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STRIDES - A STUDENTS' JOURNAL OF SHRI RAM COLLEGE OF COMMERCE

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Shri Ram College of Commerce is well known for its academic excellence and dedicated approach towards dissemination of knowledge in the academic world. The college appreciates the role of research in education and is committed to developing an inclination towards research in both faculty and students. In this pursuit, the college has taken the initiative to launch a new Journal named 'Strides - A Students' Journal of Shri Ram College of Commerce'.

ABOUT THE JOURNAL

It is a double blind reviewed bi-annual Journal launched exclusively to encourage students to pursue research on the contemporary topics and issues in the area of commerce, economics, management, governance, polices etc. The journal provides an opportunity to the students and faculty of Shri Ram College of Commerce to publish their academic research work.

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Abstract

The abstract should capture the essence of the article and entice the reader. It should typically be of 100 -150 words, and in Italics.

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Endnotes should be serially arranged at the end of the article well before the references and after conclusion.

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The first letter of the caption for table, figure, graph, diagram, picture etc. should be in capital letter and the other words should be in small letter - e.g. Table-1: Demographic Data of Delhi, Figure-1: Pictorial Presentation of Population etc.

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Principal's Message

To achieve and promote excellence in research and publish quality academic as well as educational resources as guided by the Mission Statement of the College, Shri Ram College of Commerce had launched a Journal, "Strides- A Students' Journal of Shri Ram College of Commerce" on the occasion of 91st Annual Day of the College held on 13th April, 2017. The Journal was released by then the Hon'ble Union Minister of Human Resource Development, Shri Prakash Javadekar. The Journal publishes the research papers and articles written by students of the College under the mentorship of Faculty Members which go through an intense review mechanism before getting published.

Through the Journal, students get an excellent platform to enhance their research calibre, display their academic perspective, and practically apply their classroom learnings to real-world situations. The present Issue includes several multi-disciplinary and contemporary topics such as "Effects of Globalization on the Indian Health Sector", "Will America Sustain the Wave of Automation?", "Recycling Hoax", "The Role of Corporate Social Responsibility towards Sustainable Education with reference to the FMCG Companies", "COVID-19 and Mental Health of Adolescents", "Cryptocurrency-The Rise of Tokens", and "Discussion of the Link Between Air Pollution and Economic Growth in Indian States".

I wholeheartedly congratulate the Editor, Strides, Dr. Rajeev Kumar and students whose research papers got published in Volume 5 Issue 1and 2 of the Journal. Simultaneously, I encourage more students to contribute their research papers for the successive Issues.

My best wishes for your future endeavours!

Prof. Simrit Kaur
Principal

Editor's Message

Shri Ram College of Commerce is well known for its academic excellence and dedicated approach towards dissemination of knowledge in the academic world. The College acknowledges and values the role of research in education and is firmly committed to develop and encourage an inclination towards research in both faculty and students. To reaffirm this ethos, the College has taken the initiative to launch a new Journal named 'Strides - A Students' Journal of Shri Ram College of Commerce' to encourage students to pursue research under the guidance of the faculty of Shri Ram College of Commerce.

It is a bi-annual Journal launched exclusively to publish academic research papers and articles by the students on contemporary topics and issues in the area of commerce, economics, management, governance, policies etc.

In order to maintain high standards of publication, COPE (Committee on Publication Ethics) has been constituted. The COPE is the apex authority which authorises over all the decisions related to publication of research papers and articles in Strides. The recommendations and decision of COPE is final and binding.

To maintain high academic standards, academic ethics and academic integrity, a rigorous process of double-blind review of research papers is followed along with screening of plagiarism of each manuscript received by the COPE for publication. The research work published in Strides is absolutely original and not published or presented in any form at any other public forum.

The foundation issue of the Journal "Strides - A Students' Journal of Shri Ram College of Commerce, Volume 1, Issue 1, 2016-17" was successfully released on 91st Annual Day of SRCC held on 13th April, 2017 by Shri Prakash Javadekar, Honb'le Union Minister of Human Resource Development, Government of India. The successive issues of 'Strides - A Students' Journal of Shri Ram College of Commerce' have been released bi-annually. However, due to the COVID19 pandemic and ensuing lockdowns the current issue has been delayed.

I congratulate all the students whose research papers are published in this issue of Strides and express my sincere thanks to their mentors and referees.

Dr. Rajeev Kumar
Editor

STRIDES - A STUDENTS' JOURNAL OF SHRI RAM COLLEGE OF COMMERCE

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RESEARCH PAPERS

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Population Trends in India: Demographic Dividend or Demographic Drag?

ABSTRACT

Being the world's second-most populous country, India's rapidly rising population is certainly a unique feature for the country. India's economic growth story is also of importance as it is a developing nation and one of the fastest-growing economies. While some argue that the rising population is a menace for economic growth in India due to the decline in capital per worker, this paper aims to analyse how a growing population can have a positive impact on the nation's economic growth. To facilitate this objective, the paper focuses on the demographic transition experienced by India and the various aspects through which the country can reap its demographic dividend. However, there exist certain obstacles that may convert the demographic dividend into demographic drag, making population growth a burden over the economy. The paper also takes into account experiences from across the globe in the form of empirical evidence and studies various policy implementations necessary to take advantage of the demographic dividend.

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Dr. Ravi Kant
Assistant Professor
Department of Economics
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Keywords: Demographic Dividend, Demographic Drag, Demographic Transition, Economic Growth, Population Growth

INTRODUCTION

In the 1990s, several scholars and researchers used the empirical convergence models à la Barro to isolate the effect of demography on economic growth (Kelley and Schmidt 1995; Bloom and Williamson 1997, 1998). The major finding of these studies stated that there remains a strong and positive effect of demography on economic growth when the working-age population grows faster than the dependent population of a nation (Sanchez- Romero et al 2017). However, with time, the importance of demography was clearly stated in terms of the fact that changes in the age distribution affect the productivity of workers in the nation (Kelley and Schmidt 2005). Apart from this, the absolute importance of demography is three-fold. Firstly, it acts as a 'predictive tool' and ensures powerful insights about future trends. Secondly, it also helps scholars and policymakers to estimate future challenges that may be faced by a nation. Thirdly and most importantly, demographic changes provide conditions conducive to economic development, providing nations the opportunity to embark on the journey of rapid economic growth (Singh & Paliwal 2015).

