

A Developing Opportunity in Developing Countries: Inflation \propto Demographics & Productivity

Larry Speidell, May 2021

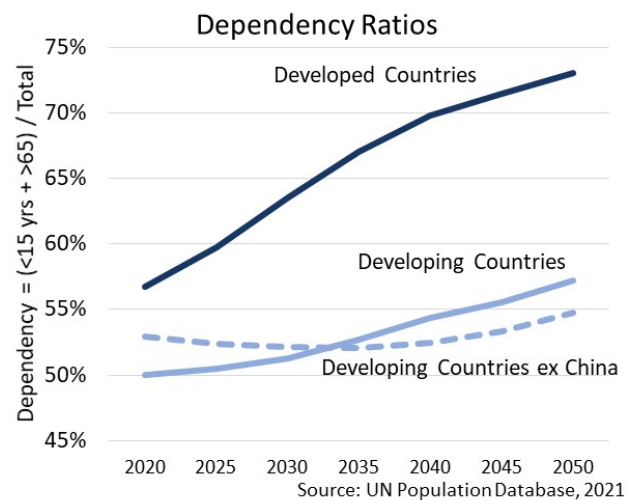
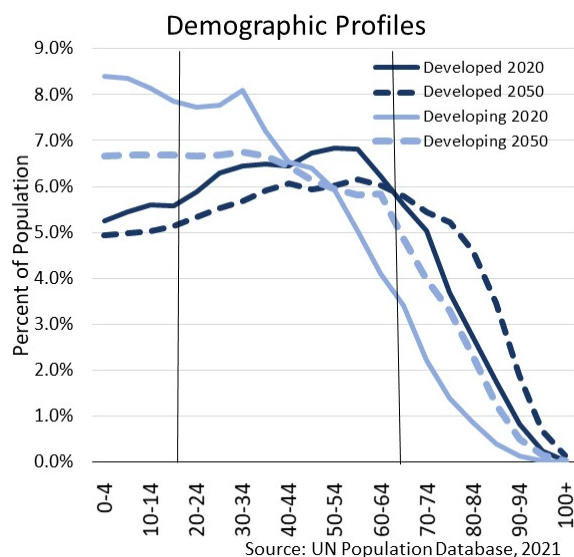
“Demography is Destiny”
- Richard Scammon, 1970ⁱ

Some ideas are fast and others are slow. Watching changing demographics can be boring, but for those on the right side of the changes, it can be rewarding. This paper examines demographic developments that may lead to inflation while working in favor of developing countries.

Concerns over potential inflation have surfaced recently on the back of stimulus packages, pent up demand, capacity reductions and commodity price increases. The Economistⁱⁱ concluded that a surge in inflation seems unlikely for now, but it is worth considering the analysis of two British economists, Charles Goodhart and Manoj Pradhan, in *The Great Demographic Reversal*ⁱⁱⁱ which discusses the outlook for declining productivity in the aging populations of the developed world. Our INDUSTRY COLLEAGUE Larry Siegel wrote an excellent review of the book and suggested: “Buy equities outside the developed world. Buy inflation hedges, such as commodities, real assets, and TIPS.”^{iv} I agree, and offer below some charts that illustrate the demographic differences between the developed world and the frontier and emerging countries in the developing world.

Based on data from the UN Population Database^v, the chart below left contrasts the aging of the developed world with the “maturing” of the developing world from 2020 to 2050. The demographic profiles show declines in the percentage of young people everywhere, but the drop is especially pronounced in the developing countries, where large numbers of young people will mature into productive members of the workforce. Meanwhile, the percentage of older people is rising everywhere thanks to improvements in healthcare, but this will be greater in developed countries. 27% of people in developed countries will be over age 65 in 2050 versus 16% in developing countries. Thus, while the number of young dependents will be falling, the number of old dependents will rise as older people retire from the workforce.

The chart of dependency ratios^{vi} below right shows the ratio of young and old to the rest of the population (the percentage of people under 15 and over 65 versus the working age population).



