

An Insight into the Challenges Facing the Mauritian Economy

*Address by Mr R. Basant Roi, G.C.S.K., Governor, Bank of Mauritius,
at the Annual Dinner of the Chinese Business Chamber on 24 March 2016*

InterContinental Resorts, Balaclava, Mauritius

Her Excellency, Madam President

The Rt Hon Prime Minister

Hon Ministers

Members of the Diplomatic Corps

President of the Chinese Business Chamber

Distinguished Guests

Ladies and Gentlemen

Good evening

I am delighted to be with you at tonight's annual event of the Chinese Business Chamber. I thank the President of the Chamber, Mr Lee Meng How On Siong, for the invitation extended to me. It's the first time that I am attending this annual event. For the next fifteen minutes or so, my job is to talk to you on a subject that usually drives people to sleep and your job is to listen to me. If you finish before I do, just raise your hand, I catch on very fast.

In the mid-1960s, when I was first introduced to the study of Economics, I had, as a beginner, read the basic definition of Economics. It said Economics is the study of human behavior. And the entire discipline rests on one fundamental assumption: human beings are rational. On the surface, the definition had sounded very simplistic – in fact, too simplistic to inspire someone with a cut and dry aptitude for mathematics, chemistry and physics to opt for that discipline. I had, nevertheless, opted for Economics. The first sentence uttered by my first lecturer at the University was, “a country is underdeveloped because its people are undeveloped.” It was a simple but very profound statement. In today's world this statement is deemed to be politically incorrect.

A year after joining the University, I had realized that I was in for an alphabet soup with cabalistic mathematical symbols like alphas, betas, deltas, differential and integral calculus, matrices, statistical and econometric equations etc. Like many others, engrossed in those beautifully laid out mathematical equations, I had tended to think that society responds to mathematical expectations. After joining the Bank of Mauritius way back in the mid-1970s, I had got directly involved in economic analysis and policy making. I had very quickly discovered that people, depending upon their level of development, react in ways that defy rational economic judgment. I wouldn't say that a rational human being is an impossible

creature. Humans are rarely rational. Rational irrationality has gained currency in economic literature, lately. People's behavior are generally non-linear. Psychology has returned to Economics. I also imagined that if heaven were open only to those who agreed on economic issues or for that matter on politics, it would be largely unoccupied. Economic policy-makers do what a typically good doctor does. The key to treating a disease is not the elegance and internal consistency of his analysis of the diagnosis he makes. What matters is whether the treatment he recommends works. Reality-based economists have similar outlook.

Essentially, the point I have tried to drive home in this introductory remark is that human decisions that influence the future, whether personal, economic or political, cannot depend on strict mathematical calculations. It is our intrinsic urge - the "animal instinct" in us - to activity that makes the wheel go round. But, often, we fall back for our motive on whims and sentiment. In around 1965, the then Government had announced the introduction of our National Television. This decision was ridiculed. Just after Independence, the then Government had decided to establish a national airline. Even opinion leaders of the time had questioned our capacity to ever acquire airplanes. The same skepticism was expressed with regard to the Export Processing Zone and the tourism industry in the 1970s. In 1988, the decision to set up offshore banking was announced. Very few people had an idea what offshore business was all about but the many found it a non-starter. Not a single bank was willing to finance the restructuring of the sugar industry in 2002. Banks had taken, not a very myopic view, but a brain dead stand on the issue of financing. Ebene, the place for our cybercity, would not have been a reality if the Bank of Mauritius had not provided the required financing. Yet, I see many banks headquartered at Ebene today. There are consequences to living in a dream. Questions are: are we congenital skeptics? Are we victims of infectious pessimism? Do we, as a society, have an attitude problem? What were deemed improbable were made possible. And only those countries that make the improbable become possible can aspire to survive in this age of great disruption. Today, it's the turn of 'Smart Cities'. 'Smart Cities' are just a step forward in the very best interests of our society. In fact, Mauritius, as a whole, should eventually become a 'Smart Island'. The Chinese say: "a thousand miles journey always starts with a step." The one step Mauritius is making is a smart step ahead.

Anyone of us having a good insight into the economic and monetary history of the country must be familiar with the opportunities we have missed in our development trajectory over the years. At primary schools we have all been taught the economic reasons that defined Mauritius as the Star and Key of the Indian Ocean. I need not dwell on the reasons as I believe they must be familiar to you all. One thing is clear. We have never made determined efforts to get the best possible out of our positioning in this part of the world. At least two other countries have tried and maximized economic gains from their positioning in the Indian Ocean. We have overlooked that Mauritius used to be a regional financial centre since as far back as the 17th century to the early decades of the 20th century. We used to have several banks here, each issuing its own currency as a means of payments. Free banking was the name of the game as it used to be in the United States in those days. Bank failures were common as much as new banks coming into operation were. With the Pound sterling, the Indian rupee, gold, silver and other Middle Eastern currencies used as media of exchange, Mauritius had emerged as a payment and settlement centre for traders, both local and foreign. The reasons why this trend did not continue do not fall within the ambit of my intervention tonight. Suffice it to say that the externalities stemming from the development of a port with unrivalled efficiency cannot be discounted. We do have natural advantages. It's all a question of people's awareness and understanding, a question of people's faith and conviction, a question of people's commitment. Not only of the Government.