Against this backdrop, it becomes pertinent to study the case of Indian demographics in relation to its economics, considering India is the second most populated country in the world. An analysis of its population and age structure becomes imperative as 'population' can be that factor in India, which can be flipped from a burden to a boon.

Before focusing on the case of India, it is necessary to understand the economic rationale behind the process of demographic transition and demographic dividend, which has been elaborated upon in section 2. Section 3 focuses on the implications for growth in the case of a demographic dividend and section 4 supports the theoretical analysis with empirical evidence of cases from across the globe. The next section has been dedicated to the Indian case of demographic transition, followed by policy prescriptions. Finally, section 7 concludes the paper.

LITERATURE REVIEW

The discussion dates back to the time of the Marx-Malthus debate, wherein Marx and Engel undertook an onslaught of the Malthusian theory, which stated that population growth was the reason behind mass poverty and hunger. Marx and Engel's problem with the theory was that they considered it to be 'ahistorical'. Marx accused Malthus of using the “external laws of Nature to explain the problem of overpopulation, rather than the historical laws of capitalist production” (Wiltgen 1998). Thus, according to Marx, the reason behind mass poverty and hunger was capitalism rather than population growth. Marx argued that in a well-ordered society, a rise in population growth would lead to greater wealth rather than misery.

This discourse has given rise to two sides of the coin based on the stance around the impact of population growth on economic growth. While citing Cassen's 1994 work, Desai observes that on one hand, the 'population pessimists' believe that rapid population growth poses a threat to economic growth and development by reducing the capital per worker and dampening productivity. There are two broad reasons due to which population might be an obstacle for the economy (Desai 2010). Firstly, low levels of per capita income and scarce resources thinly spread across a large number of people make population growth a constraint for economic growth and the improvement of living standards. The concise response to an increase in population growth is that “every mouth to be fed has two hands that can be put to work.” The second reason stems from this and it can be stated that the problem of development is considered to be the challenge of “employing more workers in more productive work to yield larger surplus without depriving people of the basket of goods that they currently consume” (Chandrasekhar, Ghosh & Roychowdhury 2006).

On the other hand, “population optimists” and scholars like Kelley & Schmidt (1996) and Johnson & Lee (1986) believe that population growth can be a boon as a rapidly growing population can increase human and intellectual capital and facilitate the expansion of markets, leading to rapid economic growth. However, Desai throws light on the recent third approach wherein the population composition is more important than the population size of a country. This approach pertains to the theory of demographic dividend and the ability of a nation to reap its benefits (Desai 2010).

- Demographic Dividend

Also known as demographic gift or bonus or demographic window, the demographic dividend is the rise in the economic growth rate due to the rising share of working-age people in a nation's population (James 2008). In other words, a 'bulge' in the working-age population, irrespective of the size of the total population, is an "inevitable advantage" called the demographic dividend, making age structure matter more than the size of population (Chandrasekhar, Ghosh & Roychowdhury 2006). However, if the growth rate of the working-age population is slower than that of the total population, the demographic dividend turns into demographic drag or burden. This happens due to a lower share of the working-age population (Gaag & Beer).

Changes in the age structure of the population of a nation lead to a period of demographic dividend, by impacting the dependency ratio of a population. Dependency ratio is defined by the United Nations as "the number of children (0-14 years old) and older persons (65 years or over) to the working-age population (15-64 years old)" (United Nations 2006). Thus, in a nation with a large young population and/or a large old population, the dependency ratio will be high and vice versa. This demographic window emerges for a nation due to a demographic transition.

- Demographic Transition

Demographic transition is "a population's shift from high mortality and high fertility to low mortality and low fertility" (Blue & Espenshade 2011). The scholars state that a consequence of this is robust population growth. This feature of the demographic transition can be explained by the fact that death rates fall before a decline in birth rates set in (Chandrasekhar, Ghosh & Roychowdhury 2006). The authors, in their paper, explain in detail the reason behind this pattern of birth rates and death rates.

Initially, death rates decline due to lower infant and child mortality rates which is a result of better policy interventions pertaining to public health, water and sanitation and medical health interventions related to vaccination and antibiotics. High levels of knowledge and low costs facilitate these factors to be taken advantage of at even low levels of per capita income in a country (Bloom & Canning 2004). With time, a reduced dependency ratio in the middle and older age groups causes the death rate to fall further and the average life expectancy increases. This reduction in the dependency ratio can be attributed to an increase in income, improved lifestyles and better medical technology. On the other hand, reduction in birth rates depends on two factors- age of marriage and fertility rate, both of which depend on a level of development. While high levels of development translate into no social norms prescribing early marriage for women, fertility rates decline due to higher child survival rates, better female education levels and labour market opportunities, reducing the desired family size. Further, the authors stated that the relationship between birth rates and death rates and development not only impacts the rate of population growth but also the age structure of the population (Chandrasekhar, Ghosh & Roychowdhury 2006).

Demographic transition consists of three phases that give rise to three unique age structures. The first phase is characterized by high fertility rates and declining child mortality rates. This leads to a larger young population, particularly below 15 years of age, causing the dependency ratio to rise (James 2008). Apart from lower child mortality rates, child survival increases, causing a baby boom (Chandrasekhar, Ghosh & Roychowdhury 2006).

