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Past and Present Global Trends for Economic Development and their Implications for an Emerging India

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Abstract

This paper is the result of an exhaustive review of some basic sectors to identify the trends in the journey of nations to economic development. A knowledge and understanding of the past trends in the evolution of developed countries would help us to craft the strategy for betterment in terms of social and economic growth. We have attempted to answer in this paper two questions, viz.: What the developed countries did and what the developing countries must do in order to become competitive. The paper has been largely India-centric in respect of developing countries, even though reference to China has been made frequently.

Keywords: Infrastructure, Demography, Lifestyle, Recession

1. Introduction

This paper examines the global trends among the developed and developing countries, and their possible implications on business and economy. For the purpose of this paper, a developed country is viewed as one that makes use of advanced technology base and has well-trained and highly skilled human resources to manage the technological base for the production and distribution of goods and services, enjoys a substantial share of international trade, possesses strong national and social security systems, and has a well-developed judiciary. A developing country, on the other hand, can have abundant natural and human resources, and a structural framework for exploiting its resources for rapid economic and social growth. In many instances, a developing country starts with an attempt to strengthen its existing systems and framework or even build a new one from scratch with the support of a developed economy if it has to evolve from primitive stages.

As we traverse the path followed by developed countries (such as USA, UK and Japan), we can discern a pattern and trend adopted by them to establish themselves as global economic powers.

These trends are grouped under the three classes, viz.

- *Basic infrastructure*
- *Demographic trends, and*
- *Wealth and life style trends*

India and China were considered to be among the most developed countries in the world in the first millennium after Christ (Sachs, 2005). These two countries had garnered for themselves more than two-thirds of the world trade during the period. In fact, India had enjoyed the privilege of being the largest global trader, followed by China during the early part of the first millennium. India and China lost their primacy to West European countries during the second millennium, on account of their internal socio-political problems and their inability to exploit the potential of the industrial revolution that had its origin in UK and spread to the rest of Europe. The industrial revolution sweeping the globe during the middle of the last millennium changed the structure and working of societies. The cottage system of production was replaced by the factory system, giving rise to mass emigration of farm workers to city centres in search of better futures. The factory system of production also called for skills in harnessing machine power in contrast to animal/draught power which the farm workers had been used to working with for centuries earlier. Furthermore, mass production brought with it unprecedented possibilities of scale, economy and more importantly

hopes and outlook towards life. India, China and many currently developing countries which were not active participants of the industrial revolution did not face the challenges of organisational and societal changes, nor the need to transform their infrastructure to the changing realities of industrialisation, as they continued to remain mainly agrarian.
The process of colonisation of some countries like India by the West had the benefit of transfer of some features of industrialisation to the colonised countries and the accompanying changes in some parts of their societies. However, the realisation of the relegation to the bottom in international trade by India and other developing countries following the end of their colonisation created a new spur towards growth through industrialisation. It is gratifying to note that India, China and other developing countries have started exploiting their vast human and natural resources base, and taking off with the technological base of the developed nations. They are growing more rapidly than the developed countries as a result of their low starting bases.

2. Basic Infrastructure

The contribution of investment in basic infrastructure to economic development has been well documented, especially in several empirical studies by the World Bank and other organisations (for e.g., Kessides, 1993; Lem, 2002; tajika, et. al., 2002; Klerman, 2007; Utt, 2008). However, the nature of infrastructure required by a country is dependent upon its technological priorities, its natural resource base and its human development at any point of time. It is also dependent to its exposure to the rest of the world by its policies of international trade in goods and services. One can, however, say that irrespective of the above, any country that wants to develop has to invest in the following minimal infrastructural facilities:

- Roads, rail, ports, communication, and other facilities for enhancing the connectivity of its people;
- Facilities for harnessing its resource base and providing a minimum level of respectable standard of living, such as water, agriculture, housing, power, etc;
- Facilities for ensuring the well-being of its citizens and their growth for handling the future challenges, such as health, education, etc.