Where does the Mauritian economy stand today? We are in a globalized world undergoing great Schumpeterian disruptions. In the past two decades, there have been many disruptions in almost every industry under the sun. They are a kind of disruptions that have forced industries not only to fight for their survival but have often turned their assets into liabilities. Two-thirds of the companies that appeared proudly in *Fortune* 500 in 1970 have vanished. The Schumpeterian forces of disruption have been intense and continue to be so. To better appreciate where we stand today, I must briefly outline the evolution of the world economy from a particular perspective. As is said, a quick look at the rear-view mirror usually provides a good guide to an understanding of the future.

The hundred-year period from 1870 to 1970 is seen as a special century unlikely to be repeated in its breadth and depth of change. People lived through a century of relative prosperity. New technological innovation – the internal combustion engine, automobiles, airplanes, electricity, electric bulbs, electrical appliances, telephone – promised a better, easier life for everyone. Urban dwelling was transformed from a primitive state to a level similar to the way we live today. Home life was revolutionized. The most profound progress made during this period has been in the form of reduced mortality rates, particularly among infants. Medical care witnessed important improvements. Life expectancy had improved spectacularly. This startling progress was largely due to changes brought about by electricity, indoor plumbing and running water. No other era in human history combined so many factors in which human condition was transformed so completely. This better life was predicated on capital, savings put to work in factories, buildings, machines and transportation systems.

As a matter of course, productivity growth in this special century was unprecedented; it fell off in the 1970s and the 1980s. Productivity grew much more slowly in the years after the 1980s. Why? Because the very real innovations revolving around the information and communication technology (ICT) sector were narrow and less transformative than the earlier innovations. Some inventions are more important in terms of productivity improvement and growth than others. Illustratively, let me give you the top 30 innovations of the last 30 years in the order of importance.

1. Internet, broadband, WWW (browser and html)
2. PC/laptop computers
3. Mobile phones
4. E-mail
5. DNA testing and sequencing/Human genome mapping
6. Magnetic Resonance Imaging (MRI)
7. Microprocessors
8. Fiber optics
9. Office software (spreadsheets, word processors)
10. Non-invasive laser/robotic surgery (laparoscopy)
11. Open source software and services (e.g., Linux, Wikipedia)
12. Light emitting diodes
13. Liquid crystal display (LCD)
14. GPS systems
15. Online shopping/ecommerce/auctions (e.g., eBay)
16. Media file compression (jpeg, mpeg, mp3)
17. Microfinance
18. Photovoltaic Solar Energy
19. Large scale wind turbines

20. Social networking via the Internet
21. Graphic user interface (GUI)
22. Digital photography/videography
23. RFID and applications (e.g., EZ Pass)
24. Genetically modified plants
25. Bio fuels
26. Bar codes and scanners
27. ATMs
28. Stents
29. SRAM flash memory
30. Anti-retroviral treatment for AIDS

These technological innovations have been much less transformative than the previous industrial revolutions were. Productivity growth has been less impressive. At the heart of the technological innovations are computers, software and the Internet that have found their way into the production of almost everything a modern economy creates. Factory workers are being replaced by computerized machine tools and robotics; office workers, by software applications; professionals by ever more specialized apps; communications and transportation workers, by the Internet. Robotics have penetrated factories to a point that there is a joke, I came across in the campus of the University of California a few years ago, that “a modern textile mill employs only a man and a dog – the man to feed the dog and the dog to keep the man away from the robotics.” Driverless cars and delivery drones are moving from science fiction to mundane facts. Imagine getting an online medical diagnosis from a smart machine like IBM’s Dr Watson that is more reliable than the diagnosis made by humans. Imagine learning mathematics from an online MITx program or one of its successors. We are given to understand that banking will be there but banks as we know them will be drastically downsized. Central banks, too, are not immune from changes taking place in digital technology. Digital coins are gathering momentum. The world is in for amazing advances in certain areas of artificial intelligence.

Already we have seen in Mauritius that typists have disappeared from offices. Online booking is slowly displacing travel agencies. Online booking for hotels is keeping out intermediaries. Online checking-in is gradually displacing workers at airports. Self-check-out at supermarkets are making cashiers redundant. Banks in the country are no longer opening branches; instead, they are closing down existing branches. At least one of our exports would be priced out on the international markets, if the enterprises do not embrace robotics. Not only jobs on some routine and repetitive level are disappearing, even jobs requiring all kinds of skills are threatened. Jobs aren’t being just destroyed – they are getting lost to smart machines the world over. Mauritius is not spared.

