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Harnessing the youth bulge

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Harnessing the Youth Bulge

How Asia can take advantage of its changing age composition.

By Sarah Harper

As the 20th century was drawing to a close, an overpopulated world fuelled by high birth rates seemed to be the top concern for policymakers, economists and environmentalists alike. The overwhelming question they were grappling with was: How could world population be prevented from growing to over 20 billion in the next century? Yet, within a couple of decades, demographic predictions have shifted from rampant growth to declining and ageing populations. Revised forecasts now expect global population to increase from its current 7 billion to around 11 billion by the end of the 21st century.

These new demographic trends, however, bring new challenges. Presently, in many countries, the working-age population (which is variously defined as persons aged 15 to 60/64) outnumbers the combined population of older adults and children. Globally the working-age population is currently five times more than those over 60. By 2050, this will almost have halved. Not only will the large working-age cohorts start to enter old age, in many countries they will live for much longer, well into their 80s and even 90s.

Asia specifically will have a large population of working-age adults until 2050. At that time, of its 5 billion people, one billion will be over 60 years of age, and slightly less than one billion under 15–leaving over half the population of working age. Unsurprisingly, the global distribution of people will also change–Asia will comprise 54 percent of world population by 2050, while Europe will account for only around 7 percent.

So before Asia begins to worry about its ageing population, it must first handle the more immediate challenges related to its current cohort of young population, or the 'youth bulge', conventionally defined as a large cohort between the ages of 15 and 24. Although this youth cohort represents a potential for greater employment, income and savings, experience has shown that a large young population doesn't always automatically translate into economic growth. Key institutional frameworks related to health, education and governance must accompany it, and the labour markets must be well developed and well planned.

So, what can Asia do to ensure that its youth bulge is converted into a demographic dividend?

The demographic transition

The world is undergoing an unprecedented change in its age composition. What started in Europe in the mid-18th century and took over 200 years to complete began in Asia and Latin America during the 20th century and will be completed in less than 100 years. It is now beginning in Africa.

The change follows the general pattern of demographic transition–as societies develop economically, mortality falls, followed by a lagged fall in fertility rates–leading to a significant change in the age structure of the population (refer to Figure 1). It has long been recognised that population grows rapidly in the time gap between the two trends. What is often less understood is the significant change in a country's age composition that occurs as a result. Additionally, while economists generally believe that demographic transition follows on from economic growth, demographers believe that it is a more complex process driven by socio-cultural as well as economic factors. Indeed, it is argued that demographic transition *itself* has strong implications for the economy, and has played an important role in the process of economic development.

In terms of demographic transition and the resultant age-structural change, the world can be broadly divided into three demographic regimes: *advanced economies* that are moving towards a low percentage of young people and a growing percentage of older people; *emerging economies* that are dominated by a large percentage of young and mid-life adults sitting between two smaller dependent groups–children and the elderly; and the *least developed economies* with a very large percentage of children, adolescents and young people. For example, while Europe, typifying a cluster of advanced economies, had more people over 60 than under 15 by the turn of the millennium; sub-Saharan Africa, part of the least developed economies, is projected to still have a third of its population under 15, and less than 10 percent over 60 by 2050.

The macroeconomic effects will differ depending upon the age composition of the population. It can be argued that large generations attract more societal resources than smaller ones. Countries with large young cohorts require resources to be diverted to housing, schooling, medical care, etc. As this population grows into young adults, a dynamic labour market with the right institutional structures can enhance economic growth. And as the large cohort begins to age, it draws on its own savings and societies' resources for old-age health and social care.

The effects may be mediated by market forces. For instance, rapid growth in numbers entering the labour market may depress wage levels; or an increase in the number of older people, who are likely to have assets, may reduce overall interest rates. Age structure can also influence public policy. In advanced economies, there is currently a need to transfer societal resources to the large cohorts of older adults, while governments in least developed economies often place emphasis on the very young. In emerging economies, the desire by governments to utilise the large cohorts of working-age people to drive the economy can threaten to reduce available resources for dependent generations. However, this reallocation to ensure intergenerational equity is often overshadowed by the huge inequalities within each generation–between those being able to access health, education and income, and those less able to.

In light of these changing age structures, the challenge in all three demographic zones is how to sustain and enhance economic growth and ensure the well-being of the population across the extended lifespan, while at the same time reducing the inequalities within each generation and ensuring an equitable reallocation of resources between generations.

Youth: resource or peril?

