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East Asia: Miracle or Debacle? Lessons Learnt and Future Prospects

by

Professor Jagdish Bhagwati

Arthur Lehman Professor of Economics and Professor of Political Science Columbia University

"East Asia: Miracle or Debacle?" I think it is both. I will start with the miracle and then the debacle, and then assess what the prospects are in light of the analysis that I have to offer.

Krugman and the East Asian Miracle

Writing in "Foreign Affairs" Paul Krugman hypothesised that just like the Soviet Union which had been going through a period of what economists call "diminishing returns to capital accumulation", East Asia was likely to move in the same direction. First, he drew a parallel with the Soviet experience and said that the Soviet Union was grinding down because of diminishing returns. And because there was no technical change in Asia as measured by the total factor productivity (TFP) index, therefore Asia too was going to be grinding down. There was no miracle such as the Asian miracle on the ground because essentially there was no technological change going on. The prospect would be that as more and more capital got accumulated Soviet style, it would run into diminishing returns so that the nice high growth rates would actually start coming down. I will talk to that particular thesis and argue that Krugman was wrong on several counts.

Krugman was wrong in interpreting the Soviet experience and he was wrong in interpreting the experience in East Asia. They are both mistakes. I do believe there was a miracle and I will speak to that and say in what sense it was. The word miracle has different meanings. "Miracle" in the sense of something you cannot explain is not the sense in which one talks about the East Asian experience but "miracle" in the

¹ Paul Krugman, "The Myth of Asia's Miracle" Foreign Affairs Nov/Dec 1994.

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sense of something "off the charts", "off the curve", something extraordinary. That is the sense in which I will say there was a miracle and Krugman was interpreting it wrongly.

What happened was that East Asia did get the sharp brush, but that is very much like the Soviet one. If I were to produce a chart for the Soviet Union, you would see that the income growth was declining steadily. Gorbachev and Eduard Shevardnadze and the Soviet leaders decided the Soviet Union could not go on like that, and then came Perestroika. Perestroika was like the financial crisis in the sense that it was a political crisis or a crisis of reforms that did not work, and then they went into the negative quadrant, into negative growth rates. There was a sharp discontinuity, a continuous decline but it was still positive growth rates which then suddenly went into the negative. The task then has been to pull out of that and somehow gain some sort of momentum towards growth again under a capitalist or mixed system or social democratic system which they are trying to get at.

Explaining the crisis in East Asia

In the same way, East Asia was moving ahead, but I do not think that there was any evidence of any declining trends. Suddenly there was a crash from many of the countries in Asia and it went into a tailspin but it was a sharp discontinuous break. If Krugman was right, it would have been gradually coming down as capital accumulation relative to labour should have had, something like the Soviet chart developing over time. It would not have had the sharp discontinuous jump, but of course, a lot of the press assumed that just because the Asian countries jumped into negative growth with the financial crisis, therefore Krugman must have been a prophet. It had nothing to do with Krugman's explanation, which in any case was wrong. It was something completely different, like Perestroika was something completely different from the previous experience. The fact that Asia went into a tailspin is totally unrelated to anything like the kind of explanation he was giving, and therefore what I am going to argue is, in three steps. One is that there was in fact no effective basis for thinking that Asia was going to come down rapidly, a la Soviet Union. Two, the financial crisis had very little to do with anything like a Krugman type of explanation. And three, therefore, I do believe that as we get out of the macro

crisis, we will get back to a trend which is actually an optimistic one because I do believe that there was some good reasons to expect the miracle to continue.

