Demographic dividend

The term "demographic dividend" (DD) refers to the accelerated economic growth that a country can achieve when it has a low dependency ratio or, in other words, when the proportion of its population that is of working age is greater than the proportion of its population that doesn't work (e.g. children and the elderly). This population structure frees up household and state resources that would otherwise be used to support dependent groups. These resources can then be invested to improve productivity and to generate economic growth.

This briefing paper discusses the DD and the conditions necessary to achieve it. It will also examine the experience of South Korea, which benefitted greatly from a DD, and consider the potential for sub-Saharan African (SSA) countries to achieve similar success in the future.

The demographic transition

The population structure associated with a DD is a natural stage of the demographic transition, which is when countries change from having high birth and death rates to having low birth and death rates. The first stage of the transition is typically a fall in child mortality due to improvements in healthcare, nutrition and overall living standards. This causes population to grow as more and more young people survive childhood, eventually resulting in a society with a large working age population. This stage is followed by a fall in birth rates. The point after this fall, where few children are born but before the large working age population has reached retirement age, is the point at which a DD can be obtained. Beyond this point, the size of the working age population relative to dependents will decrease, as improvements in life expectancy allow people to live longer after retirement.

Most, if not all, developed countries have completed the demographic transition. They have moved past the stage where a DD is possible and are now societies with low birth and death rates, which tend to have ageing populations. However, in the world's least-developed countries (LDCs), most of which are in SSA, populations are growing rapidly and young people are disproportionately represented. This poses many challenges, but it also offers an incredible opportunity to benefit from a DD.

How can a low-dependency ratio boost economic growth?

When a country's labour force grows more rapidly than the people dependent on it, there is an increase in the availability of resources, at both domestic and state level, which can be invested to create a more productive economy.

For example, people with fewer children or elderly relatives to support will find themselves with more disposable income. This income can be invested in activities such as improving nutrition, pursuing education and acquiring new skills — all

things which can help make people more productive. This income can also be invested in businesses, thereby helping to encourage economic growth. Similarly, having fewer non-working people to support frees up resources for states to invest in health, education, enterprise and also other productive investments such as infrastructure.

Furthermore, because women have historically been responsible for providing care for children and elderly relatives, a low dependency ratio gives women more free time which they can use to pursue education and to participate in the labour force. Thus a low dependency ratio can also boost economic growth by allowing economies to significantly increase the size of their workforces.

What is needed to achieve a demographic dividend?

Some argue that simply having a large workforce is sufficient to achieve a DD, but this is not the case, as having a large supply of labour merely provides a window of opportunity. To achieve a DD, and make the most of this opportunity, countries must create the conditions set out below.

1. Low fertility rates

Without a fall in fertility rates, a country's working age population will have to support large numbers of children, thereby preventing women from entering the workforce and limiting the resources available to households and states to spend on productive investments. According to the UN, under such conditions, "countries will have a difficult time investing in the human capital needed to secure the well-being of its people and to stimulate economic growth."[1]

In order to lower fertility rates, governments can take a number of different measures, but the two most important methods are increasing access to family planning services and improving girls' access to education.

Family Planning Services

To lower fertility rates, governments must invest in sexual and reproductive health and ensure that everyone who needs family planning services can access them.

Unfortunately, hundreds of millions of women worldwide are not using modern methods of family planning. According to the Population Reference Bureau, "one in four women in developing countries wants to avoid becoming pregnant or to delay or space their births but is not using a modern family planning method. These women account for almost 80 per cent of unintended pregnancies."[2] By meeting this unmet need for family planning services, governments could effectively reduce fertility rates and support women's autonomy to choose when, or whether, they have children.