Currently, half the world's population is under 25, with some 1.2 billion aged between 15 and 24. This is the largest cohort ever to transition into adulthood. Youth represents a quarter of the global working-age population, but accounts for 40 percent of total world unemployment.

In 2012, a member of the U.S. Department of Defence wrote, "From continent to continent and across race and religion, the 'demographic' of insurgency, ethnic conflict, terrorism and state-sponsored violence holds constant. The vast majority of recruits are young men, most of them out of school and out of work. It is a formula that hardly varies, whether in the scattered hideouts of Al-Qaeda, on the backstreets of Baghdad or Port-au-Prince, or in the rugged mountains of Macedonia, Chechnya, Afghanistan, or eastern Colombia."[1] The same paper, among many others, also cited the 'youth bulge', that is, a large population now of productive age, as one of the major factors behind the 2012 uprisings in Tunisia and Egypt, referred to as the Arab Spring.

With two-thirds of its population between 15 and 29, the Middle East and North Africa (MENA) region has one of the largest youth groupings in the world. High fertility rates mean that many more will join this cohort over the next two decades. Although this should imply a huge economic opportunity for the region, the youth in this region face a variety of challenges: up to 40 percent youth unemployment, lack of education, soaring house prices, delayed marriages and youth dependency on families. The growing numbers increase competition for limited job and other opportunities. Poor access to mortgages, high rental costs and inadequate finances for dowry further inhibit men from marrying and setting up an independent home, thus excluding them from a stable adult life.

THE DEMOGRAPHIC TRANSITION

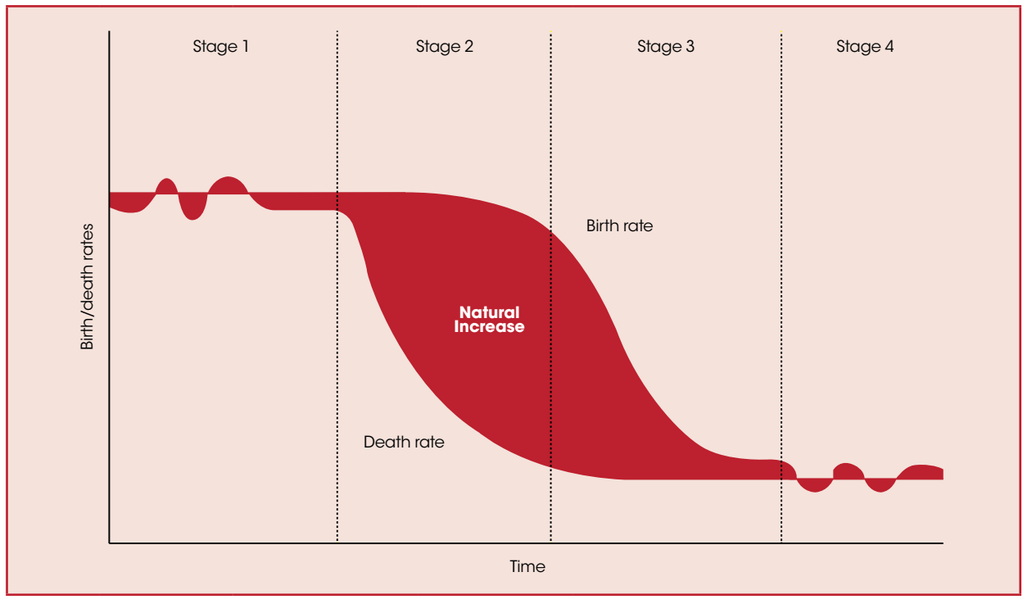

FIGURE 1 *Source: How Population Change will Transform our World (2016)*

Youth represents 25 percent of the global working-age population, but accounts for 40 percent of total world unemployment.

But a large youth bulge need not always lead to unemployment, poverty and civil unrest. Southeast Asia, which had very similar demographics to MENA in the 70s and 80s, was able to harness its youth bulge and convert it into the successful economic growth of the Asian Tigers–South Korea, Taiwan, Hong Kong and Singapore. For instance, between 1975 and 1985, Tunisia's youth bulge coincided with that of Hong Kong. While Hong Kong's working population peaked at 70 percent in 2005 and 2010, Tunisia's was at 67 percent in 2010. Yet we know that both countries experienced dramatically different outcomes.

So there must be other things going on.