The Soviet Union

What econometrics does is not explain but fit data to specific hypothesis. There are two ways in which econometricians working on the Soviet Union have looked at its economic decline. One is to try and fit the data with a reasonable fit to one hypothesis, which is the one Krugman was using, i.e. that capital is accumulating relative to labour, and since there is no technological change going on, therefore steadily you get diminishing returns. The more given labour co-operates with more and more capital, this is what we call diminishing returns. But the data equally fit another hypothesis which is that for any combination of capital and labour, the total productivity outputs, the isoquants, are continuously upwards but the rate at which productivity increases is sharply collapsing. Which of these two relatively good explanations as far as fits are concerned, with good r² on the way in which the data fit into that functional form, would anyone who knows the Soviet Union pick? No Soviet experts that I know would pick the diminishing returns hypothesis. They would say, because of lack of political and economic incentives in this system, the efficiency of use is going to go down steadily over time, everywhere, for any combination of capital and labour, and innovation is going to fall off. There are plenty of studies which show that in fact that is what was going on in the system. This was immediately obvious to people like Gorbachev who had grown up in the system and that was when they said they could not go on in the same way, the system was collapsing. First the analogy was wrong in my opinion in the sense that you do not have the explanation of the Soviet Union in diminishing returns if you look at what was happening in the system. The system was just grinding to a halt. It is not like you have got two cars per man instead of one car per man, and the amount of mileage you get with only one driver is naturally going to be less per car. Instead of diminishing returns, it is just that the car is not going to do well because the chauffeur has no incentive to turn up, nobody has an incentive to manage the car, to keep it going and so forth. It is not a diminishing returns story, it is a diminishing efficiency story for the Soviet Union.

East Asia

East Asia is first a miracle in the sense of being "off the chart". Krugman's main argument was that capital was accumulating very fast in the system and thus there was no miracle in the other sense. Not that you cannot explain anything but really there is no miracle because it is a story of high investment rates. I find that a bit strange because one has to explain why the investment rates are so high. It does not come like manna from Heaven or a miracle. It is something to be explained. That high rate of investment is "off the charts", but it is not just high rate of investment because the Soviet Bloc also had huge rates of investment. Nobody ever accused the Soviet system of not producing high savings and investment. Coming from Marx and the accumulation of capital approach, an authoritarian system would have a great advantage in producing massive savings because people could not go to the election booths and turn you out if you turn the screw tighter. The great advantage we thought in the fifties and sixties was that authoritarian regimes, and certainly the Soviet Union, was a far excellent system that would be able to accumulate more and we were right. It did accumulate and so did these Soviet Bloc countries but they were getting no results from it because over time the system was grinding down. There are other examples of very high rates of investment but there are no examples that I know of in history where you had investment rates which were productive like in East Asia over such a sustained period which was so high. In that sense it is something "off the charts". It is a miracle.

A Miracle?

Krugman made the mistake of sticking to the outcome argument just because he found an approximate association. To be fair to him, he probably had in mind people who say somehow East Asians are supermen. There was a sense about Asian values, that somehow Asians were different, and therefore they were producing these miracles. I think those kinds of arguments are much harder to sustain. They may help but they cannot explain something so dramatic and it is really independent of culture and in any immediately obvious sense.

We have to explain why the rates of investment and production are so high. That is where I think policy comes in. It comes from straightforward economic policy decisions and being able to use opportunities which were presented to this part of the

world at the time at which it began to break away from the normal run of experience of developing countries. Then the paths diverged and East Asia took off and the others did not in the same way. If you understand why this limited set of countries have this miraculous "off the curve" experience, that then tells us whether diminishing returns have a kind of role to play in terms of fearing the future. Many of us used to joke that when developing countries were managing the exchange rates and as they were held at some level, some pressure might come on, and we would always say we were going to win if we simply predicted that at some stage the exchange rates would be devalued. As long as we did not put a figure on it on a particular year, we were almost likely to be right at some time or the other. In the same sense, if you really look at East Asia with the high rates of investment going on, we are bound to say that some day diminishing returns are going to set in. It is obvious; it is the way we are brought up. First, we draw those isoquants so that diminishing returns are built into them, so it is nothing surprising. To me what is surprising is that for thirty years, diminishing returns did not set in. That is the interesting question. There is no evidence that anything was happening to show sharply diminishing rates of growth to begin with. Hence the first note of scepticism about the Krugman hypothesis or explanation is precisely this way of inverting the way you are looking at the charts.

Two, therefore, there is something going on and maybe the data are wrong in terms of Alwyn Young's calculations about estimating the production function in the TFP. The explanation of the high rates of investment, I think, has to do with policy, and the policy is in fact outward orientation. If I see it correctly, then I am going to be able to argue for countries like India which are starting twenty five years behind on the same path and are going to go into very high growth rates as well -- it is important not just for East Asia but whether the model is transferable -- to say what is it about outward orientation that really helped.

