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An Overview of the Global Economy: Markets, Competitiveness and Trade Facilitation

**Executive Interview: The Honorable Carole L. Brookins,
U.S. Executive Director to the World Bank, 2001 - 2005**

Olubukola A. Oyewumi ^a®

^a *PhD candidate, University of the Free State and Market and Economic Research Centre (MERC),
National Agricultural Marketing Council, Private Bag X935, Pretoria 0001, South Africa*

Abstract

The global economy is growing increasingly more integrated. The dawn of the 21st century was marked with cutting edge technologies creating the platform for greater connectivity and competition among global markets. The evolving economic paradigm is re-defining the way products are moving across markets, regions and continents. The combined effect of technological advances, global political economy and seasonal weather variability has called for dynamism in the way businesses are run. The potential benefit of this development is that it could culminate into increased productivity through the involvement of more people in economic activities across the globe, and the development of new efficiencies and new technologies to better manage our environment and create the right economic blocs. This synopsis is an interview conducted with the Honorable Carole L. Brookins, former Executive Director to the World Bank, 2001-2005. The objective was to relate current and evolving global economic trends to their importance on markets, competitiveness and trade facilitation across the globe. This interview was conducted at the 16th Annual World Forum, Symposium and Case Conference in Buenos Aires, Argentina in June, 2006.

Keywords: Global economy, emerging markets, competitiveness, trade facilitation.

[®]Corresponding author: Tel: + 27 (0) 12-341-1115
Email: olubukola@namc.co.za

Introduction

In today's global market, competitiveness seems to be dependent on a lot of factors – a mix of which gives a trading country an edge over competitors. Although market size plays an important role in attracting foreign direct investment to a country, it has been established that trade facilitation depends to a much larger extent on some key internal factors - port efficiency, customs environment, regulatory harmonization and the level of service sector infrastructure (Wilson, Mann & Otsuki, 2004).

The evolving economic paradigm is re-defining the way products are moved across markets, regions and continents. In addition, the combined effect of technological advances, global political economy and seasonal weather variability has called for dynamism in the way in which businesses are run all over the world. Most of the challenges in the evolving global markets have enormous potential to culminate into increased productivity through the involvement of more people in economic activities across the globe, and the development of new efficiencies and new technologies to better manage our environment and create the right economic blocs.

In this report, Honourable Carole L. Brookins, an international consultant known for her work as a policy and trade strategist shares from her wealth of experience on issues of global political economy and its effects on the food and agricultural sector. A graduate of the University of Oklahoma, Carole started her career in 1967 as a municipal bond under-writer in Chicago, before moving into commodities with the Chicago Board of Trade and then with E.F. Hutton in New York City. In 1980 she founded World Perspectives, Inc. and held the position of Chairman and CEO of the company. In 2001, she was nominated by President George Bush to the position of the U.S. Executive Director to the World Bank and was confirmed by the U.S senate. Ms. Brookins played a leading role in developing collaborative programs between the World Bank's International Development Agency (IDA) and the International Finance Corporation (IFC), providing critical support to small enterprise development in sub-Saharan Africa. She helped President Bush achieve initiatives to deliver IDA assistance in the form of grants instead of loans and adopt result based measurement program. Carole was a consistent advocate for partnering public and private sectors to develop infrastructures in the poorest countries.

Executive Interview

What are the major factors driving the global economy?

I think that the major factors are related to the integration of new technologies in the world market. Now we know everywhere in the world, what is happening

everywhere else in the world instantly and our reaction time is much shorter than in the past. Whether an event is in the markets or a geo-political development, its impact is magnified and driven by instant communication. Then the question is: How do you translate that knowledge into policies and business decisions that will permit the inclusion of all people into the benefits of participating in world markets? That's where most of the focus is going to be: "real" global integration, not just in terms of "virtual" communications. A good example is the logistics supply chain that we know and talk about. Like our colleague here at the IAMA conference from Brazil said: you still have to have the road, the water supply, power supply. Otherwise IT doesn't make things/products move from here to there. In other words, you still have to have the supporting physical and institutional infrastructure. So I believe that a hallmark of this century is going to be integration. If we have a financial crisis, it's going to be global because we are all related to each other. The other major factor integrating us is energy and environmental management. The cost of energy is going to be increasing, as more and more people raise their living standards, demand goods and services and join the economic mainstream. Energy use and climate change are driving integrated strategies for global environmental management along with economic integration. They are linked and going to shape our future common economy and society.

