

Garrett Nagle explains the concept of the demographic dividend and assesses the prospects for sub-Saharan Africa.



# The demographic dividend

## A window of opportunity?

**T**he demographic dividend refers to the economic gains that can be derived from an increase in the working population. It occurs when fertility rates decline, allowing faster economic growth. The decline in fertility often follows a decline in infant and child mortality rates, as well as increased life expectancy. As families recognise that fewer children will die during infancy or childhood, they begin to have fewer children. However, this drop in fertility rates is not immediate. The lag between falling death rates and falling fertility produces a bulge in the population that surges through age groups (cohorts). For a period of time this 'bulge' increases the dependency ratio. Eventually this cohort begins to enter the workforce. As fertility rates continue to fall and the elderly population still has relatively short life expectancies, the dependency ratio drops dramatically. With fewer younger dependants and fewer older dependants, the largest segment of the population is people of productive working age, leading to the demographic dividend.

### Mechanisms for growth in the demographic dividend

The demographic dividend can deliver a number of benefits. The first is the increased labour supply. However, this depends on the ability of the economy to absorb and productively employ the extra workers. The second is the increase in savings. As the number of dependants decreases, individuals can save more. Thirdly, decreases in fertility rates result in healthier women and fewer social and economic pressures at home. This also allows parents to invest more resources per child, leading to better health and educational outcomes. Finally, the increasing domestic demand brought about by the increasing GDP per capita and the decreasing dependency ratio leads to economic growth.

### The challenge of attaining the demographic dividend

Many countries in Asia and Latin America have experienced impressive economic growth over the last two decades. These gains are due, in

part, to the 'demographic dividend'. However, the least developed countries will be challenged to achieve the economic benefit without substantially lowering birth and child death rates, i.e. the 'demographic transition'. While child survival has greatly improved in developing countries, birth rates remain high in many of them, especially in parts of sub-Saharan Africa.

In the world's least developed countries, more than 40% of the population is under age 15 and depends on financial support from working-age adults aged 15 to 64. Another 90 million people between aged 15 and 19 are on their way to becoming financially independent as they enter adulthood.

In order to achieve a demographic transition, countries must focus on providing women with voluntary family planning information and services. One in four women in developing countries wants either to avoid becoming pregnant or to delay or space births but is not using a modern family planning method.

### The demographic dividend and family planning

While fertility has declined in most countries in sub-Saharan Africa, women in the region today still have on average 5.1 children. However, norms related to family size are changing and parents are choosing to have smaller families.

Investment in voluntary family planning helped Thailand, for example, to accelerate economic growth and this provides a model for sub-Saharan African countries. Thailand's contraceptive use increased from 15% in 1970 to 80% by 2012, and fertility levels declined from 5.5 children per woman in 1970 to 1.6 by 1990.

Rwanda is one of several countries in eastern and southern Africa where investments in voluntary family planning and child survival have led to significantly lower fertility. Child mortality has been cut in half in just a decade, modern contraceptive use has increased more than fourfold, and Rwandan women are having on average 4.6 children. If this progress continues, by 2030 Rwanda will have achieved the demographic conditions necessary for accelerated economic growth.

### Improved health, education and gender equality

While family planning is necessary for establishing the conditions for a demographic dividend, investments in child health, education (Figure 1) and

gender equality are critical additional steps that contribute to family planning use and economic growth.

The promotion of healthy timing and spacing of pregnancies can improve child health. Children conceived less than two years after the previous birth have a substantially higher risk of dying (1.5–3 times higher) than those children conceived three or more years after the previous birth.

Girls' education, especially at the secondary level, helps delay marriage and first pregnancy. Women who are educated are also more likely to work outside the home, increasing the size of the labour force and the potential for economic development.

### Recommended actions

The demographic dividend in many developing countries remains a possibility. However, for the process to begin, countries must give high priority to substantially lowering fertility and child mortality by taking the following actions:

- investing in child survival and health programmes;
- committing to voluntary family planning to achieve the demographic transition;
- investing in the reproductive health needs of both married and unmarried youth;
- prioritising education, especially secondary education for girls.

### Ethiopia and the demographic dividend

Since 2000, Ethiopia has made very good progress in improving the health and development of its people. Infant and maternal mortality are on the decline, under-5 mortality has been cut in half and literacy has nearly doubled. In addition, women's reproductive health has increased greatly: among married women, use of modern contraceptive methods has grown from 6% in 2000 to 27% of married women in 2012; women are now having on average 4.8 children compared with 6.5 a decade ago; and in Addis Ababa, the capital, women on average have just over two children.

However, Ethiopia will have to increase its investments in meeting family planning needs substantially in order to create the age structure needed for a demographic dividend. More than 40% of the population is under age 15, and the population pyramid in 2010, despite the declines in mortality and fertility, is still dominated by a large base of young people (Figure 2).