The second phase experiences a rapid decline in the fertility rates, causing the child population to fall. However, due to high fertility in the past (during the first phase of the transition), the working-age population continues to increase with a high growth rate (James 2008). The lagged fall in fertility rate reverses the baby boom, causing a 'bulge' in the younger age group. This results in the working-age group rising more than it was previously or subsequently will be (Chandrasekhar, Ghosh & Roychowdhury 2006). As a result of this, the dependency ratio of the nation falls as the population consists of more working people than non-working or 'dependents'.

Gradually with time, the bulge created by the baby boom climbs up the age structure. Finally, the bulge enters the old age bracket and the third phase is characterised by a high dependency ratio due to a large old-age population (James 2008).

It is important to note that it is the second phase wherein the demographic dividend can be exploited. This is because, during this phase, the proportion of the working-age population is the highest in the total population (Chandrasekhar, Ghosh & Roychowdhury 2006).

WINDOW OF OPPORTUNITY

Scholars and economists agree on the fact that there is no element of 'automacity' or surety, empirically or theoretically, of the benefits of demographic dividend being exploited to achieve economic growth (James 2008; Chandrasekhar, Ghosh & Roychowdhury 2006; Bloom & Canning 2004). Bloom & Canning (2004) state that the transition in the age structure merely creates the "potential for economic growth" and whether it is taken advantage of or not, depends on the "policy environment" of the nation. The failure to provide conducive conditions for a nation to reap the benefits of its demographic dividend may lead to a demographic drag. A classic example of this is the case of East Asian economies in comparison to the Latin American economy. While a third of the "miracle growth" of the East Asian economies has been observed to stem from their demographic transition, the Latin American case experienced no such growth in the 1950s till the 1980s, even though its demographic trends were similar to that of East Asia. Thus, it becomes imperative to analyse the implications for growth arising from the transition as well as the practical component of realising the benefits of the demographic dividend.

Chandrasekhar, Ghosh & Roychowdhury (2006) analyse the challenge of demography from the angle of generating surpluses over consumption, needed for investment. Due to this approach, the scholars state that the dependency ratio influences the surplus available for investment after current consumption as what is produced by the currently employed is partly consumed by those outside the workforce. Thus, other things remaining constant, a fall in the dependency ratio indicates a higher surplus in the economy. Focusing on the implications for growth, the authors state that the periods with a low dependency ratio are characterized by higher growth, provided the inducement to invest surplus exists. Conversely, in the case of fewer workers in the economy, it is noted that unless the productivity increase raises the output of the smaller proportion of workers enough to neutralise demographic deficit, economic growth cannot be achieved (Chandrasekhar, Ghosh & Roychowdhury 2006).

This lack of certainty and the conditions around realising the benefits of the demographic bonus nudges one to examine how demographic changes spur economic growth.

- Demographic Changes and Economic Growth

The first aspect to ignite economic growth is that of increased savings. Due to a lower dependency ratio associated with the demographic dividend and partly due to a rise in life expectancy savings of a nation tend to increase (James 2008). A fall in the nation's dependency ratio is associated with a rise in the average savings rate because people save the most when they are working, whereas children and older people (who are the dependents in the dependency ratio) consume more than they earn or rather only consume (Singh & Paliwal 2015). Increased savings at the household level will translate into higher savings for the economy leading to an increase in investment, an aspect imperative to economic growth.

Secondly, with a fall in fertility rates, women are more likely to enter the labour market during this stage, leading to an increase in economic activity, facilitating economic growth. Scholars mention that the reason behind this is that the major obstacle faced by women in joining the workforce was high fertility and consequently, the high amount of time spent in childcare (James 2008).

Thirdly, at the micro-level, people invest more in their own health when they have fewer children as the cost of child-rearing (in terms of the need for the child to be clothed, fed, provided healthcare services, educated and taken care of) falls. This leads to a rise in worker productivity due to better health conditions of the workers, enabling economic benefits for the household. On a similar dimension, at the macro-level, the government can spend more on productive activities because, with a fall in the number of children, public spending on education and health can be diverted by the government to more productive services that promote economic growth (James 2008).

Apart from these factors, the "demographic dividend" school of thought elaborates that there exists some degree of automacity about the relationship between demographic trends and economic outcomes of a nation (Chandrasekhar, Ghosh & Roychowdhury 2006). The authors emphasised on high savings rate being a prerequisite for economic growth and investments in the health and education sectors to ensure a better quality workforce, in terms of skills, health conditions and productivity. They stated that the policy environment of the nation is important and the country must practice encouraging export-oriented policies as a prerequisite, rather than following inward-looking policies. They further elaborated that a rise in life expectancy brings about the need to fund retirement income causing savings to increase. This helps to prove that high savings are related to demographic factors. With high longevity, the private incentive to invest in education also increases by increasing the period over which such investment may be regained. However, the importance is again laid on the government's ability to ensure a flexible economy that can absorb the rapidly expanding labour force. Therefore, it is stated that the benefits of demographic dividend depend on "good policies" which can be captured by the indices of openness of the economy as well as the quality of government institutions in the country.

EMPIRICAL EVIDENCE

Having studied the theoretical aspect of the relationship between demographic trends and economic growth and development, it becomes pertinent to support these theories by the practical component of empirical evidence. Although the relationship between demographic changes and economic development has been analysed in the context of a limited number of countries, most of the studies portray a positive association between the two (James 2008). However, based on the experience of certain countries, there also remain certain exceptions to this theory.

Firstly, an analysis of 78 Asian and non-Asian countries portrayed a strong positive effect of the growth of the working-age population on economic growth. The study contributed to the popular finding that about one-third of the "miracle growth" of East Asia was attributed to the demographic dividend (Bloom & Williamson 1998). Another study that found a powerful positive association between the age structure pattern and various economic variables, used panel data from several countries since the 1950s to examine the relationship between the average age of the population and economic variables (Behrman et al 1999). Thirdly, a study of the Scandinavian countries that used data from 1980 also found a strong positive association between the "share of economic growth and the share of the working-age population" (Andersson 2001). Another instance that James (2008) quotes is the case of Ireland. Even though the country faced an obstacle of lagging behind in fertility transition among European countries, as the fertility rates began declining faster in the 1980s, Ireland entered a phase of augmented growth which clearly shows a positive association between demographic trends and economic growth (James 2008). Furthermore, a study using panel data of countries from 1960 to 2000 portrays a strong positive association between age structure transition and economic growth in India and China. This remains an important study for India as it states that India is expected to have higher growth prospects than China due to a sharper fall in fertility rates and a bulge in India's working-age population (Bloom et al 2003; Bloom et al 2006). These are the studies quoted to support the positive relationship between demographic changes and economic growth (James 2008).