How do these factors impact the agricultural markets?

There are going to be a lot of new efficiencies and new technologies to better use land—including and in addition to biotechnology—and to better use water resources which will be increasingly scarce. We must (which I think we will do) learn to take salt water and desalinate it, and to do this cost effectively/efficiently. I'm still of the "old" school which believes that necessity is the mother of invention; because we have problems to solve, someone will innovate to solve that problem. I think it will force agriculture to become more technology intensive and at the same time to become much more of a stakeholder in the energy pipeline, in the energy machine—both through biofuels and environmental management.

In your opinion, what are the opportunities and threats to the evolving global markets?

In my view, it is fear and protectionism which can stop global integration. If we have an economic slow-down in the world or recession, people will be trying to put up protectionist barriers to serve their own markets, and I think that's very dangerous. For the emerging markets specifically, I think it's critical to open up the South-South trade which I talked about yesterday. Most of the duties today are paid from Nigeria to South Africa (within the South-South market). Most of the duties of developing countries everywhere are paid to each other. Every major study that has been done has found that trade liberalization does not create poverty but really does create opportunities for people. The model for developing countries to follow

should not be: because I am poor, I should not let in any product; it should be: because I am poor I need help in becoming a better market. I need to let in products in order to become competitive, because through investments and trade you not only transfer goods, you transfer knowledge, services, and skills. Through trade, you build the integration and connection for people to become part of the world.

In short unilateral liberalization is better than no liberalization?

There have been some important successes in unilateral liberalization, like New Zealand in agriculture. The key to successful liberalization is to focus on strengthening the capacities and competitiveness of the domestic market, as you open up that market to foreign investment and imports. Additionally, where there are very sensitive commodities, the tradition has long been to apply appropriate safeguards according to WTO/GATT rules, which permit trade to develop over time and protection against a flood of imports which could destroy internal markets overnight. But, the main point I want to make is to make the domestic production platform a priority along with trade strategies. For example, if you have no roads going to the ports from your own internal producers and you open the import door, then before long foreign products can come into major cities and compete at lower prices than local producers. If your local industries can't grow because they don't have the same opportunity to compete in domestic and international markets because of logistics impediments from the interior, you've got to improve your domestic platform. Creating a competitive interior market goes hand in hand with being a global competitor and building a level playing field.

So the key to trade facilitation is working on your internal structure.

Behind the border! That is absolutely key: You must analyze and then reduce your behind the border constraints at the same time as you begin to open up to trade. And you must also look at the time frame because there could be mismatches; where it may take 20 years to get the power supply internally, but immediately products could ship in. I don't mean to imply that trade shouldn't begin—even with internal supply chain deficits. In fact, I believe that it is trade incentives which will focus official attention and resources on necessary infrastructure (physical and institutional) gaps that are limiting the productivity and competitiveness of domestic producers. So you really have to balance your market strategies, get the investment you need, identify export drivers and improve the domestic supply chains. Otherwise, the WTO could eliminate all barriers to developing country exports, but producers in those countries still won't be able to export their products competitively.

Since the level of progress among developing economies vary, how would you classify or describe emerging markets?

I classify emerging markets as emerged, emerging, yet-to-emerge and sub-emerged—based on GDP growth levels, per capita income and the number of people who have “emerged” into the consuming/middle class. So, while China is an “emerged” market based on macroeconomic measures, it is still an “emerging” market because a large number of people are still living in poverty. For example, there are geographic areas of China and India, which are not yet part of the consumer market. Similarly is a country like South Africa. These are countries that are traders, that have capacities, growing wealth (particularly in major urban centers) and that are deeply involved and already integrated into the world trading system. They have good institutions in place, encourage private investment and economic development, but still face serious challenges in bringing the benefits of globalization to all their people—particularly those in rural areas.