But people will continue to have considerably greater opportunities, at least if they are savvy with information technology and disciplined enough to take advantage of the new free and cheaper goods. This will not come close to helping everybody. Uber demonstrates that one can create enormous value by providing a relatively simple service. The internet tools reward the self-motivated. It’s clear that many will however still fall by the wayside.

It’s more likely that Mauritius will, in the years ahead, end up being a two-tiered developing economy model should the present trend persist. The implications of computer processing speed will benefit some economic sectors more than others. The static sector will be the protected services sector like health care, education and Government jobs and the dynamic sector will be exports rooted in tech, connected to tech, made much more productive

by technological innovations. A couple of our exporting firms are already rooted in tech. Technology that was seen as science fiction is fast getting closer and closer to being part of our everyday life. Job creation for those who will fall on the wayside will remain a haunting problem for policy decision makers.

One of the biggest challenges, if not the biggest, that we face today is how fast to build a stock of quality human capital bearing in mind the threats posed by the progress being made in the field of digital technology. The gap between our existing human capital stock and the desirable quality human capital is palpably felt across economic sectors. I will not be faithful and honest should I fail to say that the quality of our human capital does not meet the standard required to meet the disruptive challenges we will be facing. With respect to quality human capital, I'm afraid, we have gone terribly wrong somewhere. Let's bear in mind that it takes many years to build a quality human capital stock. There is a gap that needs to be plugged and that can only be done by selectively allowing quality human capital in the country. The United States brought in the best brains from the rest of the world in its phase of economic expansion; it is still doing it. Great Britain did the same. Since quite some years China has been aggressively attracting the best brains from the rest of the world. A few other countries have been doing it. For us, it's a question of reconciling our medium and long term economic goals with the exigencies of the day.

Ladies and gentlemen, we have challenges in our financial sector, too. Those are challenges the character of which is highly sensitive. May I, in a nutshell, simply state that we have identified the sources of vulnerabilities in our financial sector. Short of lending opportunities here in Mauritius, banks have been lending to external borrowers. Banks have also lent to locals in foreign currencies. Capital flows have been financing our current account deficit for the last 8 years or so. This is where the exchange rate of the rupee comes into play. While the exchange rate level of the rupee is right for the financial sector, it is not right for the export sector that has more trickling down effect in the economy than the financial sector. Last year, the Bank of Mauritius allowed for some market correction in the exchange rate level of the rupee. Ever since monetary management has been a tight rope walking in an endeavor to keep both sides kicking alive. This has become a permanent challenge, more so when the Bank of Mauritius has to finance interest payments of more than Rs1.0 billion annually in respect of liquidity management. The least disturbance in the banking industry could upset the entire system. And we will be back to the painful second half of the 1970s. The Press Information Notice on Mauritius issued by the IMF a week ago suggests that we must not mess with the economy. Responsible conduct is a *sine qua non*.

Over and above all, there is one critically important element that guides any society in the path leading to economic prosperity. It's an element that is often taken for granted and sometimes dismissed as unworthy of attention. It's an element that defines the character of a society. It's what we call "values" a society is anchored to. It's an element not covered in economics textbooks. The United States, in the early stage of its economic expansion, was guided by Protestant values. Delayed gratification was a belief dearly held by the American people. It was the same story with the UK and some European countries. The core principles of Buddhism were a principal thread running through the Japanese society since Meiji Restoration of 1868. No wonder Japan eventually ranked as the second largest economy of the world. When we read about China producing in less than a day what it used to produce in one year in the late 1970s, it's not only because the Chinese Government came up with some miraculous formula; it's also because the Chinese people hold Confucian values dearly in their inner self. Values and economic development go hand in hand. A lot of smart people among

us have got carried away to a world of fantasy. They have forgotten fundamentals like how to build a solid company, a lasting portfolio of investments or even a thriving and respectable son or daughter. The secret of success is what it always has been: reading, writing, mathematics; church, mosques, pagodas and temples; the rule of law and good governance.

I had a very close friend from Kashmir, India, in my days at the University. He was a handsome young man, smart character and gifted with a good sense of humour. He was a Sikh, belonging to a sect that requires all male members to have five elements permanently with them as a reminder of their duties in life. In other words, those five elements represent values espoused by the Sikh community. Something happened to him one day. He decided to erase his past. He went to the barber and had a haircut and shaved his beard, threw away his turban and got rid of the remaining three other elements. Something serious happened to him very soon. He lost his anchor in life and started doing foolish things. I learned one precious lesson: never lose your anchorage in life.

Ladies and Gentlemen, 2016 is the New Year of the Monkey. I was born in the year of the dog. I understand that the monkey and the dog have some kind of affinity between them. However, as I mentioned a few days ago at a Barclays Bank function, the dog is advised to listen to his instincts. My instincts say I must retire to my seat.

On behalf of the Board of Directors of the Bank of Mauritius, its staff and on my own behalf I wish you all the very best for 2016.

Thank you.