On the other hand, in the case of several developing countries, such an optimistic association has not been observed. A study established a positive impact of the demographic transition on economic growth in south-east Asia but it failed to find a similar result in the case of South Asian countries (Navaneetham 2002). Another popular instance is that of the experience of Latin America. Its age structure transition is reported to have failed to spur economic growth (Bloom et al 2003). Apart from this, studies focusing on the Indian case state that the demographic transition is not sufficient to augment Indian economic growth (Mitra & Nagarajan 2005; Chandrasekhar et al 2006).

However, it is important to note that even pessimists of demographic dividend do not deny the benefits of it but are only concerned about the institutional bottlenecks existing in countries that may not let the benefits be exploited. For instance, in the study conducted by Navaneetham (2002), the author states that the absence of a clear association between demographic changes and economic growth in South Asia is due to a lack of openness to trade as compared to south-east Asia, with relatively more openness to trade. Similarly, Bloom et al (2006) mention that the age structure changes create the potential for economic growth but whether it is realised or not, depends on the policy environment, especially openness to trade. In addition to this, Chandrasekhar (2006) also quotes the bottlenecks related to education and health in India that stop the country from ensuring a quality workforce, an important aspect of economic growth (James 2008).

Even though there are studies that do not portray the positive association between demographic changes and economic growth, those studies focus on the bottlenecks in the countries that constrain the beneficial demographic dividend. Therefore, the positive association between age structure transition and economic growth in a nation is supported by sufficient empirical evidence.

Having studied the theoretical and the empirical aspects of the concept, the paper now focuses on the case of India.

THE INDIAN CONTEXT

Being the second most populous country in the world, India had a population of 136.6 crore or 1.366 billion as of 2019 (United Nations 2019). In addition to this, as mentioned earlier, growth prospects for India have been estimated to be better than that of China, the most populous country of the world. These factors make it pertinent to study India's growth story and analyse the role of demographic changes in India's economic growth.

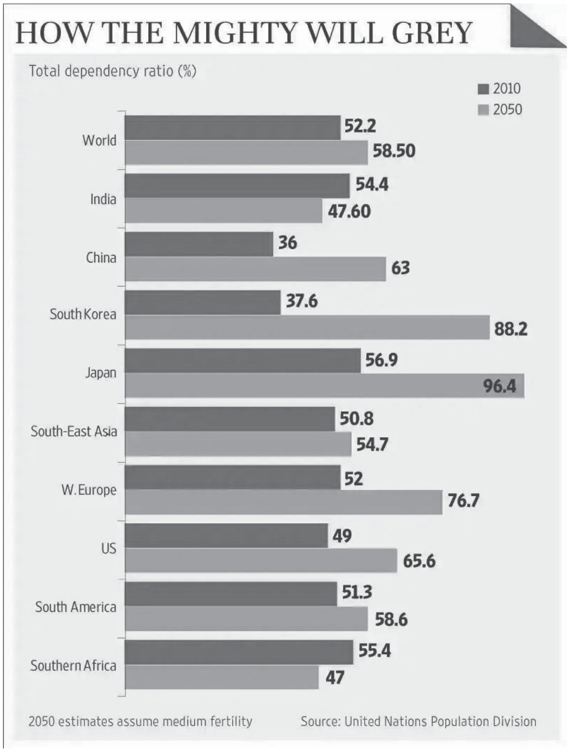
- Demographic Transition in India

For the first two decades of development in the country, post-independence, the infant mortality rate started declining but the fertility rates remained somewhat stagnant. This would have led to a rise in the population of young people due to higher child survival. During the next three decades, the fertility rate and the infant mortality rate dropped sharply in India. This had a similar effect on the population as stated above. The ramification of this, complemented by a fall in mortality in the higher age groups as well, was a sharper decline in crude death rates than birth rates in the country. Thus, due to a bulge in the working-age population, India got its window of opportunity in the mid-1970s or early 1980s, as per this study. This demographic dividend was expected to extend till 2025 due to a projected low dependency ratio of 48. Thus, as the dependency ratio in India fell from 79 in 1970 and the baby boomer generation transitioned into the working-age population, the country entered the phase of demographic dividend in the 1970s (Chandrasekhar, Ghosh & Roychowdhury 2006).

As per the World Bank estimates, India's population of 15-59 years is expected to increase dramatically from 757 million in 2010 to 972 million in 2030, causing the addition of over 200 million workers in the economy. This will also lead India to contribute immensely to the global workforce by increasing the global labour supply. During this period, the working-age population is expected to fall in most developed regions of the world, including China (a decline from 913 million to 847 million workers) (Thomas 2014). Similarly, as per the UN projections for 2050, India's dependency ratio falls to 47.6% but China's ratio spikes to 63% and Korea's ratio increases to 88.2%. In the developed world, the US will have a dependency ratio of 65.6%, Western Europe's will be as high as 76.7% and Japan's ratio will increase to a staggering 96.4%. Figure 1 shows the estimated dependency ratios for various countries for the years 2010 and 2050, to compare. Thus, with the world's dependency ratio being 58.5%, India among the only handful of other countries will remain with a dependency ratio below 50%. Thus, while India's demographic dividend provides the economy an opportunity to benefit from it, most of the economies in the world “turn grey”.