Considering the fact that some emerged economies based on macroeconomic variables – like China (but who are still emerging in terms of welfare measures) and some fully emerging countries are dominating the global market in some products, do you think these countries have potentials for sustaining this growth trend?

All you have to do is to look at the demographics. In a number of years, the industrial countries will have less than 10% of the world consumers. So to me, it's a race against time to get the physical and institutional infrastructures in place. The large markets are going to have the real potentials to be competitive in the global economy; there is no question about it. China is the leading producer and competitor in a lot of products today (both industrial and agricultural). China has very dynamic growth centers on the coast and yet-to-emerge/emerging parts in the interior. So how do you bring more and more of those people into globalization? In South Africa you also have a dynamic middle/consumer class; through their wealth creation, the government and private sector have more resources to invest in business and in supporting infrastructure and social services that create the base for job creation that will bring the next group of people out of poverty. In India, you have more than 250 million emerged middle-class consumers but a lot of people in India are still trying to live on under a dollar per day. As you expand economic activity, this process advances. And, remember that much of growth is driven through trade, because trade-led growth pays higher wages, and ultimately creates the production and marketing of more goods, and services. Whether it is bringing more competition to the financial services market, lowering the costs of borrowing and providing more trade finance or physical, or improved IT logistics, the result is to add increased opportunity. Moreover, you need to be focusing not only on measuring macroeconomic growth/wealth/GDP at the national level. A country can have a high level of GDP, but 70 or 80% of that may be generated in one or two large cities. So you may want to be looking at the spatial issues within countries—their economic geographies and the impediments to wealth creation outside of major urban centers. Like I said, China is emerged but there are huge regions of China

that are yet-to-emerge; but China is working to link together interior and marginal regions with the wealth and opportunities of coastal markets. The challenge of this is very big financially; the Chinese finance minister mentioned a few years ago that it cost the government a certain amount of money to bring 300 million people out of poverty. Then he said that to bring the next million out of poverty, it will cost as much because these people do not live in concentrated major cities; they live in rural areas and are more remote. It's pretty obvious. A highway around a major city is one thing, but to extend that hundreds of kilometres, or thousands; or power lines and sanitation systems when distances are great and population density does not make supplying these services commercially viable. So it's a challenge to get services to them because they are not congregated in five or ten cities. This is the big challenge of the "information economy;" information can flow virtually if you have some form of power and telecommunication links. But if you don't have basic physical infrastructure, you can't produce and market goods.

This is a very interesting challenge which will impact everyone in the world, because the emerging countries are going to be 'the world' force in this century. The industrial countries are going to be serving the emerging markets and not vice-versa—even though this is happening in a gradual transition. Emerging countries are demanding greater shares of commodities and other resources for growing populations and productive industries. Every day more potential consumers in these countries are becoming effective consumers as they gain purchasing power. Behind the border policies are either accelerating or impeding that trend. Large countries are going to have an easier time achieving results, because they are magnets for investment. They will attract more investment if they are well run, and investors will forgive some of their impediments because they are such potentially large internal markets and production platforms. But, in short, they don't have to be as well run as small countries. Small and land-locked countries face bigger challenges attracting investment—even when their institutions and policies are sound. Examples are countries in Africa like Mauritius or Uganda or Ghana. Uganda and Ghana have made major policy strides. Mauritius has been a star in economic management and performance. But they don't attract the bulk of the investment that Nigeria attracts because of Nigeria's big market potential and oil resources—even though Nigeria has had major problems in government management. So resource rich countries or countries that are large in terms of a domestic demand base are always going to find it easier to attract capital and trade flows.