Outward orientation

Compare and contrast India and East Asia. Until the fifties, the experiences were very similar. They were both in import substitution in one form or another, except perhaps for Hong Kong which traditionally was continuously open. At the end of the fifties, India began to look inwards while East Asian countries maintained an outward orientation though the latter is not necessarily without some forms of protection. It is

a mistake to think that protection was not used by, say, South Korea but what they did was to kill the main destructive element of protection which was to make entrepreneurs think only of the domestic market. Because as soon as you have protection, you are protecting the domestic market and making it more attractive than the export market. That, plus the squatters' rights mentality and goofing off at home from having a comfortable market with no competition, is what really leads to the massive incentive not to be efficient. Therefore you cannot build prosperity and growth, and efficient growth on that.

What the East Asian economies did even when they had protection was to largely offset the relative advantage of the home market and the lack of incentive for the export market by making export incentives, export requirements, and a whole slew of outward orientation incentives cum threats and punishments go alongside the tariffs. So you had to kill the great advantage that you have of the home market and keep an outward orientated perspective in front of your entrepreneurs continuously, and then it may become substantially closer to eliminating the down side of protection. It is not as if these are pure free trade economies. Except for Hong Kong and Singapore, the other two certainly have to be interpreted in this way.

What does this outward orientation do for investment? To me it is pretty clear that when India turned inward for a variety of reasons in the late fifties and certainly starting 1961, the incentives to invest in the industrial sector -- there was not the huge financial sector in those days the way it is today, or telecoms -- depend on your ability to sell. If these markets were only domestic, then the rate at which your agriculture grows, basically, for these traditional economies, determines the size and the rate at which you are going to produce in that industry. The maximum rate at which a sustained agricultural expansion takes place anywhere around the world is four percent over more than ten years. (Of course, you have got ten percent, twelve percent growth rates but that is when you have the Chinese agriculture under the communes – suddenly you move up very fast but then they dismantled them in three years and you get on to the four percent at maximum because then you rejoin the human race after that.) Agriculture just does not grow that fast. That is very limited, it is like lowering the ceiling on oneself for the inducement to invest in the industrial sector, which is the primary thrust in these regimes at that time.

East Asia turned outward and when you do that, the world is at your feet. It is true that trade barriers even in countries like the United States, while there, are nowhere so decisive that you cannot get in if you mean to. Much of the export pessimism in countries like India was self-fulfilling. Because if you are saying the market does not exist, you will not try to get at it, therefore you will not get it, and therefore you think there is no market, so it becomes self-fulfilling prophesy. East Asia never took it for granted that it could not get in. It turned outward and sought opportunities. Professor Robert Baldwin of Wisconsin has written a very interesting pamphlet on the inefficacy of trade barriers in which he basically points to lots of ways in which people managed to get around trade barriers, like garments from Korea into United States. Apparently, there was a high rate of duty on jackets but there was none on vests, so they just removed the sleeves and assembled them in the illegal sweatshops in New York. There was no duty on sleeves and on vests, and you have gotten around it! There are many examples like that if one really gets down to the ground level. If you are an optimist you will discover those loopholes. If you are a pessimist you will just look at those tariffs on the jackets and say the United States is a closed country and the European Union (EU) is terrible on protectionism and so on. Attitude really does matter.

Even if the world economy was not expanding rapidly, as in fact it was during the sixties right until the mid seventies, and certainly the fifties, you could, even if you were just a small group of countries, really look at it as a highly elastic market to get into. You then have an incentive to invest. This is what Keynes used to call the marginal efficiency of investment. The inducement (among East Asian countries) to invest is very high compared to India. India's investment rates wind up for years at about twenty, twenty-one percent at maximum. You have a distinct difference. Then there has to be the accommodating savings rates. In these countries, there are government policies to produce the savings to accommodate the investment. There is an added advantage because once your growth comes through exports, you have no balance of payments pressures. That in turn means that you are able to import a great deal of equipment which embodies technology, later vintages of capital equipment that will not show up in the TFP. Economists sometimes think that where there is no TFP change, nothing must have happened, that you are still living in hamlets like in

the 1950s. The point is a lot of embodied technology gets classified differently, and TFP has disembodied basically technological change. You get a lot of embodied technology which actually then leads to additional productivity. Then there are also the very high rates of literacy in all these countries, so the labour force is able to work with these machines without difficulty, and it creates demands for better-educated people. There is a market-generated push for high rates of skill formation and high education, and it becomes a sort of a virtuous circle. Of course, if you have just higher education, then you can have situations like in Calcutta, where people go and burn tram cars because there are no jobs. Just simply producing educated manpower is not enough because there will be chaos and trouble like in many developing countries without jobs. Here, the main foundation is in fact economic performance which then makes educated labour force productive rather than destructive, and that in turn means you understand what good policy is, and that in turn reinforces itself. My explanation is that it is not just literacy in itself, it is really the correct choice of outward orientation.