Thus, this will not only help India reap the benefits of its demographic bonus, but also give the country an edge over other superpowers and developing countries by being a major labour supplier in the global markets (Chakravarty 2014).

Figure 1: "How the mighty grey": Dependency Ratios of India and other countries



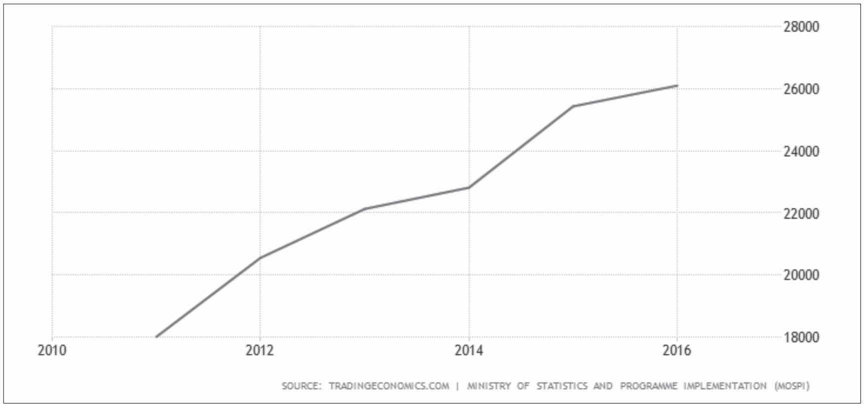
A Comparison with China

A comparison between China and India is imperative concerning this as being the most populated country in the world and portraying a faster rate of economic growth than India, the Chinese experience can teach lessons to India for its growth story.

The first aspect of comparison between the two countries is the dependency ratio. A higher dependency ratio indicates that the working population is low and the overall economy faces a burden of supporting and providing social services for children and older people who are economically dependent. As mentioned earlier, by 2025, India's dependency ratio is expected to fall to 48% due to continued fall in child dependency and only increase to 50% by 2050 due to an increase in the old-age dependency ratio. On the other hand, China's One Child Policy seems to have created a disproportionately large elderly population. This is expected to pose a burden for China around 2030 with a staggering 400 million people aged above 60 years. Thus, while China expects to face hurdles due to a large old age population in 2030, during the same time, India is set to experience high economic growth with an increasing young population, giving India an edge over China (Singh & Paliwal 2015). Figure 1 throws light on this more clearly, showing that by 2050, while China's dependency ratio will become as high as 63% (large old age population), India's dependency ratio will remain lower than 50%, setting India at an advantage (Chakravarty 2014).

Secondly, the savings rate is the factor of comparison. This is because, with a fall in the dependency ratio, as in the case of India in the future, the average savings rate of the nation is observed to rise. India's saving rate has been rising since 2003. Increasing from 29.5 in 2011 to 33% in 2015, India's saving rate is comparable to that of the 'Asian Superpowers', where most countries save above 30%. Even though China's saving rate was 40% in 2015, people are less willing to spend due to limited social safety nets. However, the reason for India's saving rate increase is not mere unwillingness to spend, but it is due to significant improvements in the government's fiscal conditions and high corporate savings. However, scholars state that even in the absence of these factors, India is expected to increase its savings rate above the 30% benchmark in the next 25 years due to its falling dependency ratio (Singh & Paliwal 2015). Figure 2 throws light on the rise in personal savings in the country to Rs. 26099.21 billion in 2016.

Figure 2: Increase in Personal Savings in India (2010-2016)



Along similar lines, the third basis of comparison is the investment to output ratio. Even though India's investment to output ratio was 31% in 2015 as compared to China's 48%, India is expected to raise this ratio significantly in the future (Singh & Paliwal 2015).

Thus, the aforementioned arguments by Singh and Paliwal (2015) show that India's dependency ratio is expected to decline sharply as compared to China. The scholars state that this an important implication for Indian economic growth as India is believed to enter its "Goldilocks" period, while that of China is over. India seems to have this advantage over China because India's dip in the dependency ratio is 'more gradual and longer lasting' than that of China, as per the scholars.

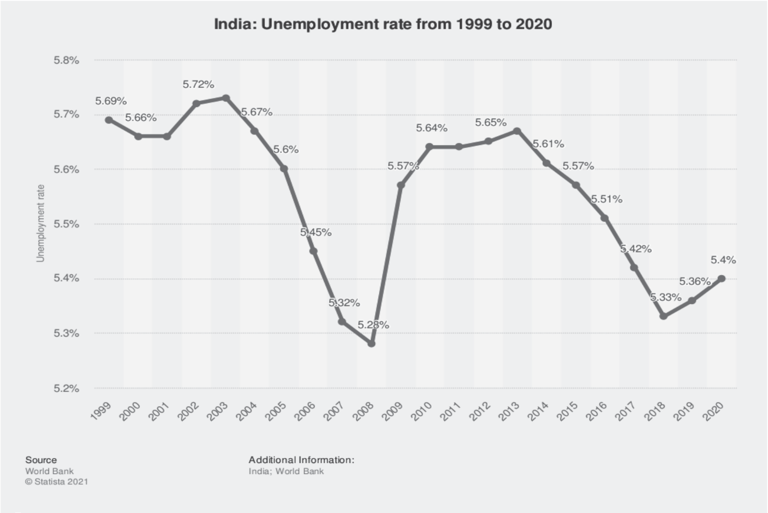
Limitations to India's Demographic Dividend

Even though the previous section throws light on the growth prospects of India and compares them to be better than that of China, in reality, there exist certain factors that limit the potential of benefiting from the demographic dividend in India. Rather, these factors, if not amended or focused on, may cause a demographic drag. The paper analyses these factors and their implications, one by one.