If you have a big domestic market you leverage down your per unit cost of production, because you are producing for a big domestic market and exports. For instance if you want to build a production plant in either Brazil or Paraguay you'll probably build it in Brazil, not only because it is a platform for the world but also because it's a platform for the domestic market. So these are real choices that need to be considered by countries in developing their strategies for globalization. I think that the smaller emerging markets will have to be more competitive and creative in

their strategies, but there are significant examples of extraordinary economic achievement by smaller countries—just look at the outstanding global trade positions of The Netherlands or South Korea. Or unique platforms like Singapore and Hong Kong. It's important to study how smaller countries with smaller consumer bases and not a lot of resources have created very dynamic trading platforms. If you can identify some industries that are capital intensive, where you can have higher skilled workers – like Singapore, Hong-Kong or The Netherlands-- which excel in supply chain management. So it's always a matter of thinking global and acting local. What are your strengths and weaknesses? Do you have a competitive port or are you land-locked? Are you resource rich or resource short? Where are you located in the world or in a region? Who are your major potential big trading partners and what do they need that you can do? Emerging markets are going to be the name of the game; linkages South/South and North/South through trade will determine who supplies the demands of 90% of the world consumers. The question today is who will emerge as the strongest economies to dominate trade flows, build sustainable environmental and economic platforms and command the new “heights” of global economic power?

I see a number of variables coming in here, there's population and spatial demographics, purchasing power and where resources are located. Some are even exogenous and others internal. Do you think enough resources are being channeled towards managing investments and also maximizing the benefits?

The world is awash with more than enough capital looking for places to go. Where is it flowing? Emerging markets are capturing more investment, especially China and India. Investment climate is critical for countries to attract both public and private capital and this means viable institutions, sound macro economics and predictability. The test always is growth, what is happening to productivity? I visited projects in Indonesia where communities competed for grant funds, put in their own money and together financed a clean water supply or feeder roads that were all-weather road. And you look at what it did in less than 6 months—the result of just one feeder road (1 kilometre) between two secondary highways. All the shops along the road I stopped at, probably ten of them, every one of the shops that I visited their turn-over had gone up by between 300-400 per cent since the road was constructed. Some of these small entrepreneurs are now able to send their children to school. So, one action that took six months, has had an enormous impact on expanding the market and increasing productivity. So it's not always the big things, but real success in small things.

What about regional trade influences?

If the US economy is performing badly, it will hurt China or many other countries who depend on exports/trade with the US, but particularly neighbors on the border—Canada and Mexico. And I believe the major tragedy for Africa is that Nigeria has

not been a major growth pole for West Africa, and Kenya for East Africa due to weak institutions, poor governance and inadequate regional infrastructure linkages. South Africa is a major growth pole in Southern Africa and many of its companies are key investors throughout Sub Saharan Africa. The problem and tragedy for the Southern Cone really is Zimbabwe—which is holding back the dynamic growth and integration of the region, and creating instability as well as terrible suffering of its people. Many African countries do not have large internal markets and are not well integrated in real terms. There are a lot of agreements between countries on paper for cooperation, but the real advances need to happen. What is needed is for the largest economy in each part of Africa to be a strong and open market and “anchor”, with a good system integrating their economies into regional growth poles with smaller neighboring countries. It’s crucial to create these regional free trade markets and economies of scale for both internal demand and investment/trade competitiveness. This is especially the case when you have land-locked countries that are dependent on the bigger “anchor”. Kenya, for example, has serious governance and business climate problems; this is unfortunate because Kenya is so rich in agricultural resources, industrial production and human capacities as well as major ports. Uganda, Rwanda and Tanzania are not going to do well economically if Kenya isn’t doing well. For example, Uganda has to ship through Kenya. It costs 300 per cent more to ship a container from Mombassa (Kenya) to Kampala (Uganda) than it costs to ship a container from Europe to Mombassa. So even if Uganda’s government has solid policies and a business friendly institutional climate, its growth will be held back due to lack of cost effective and efficient transit through Kenya. So, when we look at Africa particularly, countries like Nigeria, Kenya and South Africa have critical important responsibilities to be good regional neighbours, to take very seriously their role in building competitive regional economic and trade platforms. That will strengthen Africa’s competitiveness and economic opportunities both intra-regionally and globally.

For a continent like Africa, will it be right to say that the major challenges are the institutions, creating the right hubs and the real free trade agreements?