Developed countries have reached their current stage primarily due to the availability of abundant basic physical and human infrastructure (such as agro-processing facilities, urban industrial townships, transportation systems, power, water and allied facilities, ports, airports, communication networks, basic and advanced educational facilities, healthcare delivery systems, hospitality, tourism and entertainment, and most importantly, a well-developed apparatus for preservation and commercialization of their traditional cultural and knowledge practices). These countries were able to create huge infrastructural facilities primarily on account of their investment in technology and technology development, combined with a strong commercial outlook. The challenge for them is the maintenance of the vast infrastructure so created and preservation against natural and man-made damages.
On the other hand, the most important and fundamental challenge for the developing countries is the rapid creation of such vast infrastructural facilities. India has been paying special attention to the creation of basic infrastructure since independence. However, it has not been in a position to reach the level of the developed countries, primarily on account of its large size, high population growth rate, and low savings and international aid. The closed door policy of the Government during the first few decades is also cited as an important reason for the lack of resources for infrastructural development. In addition, India has been grappling with innumerable natural calamities and a few wars, draining a part of its resources away from constructive developmental infrastructure.
In this context, we have to look at the stages followed by the developed nations towards development. Today's developed countries like USA, Japan and Germany passed through the agricultural revolution and industrial revolution before they became fully developed (Toffler, 1981). The industrial revolution itself consisted of two sub-phases, viz. manufacturing and services. The world is now in the grip of the third wave, ushered in by the information revolution, overlapping the services revolution and deepening its contribution to economic growth.
Each of the three stages of evolution in development calls for basic infrastructure appropriate to the stage. For example, the first wave of agricultural revolution spanning the period B.C. 8000 - A.D.1650-1750 was characterised by new agricultural technologies and management of natural resources. By today's standards, the technologies were primitive and crude. The infrastructure appropriate to this stage consists of large water storage structures, laboratories, experimental farms, cold chains, and some minimal transportation for the transfer of goods from production centres to

consumption centres. The institutions appropriate to this phase were experimental stations and laboratories investigating alternative inputs like seeds, fertilisers, pesticides, etc. and developing manual and animal-driven technologies for reducing the drudgery of repetitive operations like sowing, harvesting, winnowing, threshing, packing, transportation, etc.

It was the second wave marked by replacement of manual power by mechanical power that made possible unlimited production capacities and development of markets. This new wave made it necessary for the developed countries to invest in infrastructure related to connectivity (such as roads, rail, ports, communication, etc.) and physical well-being (such as water, food, housing, sanitation, health, etc.). However, it is highly questionable whether all developed countries have paid sufficient attention to the intellectual development of their citizens, since the basic premise appears to have been the importance accorded to technology and the belief that technology can do anything. In the process, many developed countries have fallen into the traps of ageing populations, low populations, and a young generation which is not as intellectually developed as its earlier ones.

On the other hand, India's major strengths are her young and well-educated population with a good proportion comfortable with the English language; well-developed judiciary; a large, strong and vibrant democratic system; a rich and diverse cultural heritage and strong traditional wisdom; a pluralistic society characterized by the co-existence of people belonging to different cultural backgrounds, speaking different languages, practicing different religions; respect for nature and environment; and individual freedom and entrepreneurship. Her immediate challenge is the creation of infrastructure in areas neglected/ not attended to hitherto. We deal with a few key sectors of physical infrastructure meriting immediate consideration in developing countries in the following sub-sections.

2.1 Power

What water is to fish, electricity is to economic growth, health, quality of life and prosperity. In fact, the per capita power consumption is considered to be an indicator of economic development of any country. With the ushering of the industrial revolution which replaced manual effort with mechanical power, electrical power has simply become a pre-requisite for the creation of goods and services in any economy. Not only dose it increase the pace of our daily life, it elevates our quality and standards of living. It is a pre-cursor to bringing nations together in a consumer-oriented market-driven economy. Therefore, the generation of quality electrical power and its efficient distribution and utilization are fundamental to economic growth. The challenge for India is three-fold: first, the enhancement of its existing generation capacity by setting up new power plants; second, exploring renewable sources of energy such as bio-mass, geothermal, solar, water and wind; third, efficient distribution and utilization though research and energy-efficient new product development in all sectors.

2.2 Networking & Connectivity

The phenomenal growth in electronics and communication technology has successfully connected all parts of the globe; advances in wireless and sensor technology have succeeded in creating remote area networks, thereby connecting remote rural and hitherto unconnected areas with the rest of the world (*networking infrastructure*). As each entity across the globe gets connected, information flows independent of time and transcends it. A new kind of workforce called *virtual workforce* and a new culture of work, somewhat akin to the cottage industry era, where there is a high degree of commitment and flexibility for people to work whenever and wherever they want, is already evolving. From business perspective, *virtual workforce* will work across border, independent of time and distance. As a result, *business is anytime, any place and anywhere (24x7x365) across the globe.* This change brings in new types of challenges and opportunities to organization, business and governments. Connectivity within and across geographic regions and networking become key elements, critical to *econoedge* (meaning, economic edge). India has already started addressing this challenge in a big way by helping private firms establish electronic connectivity amongst cities and villages through low cost schemes. However, innovative applications in networking among institutions (Government, Trade, Industry, Business and NGOs) for sharing scientific, technological, trade and commerce, academia, industry information in a seamless way pose the greatest challenge to many developing countries including India. However, such information sharing is of vital importance to rapid socio-economic growth. This challenge is best addressed by orienting the huge workforce, especially the youth in the age group of 18 to 30 years to an e-culture.