Unemployment in India

The first and foremost obstacle is that the extent of growth that has occurred in India is not enough to absorb a rapidly rising workforce, generated by the demographic dividend. Between 1993 to 2000, employment generation in India experienced a drastic deceleration, with the lowest rates of rural employment growth post-independence and urban employment generation falling as well. It has also been stated that despite employment growth, unemployment levels rose in India. As of 2006, an 8% increase in unemployment was recorded for urban and rural males and a 9-12% increase for the female labour force (Chandrasekhar, Ghosh & Roychowdhury 2006). Subsequently, in 2019-20, the total unemployment rate in the country was 39.4%, indicating the health of the Indian economy (Sharma 2020). Figure 3 shows the fluctuations in the unemployment rate in India from 1999 to 2020.

Figure 3: Unemployment rate from 1999-2020 in India

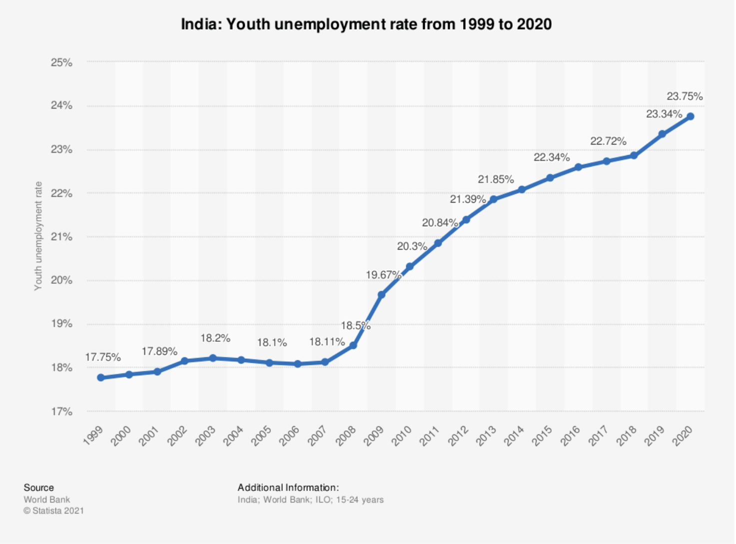


Apart from this, there was also a significant change in the pattern of employment. Along with a fall in wage employment of the country (Chandrasekhar, Ghosh & Roychowdhury 2006), the most significant change has been observed in agricultural wage employment (Chandrasekhar, Ghosh & Roychowdhury 2006; Thomas 2014). Between 1999-2000, agricultural wage employment fell at a rate of more than 3% per year (Chandrasekhar, Ghosh & Roychowdhury 2006). Subsequently, the share of agriculture and allied activities in India's GDP fell from 35.1% in 1983 to 14% in 2011-12. The ramification of this was a fall in the total employment in the sector, from 68.2% to 47.5% during 1983 to 2011-12 (Thomas 2014).

Youth Unemployment in India

The young population of a developing country like India creates a window of opportunity to improve revenue from services, increase labour productivity, increase domestic production and savings, reducing the burden of old people on the working-age population (Singh & Paliwal 2015). However, the second constraint to India's demographic dividend arises from the declining and/or stagnant labour force participation rates for the youth in the country. Even though the aggregate labour force participation rates have increased, the same is not the case for the Indian youth. In rural areas, while the male rural youth experienced a fall in labour force participation rate, the female rural youth experienced a somewhat stagnant labour force participation rate. However, the female youth in urban areas aged between 20 to 24 years experienced a rise in the labour force participation rate from the 1999-2000 levels. The shocking fact is that despite no significant growth in the labour force participation rates for both genders, across rural and urban areas (except for urban women between 20-24 years of age), the rate of open unemployment among the youth has increased over time. One of the reasons for a rising unemployment rate among the youth is the 'delayed entry of youth into the workforce due to extension of years of education'. However, this cannot be the dominant reason as an increased level of education is a positive sign of a greater degree of skill formation for the young labour force. Such declining labour force participation rate along with increased unemployment rates among the young workers causes two adverse ramifications. Firstly, it may lead to the country missing its window of opportunity as the economy is unable to produce enough suitable jobs to employ the young population productively. Secondly, the concern that arises is the negative social impact of an increased number of young unemployed, including educated and skilled unemployed (Chandrasekhar, Ghosh & Roychowdhury 2006). Figure 4 portrays the ever-rising levels of youth unemployment rate in India from 1999-2020, spiking from 17.75% to a staggering 23.75%.

Figure 4: Rise in Youth Employment Rate from 1999-2000



Gender Bias

In India, there exist enormous disparities in the areas of education, literacy and employment between women and men. These differences not only occur in the opportunities provided to men and women but also in terms of attitudes and outdated social norms that prescribe women to not take up jobs, not complete their education and other issues rooted in family responsibilities (Chandrasekhar, Ghosh & Roychowdhury 2006). A classic example of this is the fact that urban males benefited disproportionately from the growth of non-agricultural employment, other than construction, as compared to women in urban areas, during the period of 2004-05 to 2011-12 (Thomas 2014).

Apart from this, a bigger hurdle is the problem of low women's labour force participation rate in India. In a comparison study with China, there seems to exist huge differences between the women labour force participation rates of the two countries. As per estimates of the International Labour Organisation, for women aged 15 years or above, 68.9% of Chinese women are in the labour force as compared to a mere 34.2% of Indian women in the Indian workforce. The author attributes this to the fact that in India, home-based activities for women are not accounted for in the labour market statistics. Furthermore, a comparison of work participation rates of Chinese women and Indian women shows that Indian women of all age groups lag behind Chinese women. The study further discusses that when the Indian dependency ratio is looked at from the angle of non-working age to working-age population, India's advantage is clear with 0.48 in 2030 as compared to China's dependency ratio of 0.50. However, when the women work participation rate is taken into account to estimate the dependency ratio, India's dependency ratio expected in 2030 is way higher at 1.26 than that of China's at 0.89. Thus, the author claims that there exists no reason for India to reap its demographic dividend as compared to China (Desai 2010).

