Transcript of the

12th Sir Arthur Lewis Memorial Lecture

"Sustained High Growth and Poverty Reduction in Developing Countries"

by

Professor Michael Spence

2001 Nobel Laureate in Economics

Chairman of the World Bank Commission on Growth and Development Sir Cecil Jacobs Auditorium, ECCB Headquarters, St Kitts

7 November 2007.

Salutations

It's a great honour to be with you tonight. I grew up with a generation of teachers in Princeton, Oxford and Harvard who by virtue of the fact that they were born around the time of the aftermath of the great depression or earlier lived through World War II, had major roles in government, the war effort and other things, they had an extraordinary range of abilities and it made them ordinary teachers.

Sir Arthur Lewis was the leader of a group of people who in that generation took seriously and really kind of understood economic development, something that we lost for a period of time in economics. I include in this Albert O. Hirschmann, Hollis Chenery, Simon Kuznets and many other of the great minds who helped us understand development.

And so we come back to this, I as a somewhat late comer with Sir Dwight as a wonderful colleague and friend in this effort.

What I want to do with you tonight is to have a little fun and talk to you about sustained high inclusive growth because we are living in an extraordinary period of time.

Growth of the type that I want to talk about tonight is a pretty recent phenomenon in the history of the world. In fact, what this graph shows and it comes from a wonderful report done at the World Bank called Economic Growth in the 1990s and taken from De Long's work but really it shows that for the last ten centuries there was not much growth until we got to the 19th century and then it accelerated with the British Industrial Revolution. It accelerated again with the growth of North America and Europe. Nobody knows about the 21st century, but something fairly disastrous is going have to happen if it is not really just sort of off the charts.

We are living in a period where we have governance and other institutions, not to mention that our social science and political economy does not have much of a track record with respect to the understanding of how this all works and it is not surprising that it is confusing to political leaders, to citizens and to those of us who are academics. The other thing that is noteworthy, I think, is that the fraction of the world's inequality that is accounted for by inner country differences has risen steadily since the start of the 19th century, but plateaued sometime in the middle of this century. These are measurement dependent assertions, but I expect this to turn down. The reason is that thirty years ago, the fraction of the world's population that was living in a country that was either relatively well-to-do or growing rapidly was under twenty per cent of the total. At that time it would have been five billion people now it is something like 6.3 or 6.4 billion people.

We are now living in a world in which considerably over sixty per cent of the World's population is living in countries that look like they are growing quite quickly and getting wealthier quite quickly, or are in the category of being relatively advanced. That is a transformational change in the global economy in all kinds of dimensions. Of course our concern is that the remaining roughly 35 to 40 per cent or approximately two billion people join the party and enjoy the same benefits that have expanded so rapidly.

Inequality however, has taken a new form and I guess I have just sort of indicated what I think about this. Maybe, the best book on this that has come out recently is by Paul Collier called "The Bottom Billion". These are the people in the global economy some of whom live in growing economies by the way who are genuinely poor. The worrisome cases, the ones that everybody has at the top of their agenda in terms of concern, are those people who live in poor countries who are not growing.

The Commission that I am involved in along with Sir Dwight and a number of other distinguished, unlike me I might add, leaders from developing countries is concerned with what we call sustained high growth. Somewhat arbitrarily to focus our attention, I have defined sustained high growth, and admittedly this is a stretch goal, as growth at 7 per cent or more for at least two decades. We actually use twenty five years. The reason I picked 7 per cent is because income doubles every ten years if you are growing at that rate. We know it is hard to grow at that rate, although a number of countries have come close. There are twelve cases of this. They are all in the post-war period; they are all heavily dependent on the fact that they use the global economy. Sir Arthur was right about this, completely right. You cannot grow at these high speeds without the knowledge and the demand that comes from the global economy, and I am going to risk repeating myself several times.

So much of the lack of success in the early post-war period were countries who had strategies and were trying to do something else, like import substitution. Like it is safer not to engage in the global economy, to some extent true, it's just that it puts a ceiling on growth.

I am going to show you those twelve cases in a minute but I want to emphasise in passing that it is the global economy's resources, however difficult it is to take advantage of them and at the same time mitigate the risks that enable this to happen.

We are talking also about things that go on for decades. At least from my point of view, and I think from that of my fellow commissioners in the Growth Commission,

we are not interested in three years of high growth followed by a set back and then no growth for a while. We are interested in on average sustained high growth. The reason we are interested in high growth is that, that is what produces big changes in the levels of poverty and income. What I have shown you here is how long it takes at various growth rates to go from a relatively poor country to income levels we associate with advanced countries and even at what I am calling high speeds for purposes of tonight, like 7 per cent it takes five decades to make this transition. That is sustained continuous persistent effort in a very rapidly changing environment to get the job done.