In Hong Kong, there was a heavy focus of public expenditure on health, education, social welfare, and public-private investment in infrastructure, with an emphasis on housing and transport. Hong Kong also pushed for low levels of taxation and subsidised public housing. Combined with this government intervention to develop a social infrastructure, it created a fertile ground for entrepreneurship. Furthermore, the flexible labour market allowed for a shift from manufacturing of textiles to technology, and then to becoming a financial centre. All these factors came together to contribute to Hong Kong's success.

Converting youth bulge into demographic dividend

In Asia today, we are seeing a decline in mortality rates and greater life expectancy accompanied by a sudden decline in childbearing rates of women, especially in urban areas. As this has come after a period of high birth rates, it has resulted in a youth bulge. Additionally, the delay of first childbirth has enabled women to increase the time they spend in education as well as in the labour market. Where both men and women have joined the labour market and have fewer children to look after, more of societies' resources get focused on economic activity.

While a large number of urban, mobile, young people can drive productivity and economic growth, the right economic structures and institutions, and the right policy environment, are required for this potential to be realised. Thus, a key challenge for these societies is to enable well-developed, flexible labour markets for these young adults. If successful, this youth bulge can get converted into a demographic dividend.

The demographic dividend is a composite of five distinct drivers of change in population age-structure: an increase in those of working age; a diversion of resources from young dependents to investment in physical and human capital; an increase in female economic activity following a decline in childbearing; an accumulation of capital by the working population to invest in the economy; and incentives to save with the realisation of longevity and an extended period of late-life, non-economic activity.

It is important that public spending on education and health should continue even as countries develop and the economy becomes richer. In some emerging countries, such as Indonesia, the Philippines and Thailand, increased taxation from the growing proportion of workers will offset the benefits needed as the populations age, but there is the danger that this might impact savings and the level of investment required to propel growth.

Additionally, good economic management, with efficient financial and labour markets, supported through strong governance and institutional structures, are essential. There must be flexibility in the labour markets to allow expansion and polices to encourage investment, and a skilled working population that is benefiting from good quality health and education systems. These are required to enable the demographic dividend; an increase in the working-age population is not sufficient by itself to ensure economic growth (refer to Figure 2).

THE CASE OF KOREA

In 1950, just over half the Korean population was of working age, with 42 percent under the age of 15. The country prioritised access to family planning throughout the 60s and 80s by promoting local health centres and home visits by care workers. Total fertility rate fell from 5.4 in 1950 to 2.9 in 1975, reaching a low of just one child per woman in 2005.

By 2010, the percentage of children had fallen to 15 percent while those of working age had risen to almost 75 percent. Emphasis was placed on expanding healthcare facilities and encouraging health insurance. Education was also prioritised with 99.2 percent of all children in primary and secondary schools.

By 2030, South Korea's labour pool is expected to shrink by about 11 percent and the cohort of young workers entering employment will fall by nearly one-third (refer to Figure 3).

TIGER CUBS

What the Asian Tigers achieved in the 60s and 70s can be glimpsed in other parts of Asia. China capitalised on its massive youth cohort. And now