Africa needs to strengthen national and regional institutions to build a continent-wide market, because most African countries are too small to be major diversified economic powers. Many countries are resource rich, but oil and mineral revenues must be used effectively for improving the social capacities and business climate—and not looted or wasted. Countries in Africa must find ways to cooperate in real ways. They have to come together in creating regional power pools, water districts, port access, road networks. Cross-border power grids are already developing in Southern and East Africa, along with the developing of the West Africa gas pipeline. This is good news for Africa in reducing the cost of providing power building efficiencies and bringing services and connectivity. Look at what has happened to build the economic and trade integration on the European Continent through steps

from the original European Coal and Steel Community to the current European Union (EU)—from trade and investment to a common currency.

Of course, trade agreements are important. They set the legal framework and rules for a level playing field. But these agreements on paper, as I've said repeatedly, are only as successful in bringing trade benefits as the real capacity on ground; the legal agreement is an important policy beginning but it's just words. You have to be able to clear customs; you've got to have roads, rail gauges that work. And while you're negotiating trade agreements, you would be smart to get to work on your interior market. Policy and institutions matter. In the 1970s when Ghana had a cocoa marketing board and Cote d'Ivoire did not (or rather had a different system), prices being paid to farmers in Ghana were much lower than those of Cote d'Ivoire. And Ghanaian cocoa ended up being smuggled to export markets through Cote d'Ivoire, so all of a sudden Ghana's trade figures went down. Farmers and other entrepreneurs are smart; they want to maximize their returns and when institutions are corrupt or policies are harmful to their business, they will find ways to get around them. Sometimes it's not a straight line, sometimes it is steeper way but they'll find ways to enhance their ability to sell or to gain imports.

Talking about trade negotiations, you find that the positions taken by the developed countries do not support economic growth in the developing and under-developed countries. For instance the Doha Round of the WTO is deadlocked just because the developed countries do not want to reduce domestic support and farm subsidies substantially (or even eliminate them). Don't you think it would be fair if the rich countries could at least allow a level-playing field?

Everybody knows that we need to get rid of farm subsidies but there are some countries who are used to importing cheaper food, so we have to also understand the impact this would have on food importers and their standard of living as well. Our goal must be to reduce and eliminate all unfair trade practices. A lot of the tariff escalation (which is putting higher tariffs on more processed products) needs to come down; it needs to happen, but it's not going to happen over-night. Remember that many countries are very successful despite subsidies and protection. New Zealand is the leading dairy producer in the world; leading exporter in the world as well, despite the fact that the US, EU and other dairy producers have very protective dairy regimes. So I think you're absolutely right, Doha needs to create a more level playing field, but many of the problems of developing countries are behind the border impediments. Look at one simple competitive issue: money or finance. How much does it cost you to finance your farm production? What is the interest rate if you want to finance your business? Can you get long term finance, or trade finance? What's the rate? Are there competitive banks? Yes, Doha needs to move in that direction of further opening markets and reducing subsidies, but we must remember that this is a "Global" market. Liberalization won't work if developing countries say: "Trade is only good one way. We shouldn't let in imports."

It's got to be a win-win situation for everybody. There could be (and will be) longer time to allow developing and poor countries to meet commitments, and lower targets. That was the way that commitments were made under the Uruguay round—with special treatment for developing countries through a longer period for phasing in their commitments and lower commitment targets than industrial countries. But you must also remember that success isn't going to be achieved by developing countries by keeping their markets closed—either to each other or developed countries. They need to be open to create competition. Competition is good; we've just heard two presentations for services during this conference—from John Deere and Oracle who are both selling IT services. They are competing! Lack of competition creates monopoly rents, then services go down and costs go up.

To me, trade negotiations are not about beating up on people; trade negotiations are about making something positive and meaningful happen. There's always going to be a war of "words", lobbying for one position or another. But negotiators need to always understand that they are not there doing their job for the rhetoric...but to get enough consensus for real trade deals to be done that provide the maximum benefit. Look at the war of words over Africa cotton. Do you know who was leading the whole charge on cotton – the French; because French companies control the mills in those countries. Most are monopolies in those countries. So they led an effective charge to beat up on the US. The US will have to change its cotton support regime and comply with the WTO dispute settlement ruling. Yes, African cotton farmers are being hurt in part by U.S. subsidies. But it is a much bigger picture that most people don't understand. Take a look at the cotton supply chain in those countries, and you tell me if the biggest problem for producers is the U.S. subsidy or their own internal infrastructure impediments, governance problems, financial costs and a range of other problems behind the border which keep producers from higher achievement and market potential.