Why did it work for one and not for the other? That is like peeling the onion still further down. There are all kinds of theories, like how they proximate Japan or the fact that Singapore is small and therefore outward orientated. But one can find exceptions to all of these, for example, China is close to Japan too, and North Korea is close to South Korea. David Landis' book, "The Wealth and Poverty of Nations" tries to get into culture, and that is when the author gets into trouble. However, he has an interesting example saying that East Asians as people who use chopsticks must have enormous dexterity, therefore they have great comparative advantage in doing electronics. This is a joke because the semiconductor industry goes around the world, it is almost robotic, anybody can do it no matter what their ethnicity, culture and so on. If one is deprived enough to be assigned to such a mindless task, one will do it. Besides, working in an air-conditioned room without the flies, mosquitoes and the dust is an additional perk.

The main thrust of the East Asian system was, in my view, outward orientation. That was the buzz that was missed by the rest of the developing countries, and in a way, it has to deal with all sorts of anti-globalisation rhetoric today. One overriding reason, which explains why the others did not do it, was that the anti-globalisation have

gotten to them because at the end of the war, compared to the perhaps excessively optimistic economists' philosophy that international interaction, like internal interaction between different economic agents, is mutually beneficial. Certainly for trade, one can argue that and for foreign investments I think also. Short-term capital flow created some problems, as unfortunately we all know now, but that is something which very few people understood at that time. Most of the people bought the line that the centre and the periphery were so unequal that if the periphery, meaning the poor countries, got into trade and investment with the rich countries, they would be harmed. Instead of a benign impact and mutual gain, you would have a maligned impact that this periphery had to be worried about and so it was not an opportunity to integrate into the world economy but it was a peril, and the most you might do is selftrade, self-collaborate and so on. Which actually is very limiting. Using an analogy, if I go and play tennis only with someone who can play as badly as I do, I am never going to improve my game. It is better for me to actually interact with somebody better than I am, but if he is so much better then of course I would not play. Again it depends on the problem. An analogy can only go so far but the analogy was always that if I went with the bigger guy, I am going to be finished – "international integration leads to national disintegration". That is exactly the story you would see in the street theatre in Washington, Seattle, etc. It has all come to the West now in a big way. It was all in the East but it has gotten away from the poorer countries. This fear of globalisation was really what was driving the other countries from using this opportunity. That was really the kind of ethos or thinking, the fearful approach through integration, which really hurt the other countries. East Asia was an exception, "off the charts" as far as the story of the poor countries is concerned, and everybody is now trying to catch up.

In this sense, if you throw in the investment story as well, I think it makes a logical argument. There is a lot of embodied technical change going on, and I think that can remain an impulse for rapid growth, which is the rest of the world is in fact continuously innovating. This amounts to taking technology off the shelf. Of course if you pay exactly what you get out of new technology, then you are not better off. If something is ten times more productive and I buy it at ten times the price, it really does not give me any great advantage. The prices of technology are set by world markets and usually onto developed countries. Most of the developing countries can

manage to get a big surplus because the prices, as soon as something gets displaced and something new comes in, shoot down very much. For you, your own social marginal product, the productivity in your society, will frequently exceed the price at which you get these things. So there is a surplus to be tapped. That is another element in my understanding of why it amounts to something like taking technology off the shelf. Because there is an element of surplus which you can extract. Because international prices never reflected true productivity that any individual domestic buyer in Singapore, etc. can get for it because continuously prices of just t-1 vintage are going down very sharply.

If that is the story, then one can understand also why rapid growth took place in these economies. Because there is a huge amount of embodied technology coming in, and these surplus elements which I mentioned leads to greater build-up of human capital in turn. But all of these are being assigned to non-TFP factors in the way which we look at it. The fact that TFP is small is sort of missing the story because the rapid growth is part of a process where you can identify productivity enhancing or growth enhancing effects. I would expect this to continue unless these economies suddenly run out of labour or something and then they are delimiting themselves because they cannot find people to work with. If this story is correct, there is no reason to worry about diminishing returns in my opinion because this provides elements of pushfulness[?] towards growth.