DRIVERS OF DEMOGRAPHIC DIVIDEND

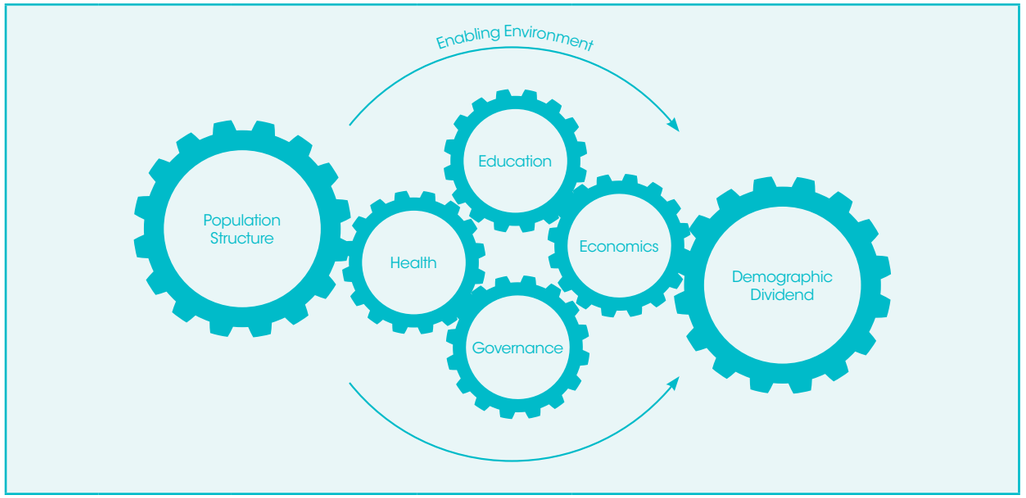

FIGURE 2

AGE-STRUCTURAL CHANGE IN SOUTH KOREA

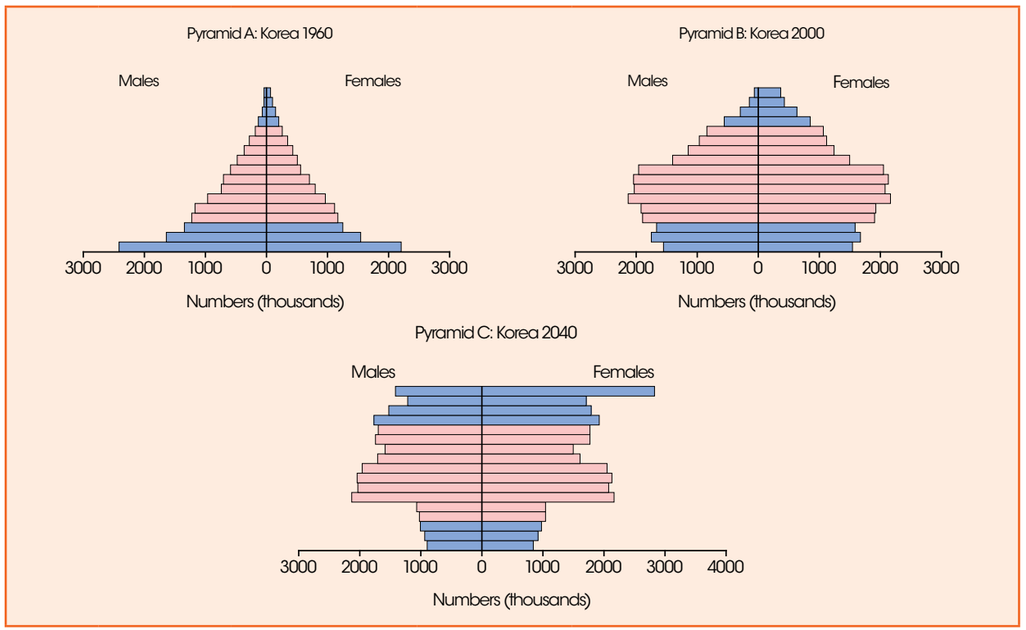

FIGURE 3

Source: Extracted from United Nations, Department of Economic and Social Affairs

there are early signs that the youth bulges in the Tiger Cub countries–Indonesia, Malaysia, the Philippines and Thailand–will replicate this success. The Philippines is set for a considerable increase in its labour pool, with a 34 percent increase in the next 20 years; and Malaysia and Indonesia expect a 20 percent growth over the same period.

Thailand is seen as a modern Southeast Asian economic powerhouse. Like the other Asian Tigers, Thailand prioritised health, education and family planning as part of its developmental goals–the result of which was a dramatic shift in age composition. By 2010, Thailand's working age population peaked at 71.8 percent, and is expected to shrink by about 12 percent over the next 20 years.

Many Asian countries will have the opportunity to convert their youth bulge into a demographic dividend over the next few decades. The demographic dividend period in China and Thailand is forecast to last until 2035 to 2040, Malaysia until 2045, and India and Indonesia until 2050. Vietnam, also poised for a demographic dividend, has a working-age population that is very similar to Thailand. At the same time, these societies will need to ensure basic education and health for children, women and the elderly, and tackle the growing inequalities between the burgeoning urban middle class and the often-neglected rural poor. They must also tackle the inequalities within urban areas, including providing the infrastructure for sprawling urban growth. All this, while maintaining the much-needed economic growth to support raising standards of living for all.

The technology factor

Historically, new technology, such as 19th century manufacturing advances or 20th century computerisation, led to a substitution of skilled labour through the simplification and replication of tasks. However, the modern relationship between technological development and employment seems to be different, as advances in robotics and digital communications will principally reduce low-skilled and low-wage occupations, while highly skilled jobs will stay protected. One estimation is that nearly half the jobs in the U.S. may become automatable over the next 20 years, with transport, distribution and manufacturing being particularly affected. Over the next decade, a 25 percent increase is predicted in the use of robotics for manufacturing.