Honourable Brookins, do you mean some of the agitations of the developing countries are not real or genuine?

Some of them are real; some of them are very true. Cotton subsidies should be reduced in industrial countries, subsidies should be eliminated. But if you do not do what you need to do behind the borders, in sanitary regulations and enforcement, in building your supply chains and giving people access to power, in having clean water to wash your fruits and vegetables, in having IT to know the markets and manage chains/trade/finance, then you cannot compete. You could open all the markets tomorrow; for instance Chad has AGOA, businesses in Chad could be shipping cotton products to the US but they don't have any power in the South of Chad for textile plants to operate. Power costs more in Chad than virtually anywhere in the world, it is very high. So how are you going to participate even if there is trade liberalization? You have to really look at it and say: "If I'm not being competitive why am I not being competitive?" My advice would be to be an effective

negotiator and participant in the WTO process. This means: BE a tough negotiator; but you can't be effective if you haven't carefully analyzed your economy, your key industries and issues—and then set meaningful priorities. Integrate your approach to trade and aid/development programs. Trade ministers may yell about cotton, but are finance ministers seeking loans from development banks/or grants from development partners to support the cotton economy development? Talk to your private sector in setting your priorities. KNOW your investment climate and your limitations/impediments.

So, each country needs to do some self assessment and evaluation in terms of drivers of its competitiveness?

Right, you need to look at what is competitive, what is not competitive and/or what you hope to achieve. And what's that going to cost; what are the steps that will take to get you there. It's a practical exercise; for example, some of these components are obvious when you do models. Look at John Wilson's work on global trade facilitation (the things that I talked about in my presentation yesterday). Just four simple components in trade facilitation and what they could do to increase trade revenues; he studied these factors – electronic documentation, trade processing for efficiency, customs environment and regulatory harmonization i.e. getting improved regulation so that your regulations conform to everything. He looked at 75 developing countries and assessed what would happen if they improved and moved up half-way to the average of the world in performance. The result is that it increased trade for those countries by nearly 400 billion dollars! This growth in their trade had nothing to do with lower subsidies or import barriers. So, while I share the concern of developing countries with unfair subsidies, this is only one factor in their competitiveness. In fact, many countries are very successful traders today, even in highly subsidized industries. That's why I used New Zealand as an example. They met all the requirements of the Uruguay round and even went further because the Uruguay round agreement permits a lot of subsidies. But New Zealand's government basically got rid of all the supports—not only to agriculture but industry; it transformed the country's domestic business culture. Just be fair. Look at where problems lie—behind and across borders. And then work to overcome them through negotiations, investments, pro-trade and investment policies and institutions that work.

Remember as well that many developing countries tax agriculture; many put high tariffs and barriers on inputs which add to very high internal production cost. They tax agriculture through the whole supply chain deficit and in other ways. And that is why you have to look at the trade environment in a more holistic way, particularly for agriculture. How much does fertilizer cost, what about the road networks, how much IT do they have, what kind of seed varieties, how much does seed cost, what is the distribution cost to get the seeds, are they monopolies, are they competitive? Those are questions to be asked. So you have to be honest, you

have to call what is true, true and call what is untrue, untrue. You must be willing to point fingers at problems wherever they are and you must say what can we do to solve them?

In short, competitiveness has to be re-defined in real terms. How then do you define competitiveness?

I think competitiveness is having the tools to raise productivity on a continuing basis, both through the internal production processes and both physical and financial infrastructures, human infrastructure (health/education), institutions that work in providing the regulatory and policy environment that enable an individual to be productive. That is what I view as being productive. I had a company that was first to do something in 1980. It did very well and pretty soon other people saw what I was doing and they started doing it too. So the value of my business went down because other people were in the business. So I had to look for a different thing to do because you can't just always keep doing the same thing. That is innovation!