Why are we interested in growth? People would say, I think correctly, that is not what human beings are interested in. Human beings are interested in their health, their opportunities to be creative, the way they interact with other human beings and so on, a kind of freedom in a number of dimensions.

We are interested in growth because it creates options with respect to those more fundamental things. It is a kind of supporting condition absent that, it is probably necessary to spend most of one's time worrying about getting through the next few days or months especially if one is very poor. So, just to be clear, we are not selling this as the ultimate objective but rather as a very important intermediate objective as a means to an end.

These are the high growth countries, they will not surprise you. Maybe a few will and there are only twelve of them. I had originally excluded Japan, but I was wrong. The numbers give you the period during which they are growing at this rate. Those will also not surprise you. I will ignore the numbers on the right because they are incomplete and wrong.

There are also a group of countries that have grown close to these rates and they are interesting. I won't go through them all but I will note that Brazil which has had negligible growth since the early 1980s was actually a pretty high growth country up until that point. And the question is why? How can a country go through a period of

very rapid growth and improvement in the lives of its citizens and then suddenly hit a road block? And don't think I am exaggerating the per capita income growth in Brazil has been closer to zero than one per cent. The key elements in these high growth stories, and here I really do come around to why I respect Sir Arthur Lewis and his work so much, are the following:

First, is leveraging the global economy's resources, and that means demand and knowledge. I think we know at some fundamental level that what drives these very high growth rates is a process of catching up, of rapidly bringing in knowledge of how to do various things that have been developed either in the past or in other parts of the world and indeed we all do this.

In the global economy that my children and grandchildren will be living in, we will all be importing knowledge from somewhere else all the time because the alternative will be to fall behind. The driving force in the early stages of these high growth cases and there are no exceptions to this, is a combination of global demand which is very large and is relative to the size of the most developing countries with China being the only possible exception, is very elastic. When you combine that with the very large supply of somewhat underemployed labour, so that the labour supply is elastic then you basically can grow as fast as you can invest. That was the insight that Sir Arthur Lewis had.

What is fascinating is that this had not really started very much when he figured all this out. You now look back, and I will look back with you in a few minutes at China and India and you can see the model running at an extraordinary high speed and doing exactly what he said it was doing - labour moving to new productive sectors, exports growing, the economy transforming itself structurally in response to these relative prices and opportunities.

There are other key elements:

1. People kind of say "oh, of course" to high savings and investments. I would like to emphasise that it is high public and private sector investments. And people say "oh of course" with respect to the public sector investment, but when you go and look at what the actual levels of public sector, meaning government investments, are, in education and infrastructure you would find a) high variance and b) they are way lower than you would think of as ideal.

Now that is understandable, it is hard when you are relatively poor to save at high rates, but it is crucial. The reason government investment is important especially in these two critical areas, education and infrastructure is that it is what increases the return to private sector investment which is the proximate driver of growth and job creation.

- 2. You need long-time horizons. I just pointed out to you that this is a marathon. You cannot have a time-horizon that is the life of an elected government. You have to find an institutional way to make social and economic policies and strategic commitments that last a lot longer than the life of an elected government. The investment horizons both on the private and public sector side are much longer than that. About two years ago in Italy, I listened to a representative from the People's Republic of China who referred to the planning time horizon as 40 years. That is a bit extreme, but it gives you the idea that what you think you are doing is transforming not only an economy but intergenerational set of opportunities. If one is focused primarily on now or the immediate problems then that would set aside some of the critical things that need to happen.
- 3. You need a functional market system. It does not have to be perfect. This is one of the things Sir Arthur understood and one of the things we lost. A developing economy and a developing country is developing not just by getting larger

capital stocks and higher incomes, it is developing its institutions both market, business and regulatory institutions, and we do not know to this day, that much, how that really happens.

- 4. You need resource mobility. Obviously in the labour area because that is the driving force behind the model and what can actually happens in the case studies.
- 5. You need competition as a driver. There are too many examples of a static analysis which says that you have to have large size to be efficient in terms of scale of economies. The research in economics suggests that the dynamics of entry-exist knocking out the inefficient, simply overwhelms the static analysis. You need competition and what Schumpeter called 'creative de-structure'. Paul Romer and others in modern theories called this 'churn' which means things keep changing.