2.3 Physical Mobility

Mobility is fundamental to economic development, as it stimulates the flow thereby facilitates exchange of goods and services – the very essence of competitive advantage. While electronic connectivity is bound to reduce the time and distance of travel to work places, the growth of efficient and effective transport systems becomes necessary for people to enjoy their earning and leisure. People need to commute to massive shopping centres for their daily needs and indulge in travels to far-off beaches and resorts for their vacation with their laptops connected to their employers. Tourism has, of late, gained importance as an important component of life and a great experience to acquire. Further, with the widespread distribution of production across the world based on principles of comparative advantage, more goods have to move faster, quicker and cheaper. Efficient transportation systems, therefore, underpin the importance of highways, waterways, seaways and airways, with attendant support services like bus terminals, railway stations and yards, sea and air ports, efficient cargo and passenger handling systems, etc. Concomitant with the development of systems for physical mobility is the need to preserve the environment which can easily get damaged by the recklessness of use. The challenges for the developing countries in this domain are quite complex, in view of the competing demands of the system. The experiences of the developed countries here are not happy and need a thorough examination before they are adopted in developing countries. Mass transportation systems based on non-polluting technologies and use of renewable energy sources may be the answer, but a lot of research and a search for indigenous solutions will be imperative.

3. Demographic trends

3.1 Urbanization and Modernization

Historical data show that more than seventy percent of the population in industrially developed countries lives in cities and semi-urban centres. In contrast, a developing country like India has about seventy percent of its population living in her 600,000 odd villages. The history of developed countries shows that movement of a nation from an agrarian economy to an industrial one is accompanied by large-scale migration of people living in villages to urban centres and cities. The direct results are congestion of cities, large-scale slums, squalor and urban poverty. The miseries of such migration trend can be largely mitigated by effecting networking and connectivity, creation of urban infrastructure in rural areas and spread of production centres across villages. Abdul Kalam came out with the concept of 'PURA'; PV Indiresan has suggested geographic socialism and *urbanisation*. With efficient electronic networks, mobile connectivity, physical connectivity and power distribution, the strategy of developing countries should not be mindless replication of the model of the developed countries, but evolving models appropriate to their population densities.

3.2 Age and Population growth

Walking down the pages of history, we had an old formula in the past; more children meant more labour, available for working in the farm or taking care of the household chores. However, the industrial revolution brought down the need for manual labour in farms and factories.

The total population of developing countries is hovering roughly around three billion, with a very large population of youth in India. Developed countries have a population of around a billion people, the majority of them beyond productive age. They enjoy good health, are active and energetic and willing to work more and pursue challenging opportunities. Further, UN data show that the fertility level in most of the developed countries is below replacement. The direct implication is that the developed countries will soon have less people with a majority beyond the productive age group. The same trend is projected for China as well. The challenge for India, whose population will comprise more than 50% in the working age group of 25-50 years, is to prepare itself for this opportunity by continuous honing of the skills of its youth in all spheres of economic activities, including research and development, simultaneously with an emphasis on small and medium business entrepreneurship and mainstreaming girls and women in economic development.

A second implication of this trend is the need for people in the developing countries like India to remain abreast of the changing technologies and skills and develop life-long learning habits. As for organizations, the challenge would be to train and retrain their work force to stay competitive. As a result, a fraction of the workforce of an organization is expected to be in schools at any given time. *Equal opportunity employment* for the workforce, where both the desirous young and the enthusiastic old could compete to keep themselves attached to their professional careers will be a reality of the future in developing countries like India. Now, this fact demands two actions: first, the workforce going back to school and taking short-term-professional-courses for learning a new trade

or skill or even retraining on a continuous basis, and second, the challenge for educational institutions to rise to meet such fast-changing demands.

3.3 Erosion of family tree (diminishing family size)

Data from developed and affluent countries show that more than 50% of women are single. Many men and women postpone their marriages to a fairly late stage and limit their family size to two children after marriage. A direct result is the gradual erosion of the family as an institution and the disappearance of the family tree. Today, traditional family setups are extinct. Kids are growing up much faster (as they receive more education through cable and media obtaining early adulthood before the age of maturity) and adults are growing up slowly, thanks to rejuvenation therapies, life style, food and health.

India has been preserving family values despite economic development. But signs of their breakdown are becoming manifest as a result of several influences like rising family incomes, need for independence, continuous exposure to Western living through media and internet, etc. The challenge for India is not inorganic economic development, but holistic growth of the society by preserving the rich Indian culture and family traditions – a feature unique to very few societies still in existence.

