanding that these agricultural subsidies should be cut back. But there was some fine print in the agreement that most of the developing countries did not fully appreciate that talked about non-trade distorting subsidies. A non-trade distorting subsidy is supposedly a subsidy that does not distort trade. But almost all subsidies – and not just export subsidies – do in fact distort trade. A production subsidy increases output, and unless consumption is increased commensurately, that means exports will increase. Today, the US claims that most of its subsidies are not trade distorting. But the US has not come up with such a list, though trade officials have *claimed* to come up with one. Thus, the United States, rather than cutting back its subsidies in the way that was promised, actually doubled the subsidies to a hundred and ninety billion dollars over 10 years. The US claimed that these were all legal within the WTO framework because they were all non-trade-distorting. Brazil got sufficiently annoyed that it went to the WTO and challenged the cotton subsidies. With subsidies of 4 billion dollars a year going to 25 thousand farmers in the US, the price of cotton fell dramatically, and some 10 million Sub-Saharan farmers became worse off. The same is true of a whole range of agricultural goods. The WTO came down on the side of Brazil; and though the U.S. is appealing, it is clear that Brazil *should* prevail.

China now has to compete against these agricultural subsidies provided by the United States and the EU. China recognizes that one of its major problems is the disparity of income between the rural and urban sectors, and that accession to the WTO will place downward pressure on the one part of the society that has already been lagging behind. And therefore it's going to exacerbate the problems of the poorest part of the Chinese society. So it's essential to do something about agriculture so as to maintain growth with equity. Mechanisms for finding assistance within the WTO framework will need to be explored. There would be a high cost to direct subsidies to undo the damage; for the money spent on agricultural subsidies could have been spent on growth promoting investments, or even in strengthening more broadly social services, like education and health. One of the reasons for not appreciating the exchange rate (as the U.S. is pressuring China to do) is that doing so would lead to lower prices for agricultural goods imported into China, hurting those in the rural sector even more.

A well functioning financial sector is important, because it is the brain of the economy. Therefore, it represents perhaps even more difficult policy challenges than agriculture. The problem is two-fold. First, the financial sector in China is not efficient. In a market economy, banks perform the role of allocating investment. A loan applicant goes to the bank, and the lender decides whether to give you access to credit. But in a pre-market or

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socialist economy, such as in China, banks do not perform that role. Instead, central government planners make the decisions about which projects will be undertaken. All the bank does is act as a treasurer and write cheques. It isn't doing the job of screening, monitoring or selecting projects and therefore, doesn't perform the classic role of a bank in a market economy. So an essential part of the transition to a market economy is the transformation of these institutions. This takes time and can be an arduous process. What makes it more difficult is that there is a legacy of liabilities that banks took upon themselves at a time when they were not assigned the task of monitoring or selecting on the basis of credit worthiness. So it is quite a challenge to prepare the financial system of China to compete with foreign banks and to create a level playing field. It is important for the government to help banks restructure their inherited assets and liabilities, so that, going forward, they can have a fresh start.

Some have suggested that while the WTO has presented a problem – competition from international banks will overwhelm China's domestic banks unless something is done – they also present the answer. Simply let the international banks take over. But typically, foreign banks do not provide broad-based finance to the economy. Many economies – such as Argentina and Mexico – have found that foreign banks are more likely and more anxious to lend to the likes of Coca Cola and IBM and large national firms. But they are not well equipped to screen or monitor small- and medium-sized domestic enterprises. So one of the consequences of financial market liberalisation – the entry of international banking institutions – is that credit dries up for smaller businesses. Thus, financial market liberalisation frequently has a negative rather than positive effect for many enterprises.

This particular concern played an important role in American economic history. In the 19<sup>th</sup> century, the US government did not allow banks to operate in more than one state. There was a fear that if national banks were created, all the money would flow out of the Midwest and the newly developing parts of the country to the more established money centres, such as New York. This restriction was only eliminated in 1995. But then, only a few years later, globalization (in the form of a financial services agreement within the WTO) required that everybody open up their banks.

How should a country like China respond to this concern about capital flows? One way is by enacting a general version of a community re-investment act. For example, a US law requires that banks lend a certain fraction of their portfolio in under-served communities – parts of the country where there's an insufficient supply of capital. The notion is that all banks – whether Chinese or foreign – would have to lend a certain percentage of its loan portfolio to small and medium sized enterprises, and this would help alleviate concerns about less capital for smaller businesses.