Data for China since the reforms of 1978 shows growth of approximately 9 per cent per year for at least 30 years in both real GDP per capita and real GDP per worker in the modern sector (not in agriculture). It is very easy to forget that in 1978, China was a desperately poor country and we now think of it as an increasingly powerful economic force in the world economy. In about one-and-a-half generations, there was an extraordinary transition of growth from 75 per cent of people who were in poverty to well under 20 per cent and hopefully declining. This is not happening everywhere in the world.

This is a picture of the per capita incomes; in this case, purchasing power adjusted, for India and Brazil.

Brazil is a middle-income country, and has been for this period. China was not even in the same league in 1980, and I think was probably within two or three years of passing Brazil in terms of per capita income.

India is very interesting and was slightly better off than China in 1980. It is a vibrant wonderful democracy but a complete contrast to China. India basically did not open up and exercised the same degree of leveraging of the global economy until recently, and now this pattern has shifted. If you want to know what India is going to do now you will have to look back to 1994 and follow the China path. The other thing that is important is that everything changes all the time. The industrial structure of the economy changes, what people do changes, their jobs change and people move from rural to urban areas. Urban areas have to be set up and invested in, a pretty chaotic process. I have put here what happened in these two cases to their rural populations over time.

These rural populations are very important and they were in the way that Sir Arthur described it. This migration is in some sense the development process. These people are moving to productive employment where the productivity differentials are on the order of five or six times different. When a person moves from the agricultural sector in India into the modern sector, into trading services or the newer manufacturing exports, the productivity jump is on the order of five or six times, the same is true of China.

China has been putting people into the cities at the rate of about 1 per cent a year. This is again a long-term process. You may say that that is not very fast but one per cent of the Chinese population is on the order of about thirteen million people. The actual flow is about fifteen million new people coming to the cities every year. I think of it as one new Los Angeles every year.

Savings and Investment

The India savings and investment rate is at the level that is required to sustain high growth. This is combining both public and private sectors, anything a long way below that suggests that you cannot grow, other than at moderate rates. The China case is off the chart, savings and investment rates are almost too high and is a source of the

considerable amount of the global imbalance that then affects the exchange rates and the cost of capital.

In the leveraging of the global economy, and this tends to be true of small countries, you find that the sum of exports and imports as a fraction of GDP is high, and in the case of China it has been high and on averaging rising. In the case of India it has been much lower, because India was a more protected country until the reforms finally kicked in starting in 1991 and proceeding more or less continuously. So if you were to make a projection, the India figures would look on the order of 60 to 70 per cent of GDP.

What is the difference in the strategies that these two economies adopted? The answer fundamentally is that Indian policy makers and politicians did not trust foreigners and therefore they did not promote exports as a driver of growth, leveraging their supply of labour, and they did not encourage foreign direct investment which is one of the important channels by which the knowledge flows in (the production knowledge in this case and the knowledge of the global economy). So there was a big difference in both dimensions with respect to China and India in the critical period when China took off and India, considered at more moderate growth rates.

The reason they are now going to converge and grow with a thirteen year differential is precisely because India has adopted the same policy, and because their extraordinary higher educational institutions have this amazing sort of trade in IT, business processes, outsourcing and other services, that are growing like a weed (30 per cent per year). That is an opportunity that is not terribly scale dependent, and therefore different from anything we have seen in the global economy in a long time. This is an opportunity for small, medium-sized and large regions, regions within countries; the provision of the service where the service is being delivered on information technology platforms, the globalisation of labour markets and those things is what Tom Friedman described in his book 'The World Is Flat'. There is a huge set of opportunities for virtually everybody

who can make the investments in the human capital that underpins those businesses. Here it is just the investment and the infrastructure difference.

I asserted that infrastructure is one of the elements of investment that is required to raise the private sector returns to investment and a whole variety of kinds of economic activity.

In the information technology-based or enabled industries, that critical infrastructure is the infrastructure that supports the information services plus competition and the regulation so that those services are delivered at reasonable competitive prices. You might say well that is obvious, but the investment in the infrastructure is not adequate in many places and not paid attention to enough. Secondly, the pattern of regulation is all over the place. In some countries, you see great amounts of competition and very respectably priced accessible service provision. In other countries you see a regulated monopoly that use to belong to the government that was recently privatised and is regulated so as to generate as much government revenue as possible. I can't tell you what the economic and social costs of that second strategy are.

The dimensions in which these technologies and services if properly priced, deliver opportunities to an economy including; education, improved efficiency in agriculture, better health, better integration in the global supply chain, better opportunities for trading services, better opportunities and higher value going to highly trained people.