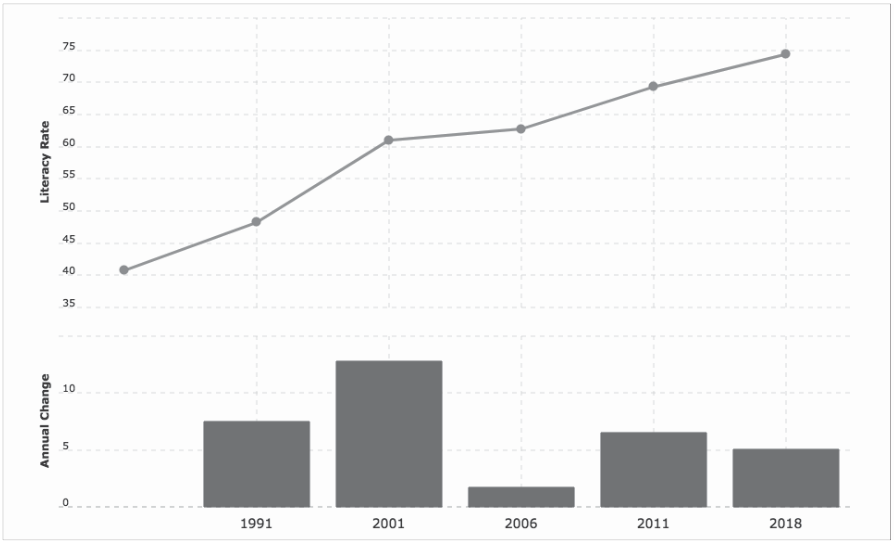
Health

The next field wherein India experiences a deficit is the health sector. Changing age structure can lead to a rise in the supply of workers in the country but that is not enough to reap the country's demographic dividend till significant improvements are ensured in the health status of both the working-age population and non-working-age population. This is because, with bad health conditions, there will neither be an increase in labour productivity nor a decline in worker absenteeism. Also, lack of proper health services and improvement in health indicators may even refute the savings-growth causality such that increased longevity may not be accompanied by higher savings of the working-age population due to a rise in disease burden across all age groups, causing increased healthcare expenditure. While some health problems like asthma and tuberculosis may be concentrated to the younger and/or older age population and others like malaria and jaundice are evenly distributed across age groups, reproductive health problems, HIV/AIDS and mental health issues are likely to affect the bulge in the working-age population. As a result, maternal mortality and child and infant deaths must be worked upon to reduce, through investment in infrastructure and advocacy in India (Chandrasekhar, Ghosh & Roychowdhury 2006).

Education

This is another sector where the country faces a deficit. The quantity, quality and relevance of education is important as it determines the quality and skills of the future workforce of the nation. Literacy and education in India suffered setbacks during the period of liberalisation due to an ignorance of the importance of the two in determining the degree of economic growth and development of the economy. The spread of literacy rates over the years of globalisation till 2004-05 remained slow. As of 2004-05, only 21.2% of rural males and 10.2% of rural females aged 15 years or above possessed the minimum education of secondary school or more. The corresponding figures for urban areas were 48.3% and 35.6% respectively. The added problem to this was that even the educated of India found it difficult to get jobs, appropriate to skills or otherwise along with little to no vocational training in the country (Chandrasekhar, Ghosh & Roychowdhury 2006). Figure 5 shows the literacy rates in India since the period of economic reforms in 1991 when the education sector was neglected to as recent as 2018. It can be imputed from the chart that even though the literacy rate in India has been rising over the years, the annual changes since 2001 have not been very significant.

Figure 5: Literacy Rates in India from 1991 to 2018



Source: World Bank; Macrotrends

India's IT & ITES sector

The next hurdle to India's demographic bonus is related to the IT sector of India. Scholars state that India's demographic dividend can be encashed through the growth of the IT-ITES sector in the country as it accounts for a huge share of the country's GDP and industries. The sector enjoyed a rapid growth rate (compounded annually) of more than 30% between 1998-99 to 2004-05. It is important to note that this quick expansion of the sector can be attributed to external demand or the exports of software and ITES, which rose at an annual compound rate of 38% p.a. since 1997. While the growth of this sector is impressive, the obstacle it poses is its minimal contribution to employment despite such high growth levels. As of 2006, it was found that the sector only employed a bit more than 1 million workers out of a total workforce of more than 415 million in India (Chandrasekhar, Ghosh & Roychowdhury 2006).

POLICY PRESCRIPTIONS

The aforementioned constraints on economic growth as a result of demographic dividend and the claims of the policy environment being a determinant of the benefits of demographic dividend in a country, make it imperative to study various suggestions and policies that need to be undertaken.

Firstly, Chandrasekhar, Ghosh & Roychowdhury state certain general suggestions which can enable a country to reap the benefits of its demographic dividend. The experts suggest that the dependency ratio should be defined as the ratio of actual non-workers to workers rather than the ratio of non-working age population to the working-age population. This will take into account the problems of unemployment and underemployment leading to better policy-making for employment generation. Their second recommendation states that even in periods with a bulge in the working-age population, large-scale unemployment and low expenditure on education, both by the governments and households, erodes the ability of a country to exploit the demographic dividend as and when it emerges (Chandrasekhar, Ghosh & Roychowdhury 2006).