Asia, in particular, has benefited from the availability of cheap labour and the subsequent offshoring of jobs from Europe and the United States. This promoted rural-urban migration, which in turn drove consumption, enabling the development of local markets and a thriving service economy–ultimately helping to convert the youth bulge into the demographic dividend. Unsurprisingly, it will be these countries that are likely to be most affected by the impact of technological change on employment.

There is a supply-side issue as well. With the steep rise in labour costs of up to 17 percent a year, countries like China are already pricing themselves out of the cheap labour market. Rather than these jobs moving to other Asian countries like Vietnam or Bangladesh, many are returning to advanced economies where they are being replaced by robots. In the 1990s, the U.S. textile industry was decimated when manufacturing moved to China and India to take advantage of cheap labour. Today, the U.S. textile industry is being revitalised with the help of robotics and advanced digital machinery, reducing labour requirements in some sectors by over 90 percent.

It is not only in manufacturing that such developments are seen. Advanced voice recognition systems will have the ability to replace human labour in call centres; wordsmith programmes are already undertaking copyediting tasks and composing news articles for agencies such as Associated Press. Skills in mechatronics–a combination of mechanical, electronic and computer skills–can adapt to these changes, but this will require a highly educated and skilled workforce. In a similar vein, IBM has created the Watson computer, which can scale or break down expertise into algorithms so that tasks can be easily learnt by computers and widely disseminated. Watson is described as a machine that can develop cognitive skills and improve its performance or 'learn' with feedback from humans and the computer itself.

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When and to what extent the creative and social intelligence of humans will be easily and widely replicated by machines is still debatable, yet the trends are clear. The intersection of age-structural change and the digital revolution has very clear implications for emerging and advanced economies. In Asia and also in Latin America, the youth bulge and growing labour supply are being threatened by automation. The jobs that will be available in both advanced and emerging economies will increasingly be for highly skilled technicians, requiring greater investments in human capital and education.

Enhancing human capital

It may be argued that the most important policy that any government could introduce to ameliorate the negatives and promote the positives of age-structural change is to enhance the human capital of their population through education and training. The role of education in reducing childbearing rates by delaying childbirth is evidenced in the direct link between education and contraceptive use. The desired family size also declines with increasing education in most countries.

For emerging economies especially, the demographic dividend is made possible with a more highly educated population. In particular, high skill levels are required in the uptake and adoption of new technologies. And for the advanced economies, education can also help to keep open the window of opportunity as the percentage of working-age people starts to decline. Enhanced human capital across the population and throughout individual lifespans through lifetime education, training and learning enables a continuation of economic productivity.

Maintaining the well-being of an ageing population is another means to sustain human capital, especially given the demographic patterns. This includes focusing on healthy children, a healthy workforce and a healthy cohort of elderly. Adequate investments in health are required to ensure, not just longer lives, but longer, healthy lives.

20th century institutions, 21st century challenges

Over the next 15 years, globally, some two billion babies will be born, another two billion children will need to commence school, and 1.2 billion young adults will need to find work. "While the demographic transition produces favourable conditions, it does not guarantee the supply of workers will be gainfully employed. Nor does it ensure that those who wish to save will find themselves encouraged to do so."[2]

Increasing unemployment, youth dissent, inequality and the inequitable distribution of resources alongside economic growth, frame the major challenges facing the emerging economies of Asia today: 20th century institutions will not suffice to solve 21st century problems. Education, health and the ability of people to move in the light of population needs and pressures are important to adapt to age-structural change. And yet all three face constraints inherited from the previous century.

While the flow of people, resources and communications are increasingly cross-border, legal and political action is controlled in the main within national boundaries. There will be a quarter of a billion international migrants by 2030, yet there is very little international flow of health, education or welfare that transcends national boundaries, but which is essential for the well-being of the migrants and for ensuring the best outcomes for them and their host populations.

Education is still instituted in old systems, which emphasise foundation schooling to the neglect of advanced and lifetime learning and training. Similarly, health systems are still predominantly focused on tackling acute diseases in a world where chronic conditions and comorbidities will be the largest health challenge.

These policy-level changes will become even more critical as Asia's population ages and the workforce concomitantly shrinks in size, increasing the grey burden on healthcare and the need to update and upgrade skills through education and training. Acknowledging the importance of age-structural change and integrating it into national and international policymaking will therefore be a critical piece of the solution, today and in the future.

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