Debacle

The East Asian model is spreading through the world, or was spreading through the world, in the developing countries. South America is looking at this. ASEAN countries other than the first East Asian four countries, looking at what you could do, went for it. India is now beginning to move into that and India's growth rate has already picked up from three and a half percent under the anti-globalisation policies for almost thirty years, and since the eighties when it began to open up, is now about six and a half percent on the average. I expect it will open up even more because if you look at the state of technology in India, it is exactly what you would expect. It is happening even faster because of information technology, because that is an area which nobody has been able to touch in India. It just happened to grow autonomously and if it keeps growing for the next five years at the rate at which it has for the last

three years, as people expect it will, then half of India's exports earnings by that time are going to be software and Information Technology export. If so, India's moving right into the East Asian model. It will do exactly what it did for East Asia. That is one of the promising areas in my view. It does not depend on dismantling barriers because there are no barriers there to begin with, and it is rapidly growing. The country already has extensive manpower and unfortunately it does not depend on massive literacy but that too will happen once jobs begin to open up and the system begins to grow. So I think it is a miracle, but a miracle which we can explain. It is an "off the chart" miracle, but there is nothing terribly mysterious about it, and if you accept my explanation, then you have good reasons to be optimistic. Then comes this wretched debacle, not in Singapore but certainly in the other countries, and that is where there is a huge amount of debate between those like me who feel that the large part of the problem is that due to reasons which have to do with what one might call "the pendulum effect".

The pendulum effect

There was so much intervention in the fifties and sixties around the world, particularly in the poor countries, there is also a tendency to dismantle controls and regulations. If you look at financial regulations, there are also cycles like that. This is a pendulum model. During the 1950s and 1960s, the complaint in most of the developing countries was that Adam Smith's "invisible hand" was nowhere to be seen. There was just knee-jerk intervention everywhere whenever a problem emerged, and there were huge numbers of problems in the developing countries. In the face of enormous scarcities, what does a politician or an average person, uncluttered by economics, feel? If you then say, "look, you must leave it to the market", that is completely counterintuitive to the person. It is like when you first learn how to drive under snow conditions and they say if you start skidding, steer in the direction of the skid. It sounds like that to say "leave things to the market" when there are enormous scarcities. It is totally counter intuitive but that is what you are supposed to do. If you steer away from it, you are going to get into worse problems. Hence these are counter-intuitive advice, and that was what people felt.

There is a book on economic backwardness and historical perspective, in which the author argued that the more behind you are, the more tempted you are to use

government in every way to push the engine forward faster to catch up faster. But that is just a psychological impulse; it does not mean it is the smartest thing to do because you have to have a proper combination of markets and appropriate governmental intervention and guidance. There were many reasons why people were just rushing into intervention. I think we can blame Fabianism in England and all that but not beyond a point. There are other reasons. Once people start seeing all the damage that all this does, then they tend to go off in the other direction.

Similarly with capital flows, you say, all right, we have now started liberalising trade and so on, now as the next step, the (International Monetary) Fund should move into capital account liberalisation. Of course there is a good argument for it in the sense that there are important similarities. Anytime you segment a market you create inefficiency. However, my exchanging my toothbrush for your toothpaste -- it requires a vile imagination to think that can cause a crisis. It can cause mutual satisfaction, better teeth but nothing more. But short-term capital flows beware. Professor Charles Kindleberger has documented all these crises over the two centuries. This is not an easy area. I think what happened was that under pressure from Wall Street, which wants of course to act to expand markets, and people, investors and financial sector want larger play, that pressure is there, but it will succumb too partly because of ideological shift to this spectrum. I think people just forgot the lessons. Stanley Fisher's students and my students have produced models which show that these kinds of problems can arise theoretically as well. We had both our teachers like Kindleberger giving us history and our students giving us the models but it was all forgotten and then the pressure was put to liberalise continuously. The Fund has not mattered this much that they were trying to do that and the Fund is bent back now.