While the aforementioned recommendations are in general for countries to reap the demographic dividend, the next set of policy prescriptions is specifically for India's growth story. Firstly it has been identified that there exists a deficit in the areas of education and health in India. This needs to be resolved by increasing and improving education at the primary and secondary levels, especially in the less developed areas of the country. Similarly, higher public spending in health is also required to curb the deficit in the health sector. As observed earlier, another obstacle faced by the Indian economic growth is that many women in the working-age population choose not to take up jobs due to personal or family responsibilities. Scholars elaborate that household work must be reduced with the help of appropriate technologies and women must be empowered by reducing gender disparities in society. In order to do this, it is suggested that narrow mentalities and social norms should be broken down through proactive policies and interventions. An instance of such intervention is the reservation of positions for women in the public sector jobs and higher grade positions. Furthermore, a 'gender-equitable environment' is emphasized upon so that women are free to access and use family planning methods without any social or physical barriers. Implementation of policies needs to be undertaken that help women improve their education and equip them with skills to compete for higher-paying jobs. Proactive policies should ensure that women have equal access to mass media and technology. This will be an important step towards enabling women to make more informed decisions for themselves as well as their children. Finally, the most important aspect of employment, without which economic growth cannot be achieved, has been focused upon. The authors identify the need to create “remunerative and productive employment” for new entrants into the workforce by ensuring mobility of labour both from rural to urban areas, and across and within sectors of the economy. This in turn requires a 'smooth functioning labour market' and availability of skills that are in demand along with better-educated and skilled workers, earning higher incomes. Apart from this, it is also necessary to create jobs in the 'knowledge-intensive sector' of the country by adding more value to it as the level of education in the country increases. The experts conclude by saying that in addition to this, the reaping of the benefits of demographic dividend depends on whether the public and private sector of the economy have the “political will and foresight” to not only create new jobs but also honour them with quality training to the new workforce, encouraging trade, reforming the education system, raising capital to support innovation and implementing policies that instill a sense of confidence in the nation regarding the economy (Singh & Paliwal 2015).

CONCLUSION

With regard to the aforementioned arguments, it is clear that India's growth prospects in alignment with its demography look optimistic. However, the factors discussed that cause obstacles in the economic growth, may lead the population growth to be a burden on the economy or the case of demographic drag, rather than reaping the benefits of the demographic bonus. Thus, it is pertinent for the government to work on policies in the areas of education, health, women empowerment and creating a more gender-equitable environment. This will ensure that the bottlenecks in the way of India benefiting from its demographic dividend are reduced and removed, setting India's path towards a high economic growth rate due to a bulge in the working-age population of the country.

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HISTORY OF THE JOURNAL

The idea to launch this Journal was discussed in December 2016 by the former Officiating Principal, **Dr. R. P. Rustagi** with **Dr. Santosh Kumari,** the Editor of the Journal. Since the idea appealed to **Dr. Santosh Kumari**, she took the initiative to contribute to SRCC by creating this new academic research Journal and took the responsibility for its Creation, Registration, License and ISSN (International Standard Serial Number) etc. along with *Editorship*. Therefore, **Dr. Santosh Kumari, Assistant Professor in the Department of Commerce, Shri Ram College of Commerce** was appointed as the Editor of the Journal vide. Office Order – SRCC/AD-158/2017 dated March 14, 2017. She meticulously worked hard in creating the concept and developing the structure of the Journal. She introduced the concept of COPE (Committee On Publication Ethics) to maintain the high academic standards of publication.

On behalf of SRCC, **Dr. Santosh Kumari** made every effort in seeking License from Deputy Commissioner of Police (Licensing), Delhi to register the Journal at "The Registrar of Newspapers for India, Ministry of Information and Broadcasting, Government of India". The paper work for seeking license started under the former Officiating Principal, **Dr. R.P. Rustagi** on March 27, 2017. The foundation Issue of the Journal "**Strides – A Students' Journal of Shri Ram College of Commerce, Volume 1, Issue 1, 2016-17**" was successfully released on the 91st Annual Day of SRCC held on April 13, 2017 by **Shri Prakash Javadekar, Honb'le Union Minister of Human Resource Development, Government of India**. The title of the Journal got verified and approved by the Registrar of Newspapers for India, Ministry of Information and Broadcasting, Government of India on April 21, 2017. On September 1, 2017, **Prof. Simrit Kaur** joined SRCC as Principal and signed each and every legal document required for further processing and supported **Dr. Santosh Kumari**.

On December 18, 2017, the College got the license "**License No. - DCP / LIC No. F. 2 (S / 37) Press / 2017"** to publish 'Strides – A Students' Journal of Shri Ram College of Commerce'. Due to change of Printing Press, the License got updated on March 09, 2018. On April 26, 2018, the SRCC Staff Council unanimously appointed **Dr. Santosh Kumari as the 'Editor of Strides**' for the next two academic years.

On April 27, 2018 (The Foundation Day of the College), **Dr. Santosh Kumari** submitted the application for the registration of the Journal. On May 04, 2018, the SRCC received the '**Certificate of Registration**' for ***"Strides – A Students' Journal of Shri Ram College of Commerce"*** and got the **Registration No. DELENG/2018/75093** dated May 04, 2018. ***On behalf of Shri Ram College of Commerce, it was a moment of pride for Dr. Santosh Kumari to receive the 'Certificate of Registration' on May 04, 2018 at the Office of Registrar of Newspapers for India, Ministry of Information and Broadcasting, Government of India (website - www.rni.nic.in).***

On May 07, 2018, **Dr. Santosh Kumari** submitted the application for seeking ISSN (International Standard Serial Number) at "ISSN National Centre – India, National Science Library, NISCAIR (National Institute of Science Communication and Information Resources). Weblink - http://nsl.niscair.res.in/ISSNPROCESS/issn.jsp". Finally, the College received the International Standard Serial Number "**ISSN 2581-4931 (Print)**" **on June 01, 2018.**

We are proud that this journal is an add-on to the enriched catalogue of SRCC's publications and academic literature.

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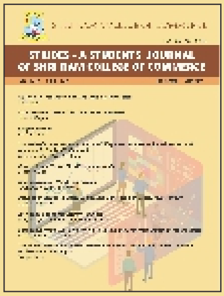

RELEASE OF FOUNDATION ISSUE OF STRIDES

The foundation issue of the Journal "Strides - A Students' Journal of Shri Ram College of Commerce, Volume 1, Issue 1, 2016-17" was successfully released on 91st Annual Day of SRCC held on 13th April, 2017 by Shri Prakash Javadekar, Honb'le Union Minister of Human Resource Development, Government of India.

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