3.4 Globe-trotting and Relocating

As businesses break down borders and corporations roam the world in search of profits, people relocate themselves for better opportunities and lifestyle. Today, relocation is easier that ever before, be it within or another country. Most relocate for a job, some for career options, and the rest, for adventure. History confirms that ambitious nations such as USA, UK, and Australia have been economically

benefited by permitting migration of highly skilled and talented people to join their workforce; however, the impact of such re-location in the social and political spheres cannot be neglected. This phenomenon ushers in major political challenges, especially when immigrants are given citizenship and incorporated into the national social system. As far as business is concerned, organizations find themselves confronted with having to deal with diversified workforces in the face of a global economy that demands an international perspective to succeed (multiracial problems and issues). India is best placed to address this challenge, given the plurality of its society and the harmonious co-existence of several diversified cultures in any area. Perhaps, the Indian outlook towards life enshrined in the philosophy of *'Sanathana Dharma'* provides the necessary succour and support for this co-existence.

4. Wealth and Life Style

Economic development of nations leads to abundance of goods and services - sufficient surplus so as to sustain and support a comfortable standard of living for all. A trend that is visible is widespread innovation and breakthroughs by the young, highly educated, globetrotting professionals. These people amass a lot of wealth for themselves in the process. As the technology and innovation get diffused and more employment opportunities are created, most people will have the capacity to purchase more and more goods and services. This leads to *population-inversion* – a gradual erosion of middle class and an expanding/swelling upper and lower class. This trend is already visible in certain places in India, and if it proliferates unbounded, will it lead to social tensions? Will the new trends lead to a new type of class divide? There is no firm answer from the developed countries.

4.1 Emergence of developing countries as production centres as well as markets

Today, many firms from developing countries are interested in moving to developed countries like USA, while firms from developed countries are moving to developing countries and exploring opportunities. For example, the US computer industry has set up manufacturing facilities in China (electronic hardware manufacturing in China) and is establishing software development hubs in India (design and development of software and new software technologies). As far as businesses are concerned, it's pretty visible and perhaps clear to the world that the economy of developing countries like India and China is rapidly growing. It is expected that over the next few years these two countries will become economically and militarily competitive and at the same time offer large and lucrative platforms as markets for the developed countries as well.

4.2 Personal Time (PT), Peer Pressure (PP) and Stress

In developing countries like India and China, most people save money by doing their own errands and chores, but the stringent mandate of business organizations, such as time-bound products launch, market entry, customer services etc., will force them to outsource their personal chores in order to stay attached to a paid job. Thus, many in the work force will feel the hard pinch of peer pressure (PP) and stress. Under this situation, personal time (PT) could be rare. These will result in a new class of technological product/s (home appliances) hitting the market, that will not only help save precious time of the new generation workforce, but also buy time to retain a paid job. An example is the automated washing machine. Another example from the entertainment industry is the TV on demand; here DTH (Direct to Home) receivers with programmable chipsets and memories store one's favourite episodes when occupied or away. This also heralds the arrival of the service sector industry. As business and organization face intense competition and thrive for survival, the stringent mandate to provide quality services and goods and products in the market, pressure of peer and time become pronounced. Therefore, in the light of growing economy of these countries, PT is going to shrink and will be available in bits and pieces. This will revolutionize the ways in which the workforce operates and business is done. A new class of health problems relating to stress (mental, physiological and physical) would surface. For India, Yoga, Ayurveda and meditation which have bulwarked the Indian society against the Western living style for ages would continue to be the support systems to fight stress and other psychological battles. Sadly, the Western developed world has not been very successful.

5. Recent Economic Slowdown – An Aberration in the Long-Term Trend

It is believed by some people that the recent slowdown following the sub-prime crisis probably heralds a new world order and calls for new ways of working and thinking. There are also others who presage the end of free market economy and of capitalism, and the possible rise of centralised planning and active state involvement. History has, however, been showing such economic trends as a part of natural business cycles in which the peaks and troughs have lasted for varying durations. It may not be possible to conclude that the current crisis portends a new trend in the global order.

However, history has also shown the emergence of new trends following certain sudden or totally unexpected events, like political and social upheavals, unexpected chance discoveries (like atomic bombs, powered flights, etc.), sudden natural events (like disasters, diseases, etc). These 'black swans' (Taleb, 2007) are beyond the predictive capacity of most of us, including highly trained scientific brains. If the past trends are to take a totally unpredictable turn anywhere in the world, there has probably been a black swan that has changed the course of the history of technology and human development.

6. Conclusion

The trends narrated above have been drawn from the past and the present. It is neither simple nor easy to project whether the future will be a replica of the past or the present. However, in our journey to re-discovering our lost economic superiority, we could take the lessons of the history from other presently developed countries and avoid the pangs they have suffered and choose strategies appropriate to our culture without losing the opportunities thrown at us.

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