There are a number of other things that have to be done to strengthen domestic financial markets to help Chinese firms meet the new competi-

tion and to ensure that the adverse effects of liberalization are mitigated. These include creating broad base mortgage markets, facilitating consumer loans, and strengthening the domestic insurance industry. Foreign banks should be required to open up branches in underserved parts of the country – not just to provide banking services in those cities where there is already an ample supply. These reforms can be an important stimulus of future growth and help shift China away from reliance on exports so domestic demand would play a more important role.

In short, the opening up of the financial services sector under the WTO framework could be an enormous opportunity for China, but unless it responds in a fairly comprehensive way, it could also impose an enormous cost on the Chinese economy.

#### **New opportunities**

China's integration into the global economy has already provided China with access to new markets and to global technology. China has benefited enormously also from foreign direct investment. But the rules of the game provide not only greater access into China, but also reciprocal access for China. This is important because China's growth has been based on access to international markets, capital inflows and technology. One way of ensuring continued access to markets, resources and technology is by making investment elsewhere in the world.

China is now making some overtures in this direction: for instance, through China's investment in energy. One way of thinking about this issue is the following. Market economies are marked by risk. The market for one's exports may suddenly disappear (as many textile exporters outside of China are discovering – they simply can't compete with China), or the price of inputs, like oil, may soar. China was not blessed with a large endowment of gas or oil. A country with gas or oil will be less affected by an increase in the price of energy; with enough oil, the country will even be better off. But globalization has changed risk in a fundamental way, because a nation can now hedge risk. For instance, China is an importer of oil and natural resources. With its enormous accumulated foreign exchange reserves, China can hedge some of those risks by making appropriate investments in gas and oil reserves or stocks. It can also use some of its wealth to gain access to technology and to obtain distribution channels for its products.

#### **China's role in reforming the international reserve system**

China's huge savings has now put it in a critical position in the workings of the global financial system. The global financial system is supposed to help stabilize the economy, but in fact it has not been working well. There have been an enormous number of financial crises over the last 30 years. More than 130 countries have experienced various crises around the world.

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Moreover, global financial markets are very peculiar. Standard theory says that the developed countries, should bear the risk of global investment but that is not often the way it works. More frequently, less-developed countries bear the risk.

A well functioning global financial system moves risk from the poor to the rich while money flows from the rich to the poor. In fact, just the opposite is currently happening, with the United States borrowing \$2 billion a day.

While a full diagnosis of what is wrong with the global financial system is beyond the scope of this lecture, I want to draw attention to one aspect – the global reserve system. Much of what is wrong with the global financial system can be related to the global reserve system – the system in which countries hold dollars (or gold, or some other safe asset) as a reserve, as backing for their currency and as a backstop against a ‘rainy day.’

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Countries hold reserves because of enormous utility associated with it. Exchange rates, interest rates, demand for goods and property prices are going up and down all the time. Reserves provide a buffer against these kinds of volatility.

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As China's reserves have increased – to more than \$700 billion – China has become a central player in the global reserve system. How it manages its reserves can have enormous effects on exchange rates and global financial stability.

There is a growing dissatisfaction with the global reserves system in the developing countries in Asia, particularly. Countries are told that, if they wish to avoid the kinds of crises that East Asia experienced in the late 1990s, they have to maintain reserves at least equal to short-term, foreign-denominated liabilities. Think about what this means from the perspective of a less-developed country. It must put aside large amounts of money in reserves. A less-developed country typically holds those reserves in the form of US treasury bills. Holding a US treasury bill means that the poor developing country is lending money to the United States. The less developed country lends money to the United States at an interest rate of roughly two and a half percent now, though it was one percent and it may go up to three, or three-and-a-half percent. Meanwhile these countries are also often borrowing large sums from the United States. But an American bank does not lend at 2%. Instead it charges something like 18%. If a firm borrows an extra \$100 million from an American bank, the government must put aside in reserves \$100 million – money that could have been invested so much better in its own country. There is, in fact, no net flow of funds: the country is simultaneously borrowing and lending \$100 million to the US. But it borrows at 18% interest, and lends at 2, 3, or 4%. That's not a good deal for the developing country, but it is a good deal for the United States. We can think of the poor developing country as giving foreign aid to the United States. The United States had benefited from this system, but it has

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not worked well for developing countries. And with the magnitude of reserves held by the developing world growing into the trillions, the costs to the developing countries have increased commensurately.

