



## **VOICE OF EDITORS**

### **Population and Economic Growth**

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There has been debate amongst researchers and policy makers regarding how strong the correlation between population growth and economic growth is. At a time when several countries are encouraging policies to promote population growth, other countries are pursuing population stabilisation. For example, while countries such as Denmark, France, Japan and Singapore offer incentives aimed at encouraging births, policy makers aim for a reduction of population growth by curbing fertility rate in Burundi, Kenya, Niger and Rwanda, for example, via family planning programmes, to increase economic growth. The precise relationship between population and economic growth therefore requires further analysis.

Some studies provide evidence that supports the preposition that lower population growth might improve economic growth (e.g., Sinding, 2009). National Academy of Sciences (1971) concludes that “lower population growth in developing countries would significantly increase income per capita, and that reduced fertility should be a policy goal for most developing nations”. Specifically, they urge countries with high population growth to reduce their rates of natural increase to less than 15 per 1,000 over the following two decades (Ashraf, Weil and Wilde, 2013). More recently, a study by Karra, Canning and Wilde (2017) suggests that there is a significant negative correlation between population growth and economic growth in Africa.

Population growth is influenced by birth and mortality rates. If the latter is relatively low, for example due to advanced medicine, the result is a more aging population. Resulting concerns regarding economic growth are based on two main rationales: declining birth rate and increasing aging populati-

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on. For example, a recent study by Global Burden of Disease 2017 Population and Fertility Collaborators (2018) published by the Lancet presents statistics on the working age population indicating a marked decline in average birth rates in many countries from 1950 to 2017. It is easy to assume that this represents bad economic news. However, certain caveats point to a more balanced and holistic theoretical and empirical research into the complex dynamics of population and economic growth.

Firstly, it is usually assumed that an aging population is ultimately bad for a country's economy. This however ignores the valuable contributions made by an aging population to economies in a wider context. For example, the younger population could and should gain invaluable knowledge, experience and wisdom from the aging population, thereby advancing the knowledge and capability of the society more efficiently and avoiding pitfalls already known to those who are more experienced.

Secondly, biological age is different from chronological age and this gap is widening with better health care and longer life expectancy that come with advances in medicine. Existing studies (e.g., Bloom, Canning and Fink, 2010; Lee, 2003) usually define aging population relative to chronological age. The older population today is generally healthier and with longer average life expectancy, and hence more capable of contributing to economic activities for a longer period.

Furthermore, an aging population creates new markets and opportunities for economies. For instance, older people tend to have more time for travel and leisure, thereby supporting a more buoyant tourism industry. Older population may also spend their money more wisely and thereby redirect more capital to essentials, rather than on frivolous goods and services that add little economic stability over the long-term.

Another caveat arises from a disregard for the indirect channel of contribution to economic activities provided by the aging population. An example of this caveat is the child care provided by grandparents, enabling the child's parents to participate more fully in the labour force. Child care contribution of the grandparents is not recognised in the official record of economic activities in countries, but such contribution by aging population plays an important role in labour-force

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participation rates of younger population. In addition to this, their spending on and contribution to the personal and social development of grandchildren is equally, perhaps even more important.

Studies attempt to investigate the relationship between aging population or the growth rate of population and economic growth by employing theoretical analysis (see, for example, Becker, Glaeser and Murphy, 1999), econometric analysis ( see Bloom and Williamson, 1998 ) or case studies (e.g, Bloom, Canning and Sevilla, 2001), but the majority of these studies tend to look into this in a national or a regional context. Since, what is beneficial in a regional or national context does not necessarily translate into beneficial effects on a global scale. Research examining the correlation between global population growth and economic growth would help shed more light into a broader context. In an increasingly globalized world, the human capital is now much more mobilized compared to many decades ago, implying that a shortfall in labor supply in certain economies could be alleviated by excess supply in other economies.

The bulk of the prevailing theories and studies argue that an aging population has a negative effect on economic growth. However, as machine-automation plays an increasingly important role, a question arises as to the validity of this argument. More recently, research by Acemoglu and Restrepo (2017) substantiates with supporting evidence that there is no such negative relationship, and provides a counterintuitive finding indicating a positive relationship between aging population and economic growth in recent decades. In line with the finding from this recent research, and with automation technologies still undergoing rapid development, questions that naturally arise are: Is a declining working population really a cause for concern? Is concern over a potential reduction in economic growth due to a decline in population growth entirely justified? Are as many young people in society required when a small team with computers can control a mostly-mechanical workforce? Significantly, the advances in artificial intelligence in recent times will likely result in enhanced capacity to undertake economic activities and increase productivity more efficiently with a smaller work force. Perhaps the working population required to sustain or indeed increase output will reduce over the coming decades. This suggests that lower birth rate and higher aging population may not really be a 21<sup>st</sup> century const-

rain and instead might open up a more efficient avenue for economic growth.

Ultimately too much focus on economic growth may hide a more noble goal: the increase in quality of life of everyone in society, based around the concept of holistic inclusive growth also encompassing various indirect economic and non-economic considerations. Is this perhaps a conceptual leap that must be embraced for the current aging population to flourish economically?

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