Obviously you cannot have applause without two hands, and there are elements of weakness in the policies, certainly in Thailand which have been warned for at least three years by the Fund about its weakness. Korea was not weak but certainly once it was pushed from internal financing into external financing by having to join the Organisation for Economic Co-operation and Development (OECD), it did not take the precautions of adjusting its system now that the highly leveraged ratios would depend on borrowing from abroad. That is a very different game from highly

leveraged ratios from borrowing at home where you can print the money. It liberalised too fast, too quickly. I do not know whom to blame but certainly it would not have been done if there was not any pressure from, say, OECD saying you cannot join the OECD unless you liberalise your financial sector. It would not have happened unless the US Treasury was pushing for it too. So in that sense ultimately we are saying the responsibility belongs to these. Indonesia has for long had capital account convergence, which is a more complicated story, but I think the Fund and the Treasury etc., publicly do not want to admit even an iota of responsibility for what they did. Now that may be because they are in a game where confidence is very important, so if you want to give a good hypothesis in their defence, you would say they cannot publicly confess to mistakes. But privately, I think at least of some of the Fund people have come around that the pressure has disappeared to move fast on these things, even on Mahathir. There are two issues: one is how rapidly you liberalise, and that is a very different question from, if you have liberalised like Mahathir had, do you then reverse steps? To me, the second is a more complicated question, and I am not entirely with Mahathir on that, because it is like you if join the Mafia, and if you wanted to leave, that is an even worse decision. You cannot just go to Mr Gambino and say, well, I have decided to leave. You will leave in a coffin. I think these are two different problems.

When it comes to advising India, which sometimes I am asked to do, I said go easy until the rest of the world has developed confidence in your political system and your economic performance. Do not take risk. Give some elements of compatibility to direct equity investment -- you can repatriate your earnings and so on. Do significant elements but do not go the whole hog where somebody can walk into a booth or a bank and if they have a hundred million dollars worth of rupees they can get it converted outright. That is a tricky one, I think, to go into full capital account convertibility. So, I am a little worried and I do not have that confidence.

Recovery

Before we get back to what trend should we think in terms of going, I would say that the recovery seems to me at least at the moment to be on the right track. I would suspect that even Mahathir's controls were not really the cause of Malaysia doing reasonably well. It was a fact that, aside from having pushed people into

convertibility a little faster than we should have without adequate monitoring and instrument, I think most people agree now the first set of IMF policies the first year was excessively deflationary for Asia and should have been, some people even go on to say, expansionary. Everybody was taking the lessons of Mexico to Asia, where it did not belong. I find that reasonably convincing. Mahathir's strategy worked well because since he did not go to the Fund and used only capital controls which were not draconian in any way, he did not get the bad conditionalities. It is not capital control as such but the fact that he escaped this handshake that would really would have killed him.

I do not blame the IMF beyond a point because it did a quick turnaround as soon as it found something was not working. One of the problems of macro-economics is everything depends on what kicks in, when and how. Many of the countries, I am told by people like Max Corden, wanted to raise interest rates to attract capital back. Of course the Fund knew that it could create a problem inside the countries because it could raise the cost of financing and the banks could get into serious trouble. But they were hoping that the funds would come back in very quickly, restoring confidence, but that did not kick in and the other stuff kicked in. Professor Heller who was President Kennedy's advisor was famous for saying that in macroeconomics, fine-tuning is not possible. Everything turns on expectations, values of relationships which are not stable. Of course, there are also huge differences among what models to use within macro-economics. I would rather judge the IMF in terms of how quickly they learn and turn around. The analogy I use is the way I reversepark my car. I go back and forth, back and forth, hoping not to hit the car on the right and to get into place. That is the only way to do macro-economics in my view and it is a miracle to expect something will always be right. The Fund turned around and I think it is working well now. Some weaknesses, certainly in the financial sector, are being eliminated. Maybe slowly in some cases but they are finally being addressed. In two cases you also have the political structure change. This is a very expensive way to change it but certainly Indonesia and Korea really needed change in the democratic direction in a very big way. So in my judgement, the model I described earlier is still in place and you have now productive changes in the institutional structures taking place. How can I be pessimistic then about recovery and about the trend rate? Maybe we will not get back to ten per cent, to double digit, but certainly

seven, eight, nine per cent. I think the direction has changed and the optimism I think is justified if my analysis is correct.