During the winter of 2004–05, I traveled in a number of Southeast Asian countries. I met government officials who were unhappy with how their countries were treated during and after the Asian Financial Crisis of 1997. Their interests were not given sufficient weight during the Asian Financial Crisis. Particularly vexing was the US and IMF response to Japan's generous offer of a hundred billion dollars to help create the Asian Monetary Fund. Though the money would have been of enormous benefit to the countries in the region facing recessions, the US opposed it because of concern that the new fund would diminish American influence in Asia. The US decided to put America's interest over the well-being of East Asian countries and shot down the notion of the Asian Monetary Fund. And the result is the economic downturn in many of these Asian countries was much deeper and longer lasting than what otherwise would have been necessary.

In the US nobody remembers these little facts of history, but in the countries concerned people remember this and other aspects of the crisis with bitterness.

Thailand, Indonesia, Malaysia are recovering today. There is confidence in the future for their economies. But as they now reflect on past events and look into the future, they observe that they are now the world's savers, far more so than the US. Meanwhile, the US defends its profligate ways, its spending beyond its enormous means, boasting that it is the world's consumer of last resort. It argues that it has helped stimulate global demand for goods by consuming great amounts for many years. Therefore the world should thank them for that important favour.

But the game has changed. Now other countries may also be willing to become a consumer of last resort, if given the opportunity. They are wondering why they are giving money to the richest country in the world at low interest rates. Why not spend the money inside their own region, helping themselves and their neighbours grow?

Central banks around the world, and especially in Asia, have made an important discovery: they don't need dollars to back their currencies. What is important is a reserve of liquid assets. The basic principle of portfolio diversification would call for the diversification of the reserve assets. There has been indeed such a tendency. Recently, the Bank for International Settlement released data showing that there has been enormous movement out of dollars into other reserve currencies over the last three years. This trend is likely to continue. The increased perceived risk associated with the US dollar is likely to cause further diversification out of the dollar.

I am rather doubtful whether the current system can continue. Why? A reserve currency needs to be a good store of value, which is why inflation has always been viewed so negatively by central bankers. What we have

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come to recognize is that exchange rate fluctuations can be as bad as inflation. If for instance, for somebody in Europe the value of the dollar has gone down 50% in the last three years, from their perspective that's equivalent in effect to 50% inflation. In other words, their purchasing power in terms of what they can get in their own country, of the money they put in dollars is diminished. Increasingly, we see a negative dynamic: As confidence is eroded, investors move out of a currency, thereby weakening the currency further. Therefore the dollar is increasingly being perceived as not a good store of value.

Much of the problem is inherent in the structure of the current reserve system. Reserve currency countries remain increasingly in debt as other countries hold their currency. The ease of selling debt entices borrowing, but eventually the debt gets so large that a country's credibility is questioned.

This is a problem that has long been recognized. Keynes, for instance, wrote about it. But like many of the world's recognized problems, it is consistently ignored, because the problems only appear episodically. It is hard in the midst of a crisis to undertake deep systemic reforms; and once the crisis is past, the incentives for systemic reforms are also passed. Today, the optimists look at the recent turmoil as simply a passing phenomenon. Most people say how could the dollar be attacked? But some three decades ago – too far in the past for most of the young traders making money in the world's financial markets to remember – there was an attack on the Dollar. It can happen again.

Some optimists are similarly not worried by America's huge (trade and fiscal) deficits and China's burgeoning reserves. A theory of mutual interdependence has been put forward: America needs China to finance its huge deficits; but China needs America to purchase its goods. But there is a fundamental fallacy in this reasoning. China is, in effect, providing vendor finance; it is financing the purchase of its own goods. It could provide finance to help its own people increase their own consumption; it could provide finance to help its backward regions invest and grow more. It does not really need the US to buy its goods. But while China does not really need the US, it is not obvious that the US will easily find an alternative source of finance.

The bottom line is that countries are beginning to look for alternatives to the current global reserves system. There are now alternatives to the dollar. The euro is one alternative; if China should decide to liberalize its capital markets, the rmb could itself be another. But moving to a two-currency (or multiple currency) reserve system will not solve the problem. The problems of the global reserve system are deeper, and more fundamental reform is needed.

I've written about some of these alternatives, as has George Soros. China will have to play a central role in developing these systems. I emphasize

this because unless a new system is created, instability in the global financial system will continue.

Within Asia, there is recognition that there needs to be more Asian cooperation, and in the last few years, there have been several important initiatives, including the so-called Chiang Mai initiative, involving swapping of reserves. It should be seen as a partial movement away from the dollar reserve system. The Asian bond fund initiative is another laudable attempt. The countries of the region are determined not to let these initiatives be sabotaged in the way the US and the IMF did for the Asian Monetary Fund.