Girls' Education

Another important method of lowering fertility rates is increasing girls' access to education —

particularly secondary school education. This is because education for girls helps girls to delay marriage and pregnancy. A girl with some secondary education is about six times less likely to be married as a child than a girl with only primary education or less. The later girls marry, the fewer children they are likely to have.[3]

In SSA, where population levels are expected to increase dramatically in the coming years, and where most of the world's LDCs are located, "primary education completion rates are 63 per cent for females and 71 per cent for males. Unfortunately, across SSA, enrolment drops by almost 50 per cent for secondary school, where only 34 per cent of girls and 42 per cent of boys are enrolled."[4] If countries in SSA hope to achieve a DD, they will have to invest in girls' education to improve these rates.

Some argue that not all countries could lower fertility rates through increasing access to family planning services and/or through improving girls' access to education, as they believe that high fertility rates are endemic to certain religions, cultures and regions of the world. History shows us, however, that these factors can be overcome, and that countries with hugely varying religions and cultures from all over the world, from Rwanda to Singapore, and from Iran to Italy, have managed to effectively reduce fertility and slow population growth through the above methods and other tactics such as campaigning to promote smaller families.[5]

2. Healthy and educated population

Economic growth requires increasing a country's productivity. Simply having a large working age population relative to dependents will not provide this increase. It can, however, help make resources available that households and governments can invest to boost productivity. One of the most important productivity-enhancing investments that they can make is investing in education.

Education and training are required to help people become better-skilled workers, but also to help workers learn new skills and to adapt to new businesses and a rapidly changing industrial environment. If countries cannot implement education policies that help workers adapt to labour market needs, then they will be unable to move away from low-value-added labour-intensive production, and unable to develop new, diverse and more productive industries.

Investing in health is also necessary to achieve a DD, because improving the health of a population helps people to be better able to focus on work and education, and therefore to become better-skilled, more productive workers.

3. Female labour force participation

As mentioned earlier, the accelerated economic growth associated with a DD is, in part, based on women's increased participation in the labour force. In order for this to happen, states must create a social and legal environment in which women are able to pursue education and to work. If women are, for example, prohibited from

obtaining employment by legislation, or compelled by custom to only work in the home, then countries will not be able to achieve a DD.

One very important way to enhance women's empowerment and to create a more gender-equitable environment is to lower fertility rates through the methods outlined earlier, as this frees up time and money which women can use to pursue education, to enter the labour force and to participate in public life. It is for this reason that women's empowerment is often inversely correlated with fertility rates.[6]

4. Positive investment climate and appropriate infrastructure

In order to reap the economic benefits of a low dependency ratio, female participation in the labour force and a large, healthy, educated working age population, states must create an environment that encourages investment and stimulates job creation.

In order to do so, they must develop appropriate infrastructure, including financial infrastructure. This is because without, for example, transport systems and reliable banks, it will be very difficult for businesses to operate. Similarly, governments must also develop reliable legal institutions to encourage investment and business growth. This is because without adequate laws and legal systems, people will be hesitant to invest, out of fear that contracts will not be honoured.[7]

South Korea

Over the last half century, countries such as Singapore, Taiwan and South Korea, once known as the East-Asian "tiger" economies, have, through the DD, managed to achieve incredible economic growth and to improve living standards dramatically.

In South Korea in 1950, 42 per cent of the population was under age 15, and the total fertility rate (TFR), the average number of children born to a woman in a country, was 5.4. Seeing the opportunity to benefit from a DD, South Korea designed and implemented a comprehensive population policy, investing in health centres and prioritising access to family planning, which caused the TFR to drop to 2.9 in 1975 and to 1.2 by 2005.[8]

South Korea also developed an education strategy that changed the country's focus "from compulsory primary education that reached only about 54 per cent of school-age children to production-oriented education that focused on the knowledge and skills needed for economic development. This change led to 97 per cent of school-age children attending school by 1990."[9]

The South Korean government took steps to boost investment, such as normalising relations with Japan, which allowed the South Korean economy to receive influxes of investment capital that helped to strengthen agricultural and fishing

industries and also to develop new shipping and manufacturing industries. South Korea also employed large numbers of their workforce in the construction of infrastructure such as dams and roads, thereby improving the potential for investment while also stimulating their own internal economy.[10]