In conclusion, what are your projections with regards to the global economy in the medium and long-term?

Well there is no choice, the global economy is going to grow and become more integrated. I think we are going to go through recessions and slow-down as we adjust to it. And I think there will be two major adjustments. One will be increased variability in weather and natural disasters due to climate change/global warming which is going to add more shocks and costs; these will be real challenges for the industry and for policy leaders to manage. We are going to put a lot of capital into responding to those problems as we seek to improve our environment and maximize our renewable agricultural resources as part of the solution. Second, I think we will have greater integration of capital and technology flows; much more innovation and much faster response times. It will be costly and fast moving. How will technologies be applied? Which cutting edge (like biotechnology) technological integration will be the key driver of bringing more people (say about another one billion people) out of poverty in the next decade? There are going to be tremendous opportunities for feeding people better and increasing productivity. In short, we will have many more choices due to fast paced innovation coming out of laboratories; and we will have to collectively be very wise in the choices we make because of the costs involved—even choices in what we use our cropland to produce (food, feed, fuel).

At the same time, we are going to learn to use our resources more effectively and I think technology will help us—in agriculture, for example, drought resistant crops, for example; or a greater ability to improve the consistency of plant output through bioengineering. As to the general economic outlook globally, I think right now, we've got a little bit of a slow-down. We've got inflation from energy. I was surprised it didn't happen sooner. Inflation is going to be passed through. China can't keep

production costs down; they've got wage pressures too, along with raw material input costs from their industrial suppliers, so they will be passing this through in the price of steel and other major inputs to global industries/consumer. If the world's central bankers decide to take a firm control on inflation targets, then we will see higher interest rates which will slow down growth. Even China will likely see some slow down as it tries to keep the economy from overheating and manage its financial system.

Conclusion

Based on Carole's comments, it is evident that there is great capacity for growth in the global economy, provided countries (particularly the emerging economies) learn to manage their internal economic environment appropriately. It is instructive to note that trade agreements alone do not move products but a mix of internal and external factors. A recent empirical study by Pustovit and Schmitz (2003) supports the general notion that there is potential for some developing economies to change their trade positions provided rich countries – specifically the OECD countries – reduce their domestic support and farm subsidies substantially. In most cases however, competitiveness is driven by how well the internal structures of a country are capable of providing the right platform and leverage, as well as gaining the trust of investors.

The emerging markets have 90% of the world's consumers. However, there is a huge disparity when it comes to the purchasing power as compared to industrialized countries. Factors such as spatial demographics, level of infrastructure development, availability of energy, as well as supply chain management portend a challenge to the drive towards integrating more of the world's population into the economic system. Therefore, the emerging economies must learn to manage their logistics supply chains effectively in order to better position themselves for increased participation in global economic system, which has enormous growth potentials.

The imminent challenges to the global markets, such as climatic variability, energy shortages and inflation will be surmounted. For instance, the Chicago climate exchange (www.chicagoclimateexchange.com) provides an important model for managing climate change in an economically efficient way, with appropriate offsets that involve both the industrial and agricultural sectors. Also, the involvement of biotechnology (with Brazil leading the way) in energy production is a step forward in reducing the global energy challenge. It was projected that by the end of 2006, Brazil ethanol export capacity would have increased to 5.6 billion litres (Bravo & Mae-Wan, 2006) and this is expected to double by 2010 (Luhnow & Samor, 2006). Brazil's leadership in competitive ethanol production and its potential for production capacity expansion will ensure that economies in high demand for energy - for instance the U.S. which is the largest importer of Brazil's ethanol - are

able to increase their use of bio-fuels to reduce greenhouse gas emissions and meet the Kyoto Treaty commitments (for countries which have ratified the Kyoto protocol). Although there are speculations that Brazil may face over-production risks if the U.S. and E.U. increase their tariffs on ethanol, the recent pronouncement by the U.S. president that his country plans to reduce its use of gasoline by 20% by the year 2017 (Kenfield, 2007) suggests the contrary.

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