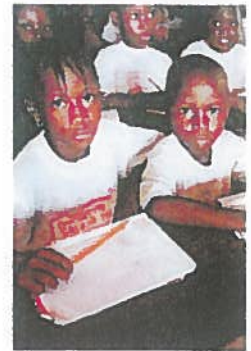


Figure 1 Improvements in education can help deliver the demographic dividend to sub-Saharan Africa

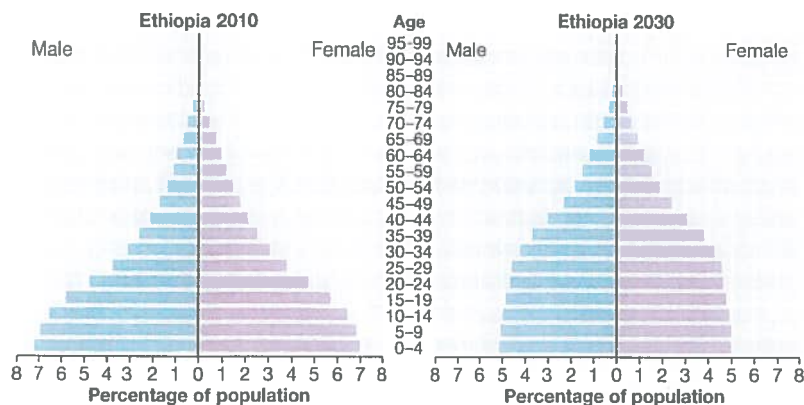


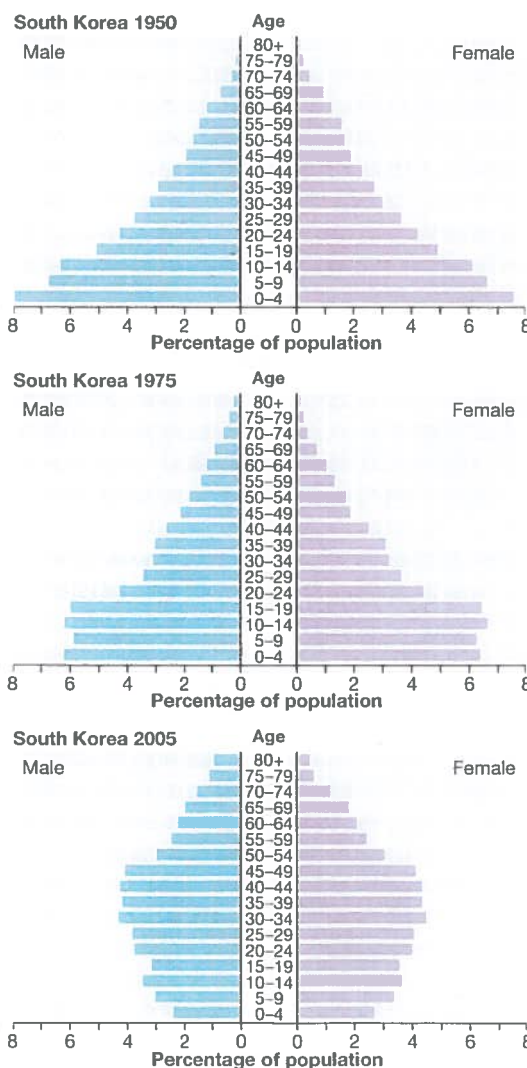
Figure 2 Ethiopia's age and sex structure, 2010 and 2030

By 2030 Ethiopia will just approach the age structure conditions that can facilitate accelerated economic growth.

### South Korea's demographic dividend

The 'Asian Tigers' are good examples of the advantages to be gained when changes in fertility

Figure 3 South Korea's age and sex structure, 1950, 1975 and 2005



can be a springboard for economic growth. South Korea made a rapid transition from high to low fertility between 1960 and 1990. Its success was the result of addressing population issues while also investing in reproductive health programmes, education and economic policies to create infrastructure and manufacturing.

#### A rapid fertility transition

Between 1950 and 1975, fertility dropped from 5.4 children per woman to 2.9. However, by 2005, fertility had dropped to 1.2 children per woman, reducing the base of young people dramatically (Figure 3).

South Korea followed an aggressive population policy. The government invested in health centres to provide a range of services including family planning. Field workers visited homes and provided family planning information and methods. People saw that having fewer children improved family life.

#### Shifting the education strategy

The government also focused on education. Between the 1950s and 1960s, South Korea's education strategy shifted from one of compulsory primary education, which served only about 54% of school-age children, to a 'production-oriented' education that would provide people with the knowledge and skills they needed to achieve economic development.

#### Comprehensive economic plans

At the same time, South Korea's economic plans were comprehensive. In the 1950s its economy was weak, based largely on farming and fishing. Improved relations with Japan led to investment capital that strengthened agricultural, fishing and manufacturing industries, including shipping. The South Korean government also addressed unemployment through a rural construction programme that provided minimum wages for workers involved in the construction of infrastructure, including dams and roads. This effort contributed to economic growth.