Think about it. Who in their right mind would under-invest in that set of opportunities? There are lots of public goods and positive externalities associated with those opportunities. I really think that one of the main messages needs to be: If there is one place you don't want to under-invest after education this is probably it.

Despite hopelessly incompetent management in the first thirty years by the communist government in China, they managed to educate everybody. The literacy rates for both men and women show this. It is the foundation on which they built the dynamic

performance I just showed you, when they fixed the economic policies and stop pretending you could manage an economy from a central government.

There is a legitimate motive for subsidising people in rural areas who are poor. Income distribution inequity really does matter. I am not at all unsympathetic with the Indian government and many other governments' pattern of subsidisation of agriculture, but to pay for it by under investing in the infrastructure in that sector is a huge mistake. In doing so you take away the productivity gains you can get in that sector and get worse divergences of income across urban, rural, and new versus traditional sectors.

The latest entrant is Vietnam. The betting odds are that India and Vietnam are on this track and maybe lots of other countries.

Global Trends in the Economy and Things that would Affect Developing Countries

There is a surprisingly widespread pattern of rising income inequality in the world.

This includes:

- 1. The high growth countries for reasons that Sir Arthur described. It has to do with the fact that you cannot move everybody from traditional sectors to the modern ones overnight. So if you start out with relative income and equality at low levels and start this engine running, income inequality will rise for a while. It will eventually level off and start to go down given good policies.
- 2. In advanced countries like the United States, the middle classes benefitted very little in the last two years from both technology and the global economy.
- 3. In a number of developing countries that are not growing, there are very large numbers of poor people who say "what is the point in all this kind of globalisation?" "We are not benefitting from it, and the country is not growing so you cannot prove me wrong".

You take that altogether and what you find is that there is a very widespread skepticism about exactly what I described as the engine that drives this high growth. We now are living in a period where it has clearly worked and may work on a much broader front and people are increasingly skeptical about it. There is a clear back-tracking of enthusiasm for things related to the global economy and the reason I believe is that none of us in academia, policy and government, in a wide range of countries have paid enough attention to the distributional implications. We have problems with the equality of opportunity, problems of inequity in terms of outcomes, we have people who are hurt in the process because of the rapid transitions and educated people who tend to stand up and say the global economy is a good thing and everybody benefits. We have to stop saying that.

Global warming is terribly important. It may be the biggest challenge that we now collectively face with respect to our capacity for global governance. With respect to the developing world, the evidence is clear that the negative effects of global warming are the most severe in the tropics in economic terms. There is a high negative correlation between countries in the tropics and income level. Therefore global warming should be a matter of considerable concern and interest on these long-time horizons that we are talking about to everybody on the planet but certainly to the current cast of citizens in poor countries. One important message is that we all have a stake in this.

The second thing is that global warming basically has three parts, and science tell us:

- 1. The planet is warming up.
- 2. We do not know how much we are contributing to it, but we think it is a fair amount.
- 3. The range of increases in the average temperature on the planet is on the order of 2-5 degrees centigrade, which is a big range.

We have to make decisions under considerable uncertainty and complexity to address the issue. The single snag in getting at this issue is fairly dividing the costs of reducing the level of green house gas emissions; people confuse that with dividing up who is going to do the reductions, and that is not actually the issue.

The carbon trading systems, if they are ever created, would decide where the efficient places to clean up are once the targets are set. The problem is that developing countries say "why should we pay for this and slow down our growth when those of you who came before did not have that task?" That is one side of the argument and has a lot of merit. The other side of the argument is that if you exclude the large rapidly growing developing countries you can not solve the problem of global warming. It is simply impossible.

The United States is now being surpassed by China as a source of carbon emissions in the world. If we leave out the developing world, we basically can say we are not going to deal with the problem. It is a huge challenge.

Demographics and Ageing

We have had a lot of testimony on this subject. Most people understand now that the way we thought about the world thirty years ago when Paul Ehrlich wrote his book called "The Population Explosion", that we were all going to see a humanity that the planet cannot support. The principal concern is that we are all getting older fairly fast. It is true of Europe, North America, China who have a one-child policy and it ended up across the globe.

The question we are trying to ask is "will demographics and aging slow down growth?" The answer to that is, it depends. It depends on major reforms in most countries with respect to the incentives that surround pension systems, where working life ends, and who gets to choose when that occurs.