Another reason for the country's success was that South Korea effectively managed to increase female labour force participation rates (now at 50 per cent) and to encourage the workforce to save and invest, "rapidly increasing the capital (investment) per workers by more than eight per cent per year — a trend that lasted from 1965 to 1991.[11,12]

These policies resulted in consistent, accelerated economic growth rates (6.7 percent per annum between 1960 and 1990), which increased the GDP per capita in Korea from approximately $100 in 1960 to almost $30,000 today, dramatically improving standards of living in the country.[13]

While each of the East-Asian tiger economies is different, and each had a distinct development experience, all managed to develop by taking advantage of their large working age populations through lowering fertility rates, facilitating women's labour force participation, investing in health and education and promoting a positive investment climate.

Sub-Saharan Africa

The population of SSA is expected to double by 2050, and approximately 40 per cent of the population is currently under the age of 15.[14] This means that there are many countries who can still potentially benefit from a DD if they can lower fertility rates and tackle population growth.

Fertility rates in SSA are high. Women still have, on average, 5.1 children.[15] Some countries are, however, on a positive trajectory, having reduced fertility rates quickly from higher points. Rwanda, for example, had a TFR of 7.54 in 1989 but managed to reduce this to 4.51 by 2013.[16] Rwanda's TFR is still high, but the Population Reference Bureau predicts that "if the impressive progress continues, Rwanda will, by 2030, have achieved the demographic conditions necessary for accelerated economic growth."[17]

Many other countries in SSA have not been as successful in arresting population growth. Burundi, which borders Rwanda, had the same fertility rate as Rwanda in 1989 but its rate has remained high, only recently falling to 6.03.[18] The divergence in fertility rates between countries was followed by a similar divergence in economic growth. While both countries had very similar GDP per capita figures for decades before the change in fertility rates, Rwanda's figure is now twice that of Burundi's. This is even after the economic collapse following the Rwandan genocide of the mid-90s.[19] This shows that lowering fertility rates can have dramatic economic benefits for countries with large and growing populations.

Thus lowering fertility rates is critical to SSA's prospects for economic development, but it is also

vital to help save the lives of the 800 women per day who die from pregnancy or childbirth-related complications, and to facilitate women's empowerment. Moreover, as population growth increases global carbon emissions and limits availability of resources, lowering fertility rates is also critical to preventing environmental degradation and curbing the significant potential for the outbreak of conflict that arises in conditions of resource scarcity.[20,21] Unfortunately for SSA, it is predicted that "current investments in family planning must increase by three to five times their current levels to meet women's needs for family planning, to stabilize births by 2030, and to establish the conditions to capitalize on the demographic dividend."[22]

Conclusion

The term 'demographic dividend' refers to the accelerated economic growth that can be achieved by a country when it has a low dependency ratio or, in other words, when the proportion of its population who are of working age is greater than the proportion of its population who are dependent on others. Having a low dependency ratio frees up resources for households and governments which they can invest to help foster economic growth.

To benefit from a DD, countries first have to lower fertility rates in order to reduce the number of dependents that the working age population are supporting. The most important ways to do this are through making family planning services available to anyone who needs them and through increasing girls' access to education. Once fertility rates have fallen, governments must implement effective social and economic policies to improve health and education, to facilitate female labour force participation and to create a positive investment climate.

The "tiger" economies of East-Asia, such as Singapore, Taiwan and South Korea, have very effectively managed to create the above conditions and have achieved the accelerated economic growth associated with a DD. This has helped these nations move from poor, largely agrarian economies to developed, wealthy, industrialised economies. There are many countries facing huge population growth, particularly in SSA, who could potentially achieve similar results if they are able to lower fertility rates and create similar conditions.

Thus effectively tackling population growth is vital for the economic prospects of nations facing huge population growth but is also vital to improving women's health and empowerment, reducing environmental degradation and mitigating future potential for conflict. Whereas some countries in SSA have already managed to significantly reduce fertility rates, most still require massive investment in family planning services, sexual health and girls' education if they are to create the population structure needed to achieve a DD.

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