It is in China's interest – and within China's ability, given the magnitude of its reserves – to help in the search for alternatives, and to help create such a new global system. (In my forthcoming book, *Making Globalization Work*, I describe more fully how such an alternative would work.)

### China's new role in global leadership

Not long ago China was one of the least developed countries. Today China is effectively becoming a middle-income country. As China's economy has grown, so too has its potential role of leadership. It can have an enormous impact on the developing world – including helping reshape the global economic architecture in ways which are fairer to the developing countries.

First, China is an important role model. Its experience proves that a country can do better without Washington Consensus policies, both in terms of growth and poverty and other indicators of human well-being. There is, of course, a very active debate around the world about alternative strategies of growth. But the evidence is overwhelming on one side.

China's economic policies are remarkably different from the set of prescriptions that have been followed in East Asia. China should market that model because other countries can learn from it and enhance their own chances of success. Although not all policies that were successful in China can be directly applied to other developing countries, China's enormous success at least form the basis of a discussion.

Second, China has an important role in helping other developing countries get a fair trade agreement in future WTO development rounds. Developing countries are at a marked disadvantage in negotiating fair trade agreements. Trade negotiations cover dozens of issues, and the US and EU have dozens of negotiators for each problem. If, for instance, the US needs more negotiators, the pharmaceutical industry lends lobbyists. Most African countries will have one person at most, or even several countries will share one negotiator on all issues. The lone negotiator can't be equally well informed about all the issues. And many of the issues are highly technical. Therefore, developing countries are at a stark disadvantage. China (with Brazil and India) is in a unique position to mount an effective counter balance to the industrial countries and help get a fair trade agreement.

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With the failure of negotiations, the US has become engaged in a whole round of bilateral trade agreements. These agreements are generally good for the US but less so for the country it negotiates with. The US-Morocco free trade agreement is a perfect example. The outcome – that Moroccans have less access to generic drugs than people in the US, for example – reflects the balance of power. China can play an important role in international bargaining by offering other developing countries trade agreements on fair terms.

It is important for China to take a different approach than I think the US has taken toward these issues. The US position is: how can we use our economic muscle to exploit, to get out of these countries as much as we can. China must choose a different course.

The dynamics of America's trade negotiations are quite astounding. While improving relations is the ostensible reason for trade agreements, once a trade negotiator is bargaining, the memory of any motivation to improve relations disappears after a minute. The result – seen in Morocco – is street protests and rebuttals. So rather than making friends, the United States makes enemies.

China must recognize that when negotiating agreements with developing countries it needs to consider a broader interest than 'how can I exploit these weak developing countries.' In the long run, China will benefit – and so too will the world – if it approaches trade negotiations asking: 'What kind of an agreement is *fair* and will promote the development of the poorest countries of the world?'

Fair trade agreements are not a handout, but a 'hand-up'; they help a country increase its income by selling more. China should approach trade agreement negotiations with developing countries with a sense of helping some of the least developed countries in the world.

Trade theory says that the greatest gains from trade occur in North-South agreement – between advanced countries and less developed countries because there is greater disparity in resources, which gives more room for gains from trade. In practice this turns out not to be the case. Developing nations are gaining more from South-South agreements than from North-South ones. The reason is very simple: these are fairer agreements. By contrast, in the Uruguay Round, the last round of multilateral trade talks, resulted in the poorest 47 countries of the world becoming actually worse off by 1 to 2 percent of GDP. So they actually didn't get any gain; they were actually hurt. On this front, China can make a difference.

### **Environmental concerns and sustainable development**

China's growth in the coming years will require huge amounts of resources, with global effects. At the initial stages of growth, countries don't use a lot of resources, for they are just barely surviving. At a later stage of economic

development, a new economy emerges, when ideas are consumed and produced more than goods. Between these stages are periods when countries consume a lot of things like automobiles, roads, houses – and that's the stage that China has entered. This stage will entail the utilization of enormous physical resources. It will put enormous demand on the global environment. The implication is that if growth is to be sustainable, measures for conservation must be undertaken. And some of these measures can simultaneously help other developing countries.

There is increasing evidence of the effects of global warming: the melting of the polar ice cap, glacial retreat in the Himalayas, and similarly in the US. As we know, the Kyoto Protocol basically treated developing countries separately from industrial countries. They were not put under any specific obligations. One of the objections of the United States was that the developing countries were not participating. Therefore, it argued, it was a not a global agreement and could not solve the problem. Europe should be commended on this front for making a commitment to reduce greenhouse gas emission notwithstanding these concerns. Europe decided that it's more important to start doing something about global warming than to wait for a global agreement that was acceptable to all.