I can tell you with some confidence the following things:

- The population of the world is going to age significantly in the next three to five decades.
- If those reforms occur, fiscally sustainable pension systems, realistic choices by individuals about the age of retirement, systems that support the doing of multiple kinds of work in the course of a working life which may now last for 60 years instead of 40 years; if all these happen, there is no need to expect global growth to slow down. If they do not happen, then there is a problem.

We can look at the growth of China and India to see whether it has negatively affected the opportunities for countries that are going to enter this process a little bit later. What China and India have done is lower the relative price of labour intensive manufactured goods relative to most other goods. They have not lowered it to information technology products and services. There is no question that because of the size and efficiency of these economies in the labour intensive manufacturing area, the relative price of that has gone down.

What does this mean? Does that mean that it is foreclosed as a growth strategy for countries such as Africa? The answer is a debated subject. Some people believe it is not a viable strategy anymore. People like Paul Collier say "In an African country if you look at the cost differential there is no way on earth until China prices itself over time out of these industries", which will happen given a seven to ten per cent growth rate.

The one thing you can say is that if the relative price of these things has gone down, then the Sir Arthur Lewis model would not produce gains at the same rate as it did in the past forty years, just because the margins are lower. There is a big strong competitor out there and is a problem that will be wrestled with. It is very important because in a country that is not resource rich, and has a lot of labour which is educated, its principle endowment entering the global economy at the start, is the

capacity to produce. This is not an exotic issue; it is a question of whether or not there are viable strategies for developing countries prospectively, as opposed to in the past.

We have a demand shock in energy, commodities and food for a variety of reasons. It is not easy to deal with. At US\$98 a barrel for oil, it is hard to see how it would get worst unless there is a supply crisis. It is a demand shock driven by rapid growth in the global economy, rapid increases in consumption of energy without comparable increase in supply. The margin between demand and supply, which was once big, has collapsed. So a crisis in the Middle East, which might threaten even a small portion of the supply, could trigger a tremendous spike in the price and the increase the level of speculation, and this would not go away overnight. On the other hand, at \$92 per barrel of oil, the long-run demand and supply elasticity ought to be big, which is very different from the short-run. We know that there are many alternative sources of energy that are economically viable at US\$98 a barrel.

Small states have acknowledged different problems in the world and I think that what you have all accomplished here in dealing with these problems is going to turn into a model which would be used with suitable modifications in different parts of the world. For example, the Southern part of Africa would be a case in point.

There is a need to jointly decide, plan and invest in the infrastructure that connects these economies to the rest of the global economy. There are more land lock countries in Africa than any other place in the World, by a lot, between 30 to 35 per cent.

A very difficult issue is that a small economy is almost by definition in a riskier situation. The normal way for an economy to mitigate risks is to diversify. You can not diversify and be efficient, much, in small economies and therefore risks is real.

The notion here is that it cannot be fixed by the ordinary technique. It may be fixed in a way the global capital markets are developing by different methods. You can imagine the scale of the countries we are talking about, countries with 2 million or fewer

citizens. You could imagine the development of financial instruments with the possible intervention of the international financial institutions could provide significant degrees of risk reduction insurance over time.

Finally, I would say that the small economies are not in my judgement going to go through the conventional sequence of structural characteristics of the economy in the course of growth. The successful ones would become immediately and heavily involved in human capital and service based economies. The reason is it does not make much sense beyond a certain point to be a major player with respect to say foreign direct investment in manufacturing industries and so on, not to say there can not be highly specialised pockets of excellence in manufacturing. On average I would expect the big opportunities to be in small economies that are much bigger than they were before, because of this sort of disconnect between geography on the one hand and the ability through transportation in IT to provide services to the global economy. If an economy or country has a valuable set of human resources, somebody in the global economy would find them and take advantage of them. The speed and efficiency with which that is occurring is rising rapidly.

This is my story. It is a marathon, there are lots of examples of success and there is a reasonable chance that we are entering a really extraordinary period in which the vast majority of people in the world in the not too distant future will get up in the morning and think that their children and grand children will be better off than they are. That would be a wonderful world to live in.

Thank you.

REFERENCES

Paul Collier, *The Bottom Billion: Why the Poorest Countries Are Failing And What Can Be Done About It.* Oxford, UK. Oxford University Press, 2007 205 pp Hb, ISBN 978-0-19531145-7.

Tom Friedman, *The World Is Flat: A Brief History of the Twenty-first Century*, Farrar Straus & Giroux, published Apr 5, 2005, ISBN: 0374292884.

Paul R. Ehrlich and Anne H. Ehrlich, *The Population Explosion*, Simon & Schuster, New York, USA, 1990. 330 pp., ISBN 0 671 68984 3.