### After the demographic dividend

The demographic dividend offers a 'window' of opportunity. The dependency ratio begins to increase again as the population cohort that created it grows old and retires. With a disproportionate number of old people relying upon a smaller generation following behind them, the dividend becomes a liability. **TE**



## REVIEW

### Key points

- The demographic dividend refers to the bulge in the young adult population.
- It is caused by a fall in fertility rates and a small elderly population.
- It can bring many benefits, such as reduced spending (on children) and increased savings.
- Benefits occur at a household level and at a national level.
- South Korea is a good illustration of the impact of a demographic dividend.
- Many African countries, including Ethiopia, will not experience a demographic dividend for about 20 years.
- The demographic dividend offers a 'window' of opportunity.

### Pause for thought

- With fewer births each year, a country's young dependent population grows smaller in relation to the working-age population. With fewer people to support, this gives a country an opportunity for rapid economic growth if the right social and economic policies are developed and investments are made.
- The demographic dividend only occurs if there are enough jobs for all the adults. If there are not enough jobs, it could lead to increased unemployment and poverty.
- Countries that experience a demographic dividend will experience an increase in their elderly population some 40 years later.

### Context

The demographic dividend can be seen as part of the demographic transition. Typically it occurs as a result of falling fertility combined with a small elderly population. This is likely to be somewhere late in Stage 3 or early Stage 4 of the demographic transition model. However, the demographic dividend is not a permanent feature – typically it will last 30–40 years. Countries may be able to prosper as a result of the increased proportion of young adults in their population, increasing the size of the workforce and reducing the number of dependants. South Korea's rapid demographic transition was a byproduct of two well-timed changes: population policies and socio-economic change that affected savings, investment and the role of women.

### TOPIC EYE

Wellington College

## RESPONSE

### Assimilation

- 1 Outline the benefits of a demographic dividend.
- 2 In which parts of the world have birth rates remained high?
- 3 Describe some of the successes in family planning programmes around the world.
- 4 In what ways is it possible to lower fertility and child mortality?
- 5 Suggest reasons why Ethiopia is unlikely to achieve a demographic dividend until 2030 at the earliest?
- 6 How did the demographic dividend enable the 'Asian Tigers' to industrialise?
- 7 What are the problems that follow a demographic dividend?

### Evaluation

- 1 'The demographic dividend has the potential to transform countries economically.' To what extent do you agree with this statement?

### ANSWER PLAN

- Introduce and define key terms such as demographic dividend, dependency ratio, ageing population, youthful population.
  - Outline the conditions needed for a demographic dividend – both demographic and socio-economic.
  - Show the benefits of a demographic dividend using examples of named countries or groups of countries, e.g. Korea, China, the Asian 'Tigers'.
  - Give examples in which a demographic dividend might not occur – falling fertility without changes in socio-economic conditions. Examples might include Ethiopia and other countries in sub-Saharan Africa.
  - Summarise, stating your views on the subject.
- 2 Describe the main changes to Ethiopia's population pyramid, as shown in Figure 2.
  - 3 How do the data in Figure 3 help illustrate the concept of a demographic dividend for South Korea?

### Extension

- 1 Watch the Population Reference Bureau's video on the demographic dividend at <http://www.prb.org/Multimedia/Video/2013/demographic-dividend-engage.aspx>. This video gives an overview of a demographic dividend – what it is and what it takes to achieve it.
- 2 Study the pages at [http://china.org.cn/business/2013-01/29/content\\_27821010.htm](http://china.org.cn/business/2013-01/29/content_27821010.htm) and <http://english.peopledaily.com.cn/90778/8145883.html> that deal with China's demographic dividend. Outline the concerns of some people about the 'end of the demographic dividend' and the arguments of others who believe that worry about China's demographic dividend is 'unnecessary'.
- 3 Read the article 'Is Rwanda set to reap the demographic dividend?' at <http://blogs.worldbank.org/african/is-rwanda-set-to-reap-the-demographic-dividend>. What are the opportunities and threats to Rwanda as a result of its changing population characteristics?



# Retiring Delayed

Every worker, at some point, may imagine retiring. But for the next generation of the world's workers, that dream is growing more distant.

As nations reform pension systems in hopes of reducing future costs, more people will get smaller public pensions and stay on the job longer, says a 2013 report by the Organisation for Economic Co-operation and Development. By 2050 most of the 34 OECD-member countries will raise the retirement age to at least 67 years, says the *Pensions at a Glance* report.

National pension systems face growing pressure as people live longer. Raising retirement ages and promoting private pensions will help address that problem, "but more needs to be done," says Monika Queisser, the OECD's head of social policy and one of the authors of the report. "More efforts need to be made to keep older workers in the workforce, provide training, and promote healthy working conditions."

The poverty rate among older people has been declining in 20 OECD countries, the report says; still, women over 65 are about one and a half times as likely to live in poverty as men over 65. In many nations older workers are safeguarding their solvency by delaying retirement, working into their late 60s and beyond. —Judi Hasson

## QUITTING TIME

Eligibility compared with actual retirement ages around the world