I think it would be an act of global citizenship for China to follow the EU in unilaterally committing to reduce greenhouse gases.

Obviously China is not going to be willing to sacrifice its growth under the Kyoto framework, which was that countries have to reduce their emission to below the 1990 level. That would require a very low growth rate, or unattainable increases in energy (emissions) efficiency. It is understandable both why China is not willing to sacrifice growth or to accept that the notion that Americans should be allowed to pollute on a per capita basis far more than what others (including those in China) are allowed.

We need an agreement that is both feasible and workable, and philosophically well-grounded, that is, which is consistent with some generally accepted principles of global social justice. China can, for instance, make a commitment to reduce greenhouse gases on a per-unit of GDP basis. To put it another way, China could make a commitment for greater efficiency. It would begin to make contributions to the reduction of greenhouse gases, using its inventory of tools from taxes to regulations. (Many of these policies would be good for its economy as well as for the global environment.) In this way, China would provide a role model for other developing countries and begin the process of global engagement on an issue of paramount importance.

China can both begin to address the problem of global warming and help other countries by engaging in an enhanced emissions trading scheme with other developing countries. One of the notions in the Kyoto provision was that participating countries should try to reduce carbon dioxide emission and other greenhouse gas emissions in an efficient way; by, for instance, finding countries that reduce emission at a low cost, compensat-

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ing them, and 'buying' their reduction emission. China can start this kind of voluntary system by trading emissions with other developing countries and providing them with incentives and assistance, such as equipment to reduce their emissions. At the same time, China can provide financial assistance to promote economic growth in a sustainable way.

The issue of carbon sequestration was raised in Kyoto. (Carbon sequestration addresses the problem of reducing the concentration of greenhouse gases in the atmosphere, by having carbon absorbed by trees instead of reducing emissions. This will reduce the amount of carbon dioxide in the atmosphere and thus the degree of global warming. This idea was recognized in Kyoto, but the negotiators made one mistake. They tried to promote sequestration by creating forests without recognizing the need to avoid deforestation. If you have a forest and you burn it, that adds carbon dioxide to the atmosphere. So the current framework says if you have a forest, you are better off cutting it down and replanting than simply maintaining it. You can be compensated for planting, but under the present system you can't be compensated for avoiding deforestation.

This is a big issue, both for many tropical countries and for the globe. The current rate of deforestation going on in is enormous. The amount of carbon dioxide thrown into the atmosphere as a result of deforestation is comparable to the amount of carbon dioxide added by the United States, which is the largest polluter in the world. The effects of deforestation in Brazil and Indonesia are offsetting most of what Europe and the other participants in the Kyoto protocol are doing. At the same time, if the tropical countries were compensated for the 'environmental services' they provide for the world, the amount they received would be enormous – greater than what they are today receiving in development assistance.

Much of the deforestation which occurs is related to illegal and/or 'corrupt' logging, where developing countries receive but a fraction of the true value of their lumber. What we need is a system which recognizes avoiding deforestation, supports schemes for lumber certification, and ensures that developing countries get full and fair values for preserving their resources. (Certified lumber is timber that has been cut legally.) This plan would simultaneously solve a development problem, a poverty problem and an environmental problem. Much of the lumber from Indonesia and Papua New Guinea, including the illegal logging, is destined for China. China could play a big role in creating this scheme. China would make an enormous difference if it allowed the importation of certified lumber and supported the coalition of rainforest countries' demand for compensation for avoided deforestation.

#### **Redefining China's role in the global economy**

China is no longer a small player in the global economy. China's growth will impose strains on the global economic system. In the long run, if well

managed, the world will benefit from China's prosperity. China will need to put more emphasis on managing domestic demand growth and continued emphasis on improvements in productivity and technology. China will need to be aware that globalization has been accompanied by increasing inequality and economic insecurity in many countries – both developed and less developed. Explicit measures to combat these will be needed.

Globalization has put strains on both developed and less developed countries. It will put strains on China. As its role in the global economy expands, China will have to assume increase its responsibilities – responsibilities for improving the rules of the game, enacting reforms in the global financial system that enhance stability and fairness, and bringing about reforms in the global trading system that are fair and that truly promote the well-being of developing countries.

China will also need to do its bit to improve the global environment: conserving natural resources, and helping create global agreements for reducing emissions (for instance through the new rainforest initiative). China will have to take on increasing responsibility for advancing the well-being of other developing countries, by promoting development-oriented trade and investment, by direct assistance, and by providing a role model. If China does live up to these responsibilities, I believe that everyone in the world will benefit. And by doing good, China will do well for itself.