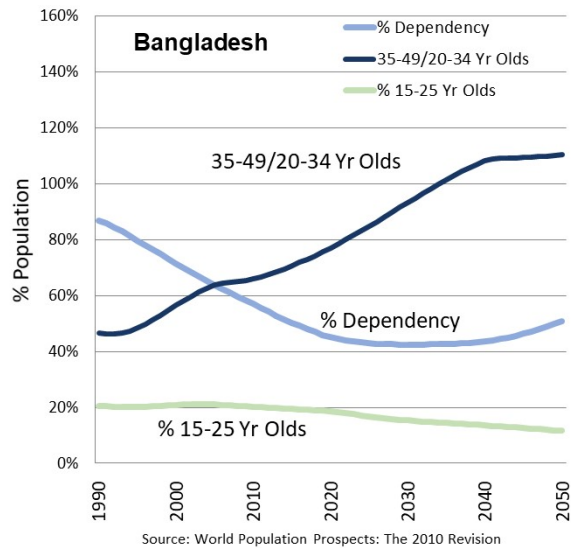
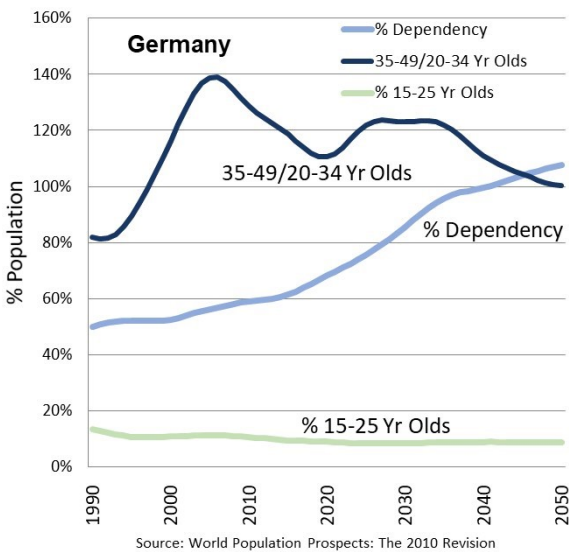
Between 2020 to 2050, the dependency ratio in the developed world will rise from 57% to 73%, meaning that every four workers in 2050 will be supporting nearly three people who are not in the workforce. By contrast, dependency in developing countries will rise much more slowly, from 50% to 57%. China is now suffering from its years under the one-child policy^{vii}, so its dependency ratio soars from 42% to 67% by 2050. However, excluding China, dependency in developing countries only rises from 53% to 55%.

In addition to dependency, a demographic measure of potential national productivity is the ratio of experienced workers, ages 35-49, to less experienced workers, ages 20-34. A high and rising level of this ratio is a sign of potentially high and improving productivity because more of the workforce is in its most productive years and less time is spent training new workers.

This is shown in the charts below, along with the dependency ratio. These charts also display a measure that can subtract from productivity: the percentage of population ages 15-25. Countries with a lot of young adults can face challenges, as did the US in the 1960s, when the percentage of 15-25-year-olds rose from 13% in 1959 to 19% in 1974 as the baby-boomers came of age.

The below left chart of Germany shows the country facing both a rising trend in dependency and a falling ratio of experienced workers.

On the other hand, in the below right chart, Bangladesh illustrates the pattern of a typical developing country, with a falling dependency ratio, an improving experienced worker ratio and a falling percentage of young adults.



We believe the coming demographic reversal is likely to present a challenge for the developed world and an opportunity for many developing countries, such as Bangladesh, Cote d'Ivoire, Egypt, Ghana, India, Indonesia, Jordan, Kazakhstan, Kenya, Malawi, Malaysia, Mexico, Morocco, Nigeria, Pakistan, Peru, Philippines, Rwanda, South Africa, Tunisia, Turkey and Vietnam.

Global Consequences

We have become accustomed to an expanding labor force over the last half century. The first wave in the U.S. was from the baby boomers. In the second wave, more women entered our labor force. In the late 1980s, the fall of the Iron and Bamboo Curtains swelled the global labor force, depressing wages in the developed world. Today, these increases in the global labor force are slowing, except for gains in the Indian sub-continent and in Africa.

While automation can help balance labor and demand, it cannot replace all workers, including the “care workers” needed for elderly dependents. As a result, workers will have more power, which can lead to higher wages and inflation.

Inflation may not be guaranteed by aging demographics. It was not the case for Japan during the past 30 years, but Japan has been in a decades-long recession. Juselius and Előd Takát^{viii} studied 22 economies from 1955 to 2010^{ix} and found a positive correlation between rising dependency and inflation, which would support the conclusions of Goodhart and Pradhan.

At the national level, as Scammon said, demography may be destiny^x - but destiny is not the same as fate. Although often used interchangeably, many^{xi} argue that fate may be unavoidable, whereas destiny is a path that people can change, just as they can change the destination of a journey.

Nations can actively influence their destiny. Some nations will make gains in education and will embrace robotics and automation in support of workers, thus achieving better outcomes. And simpler technologies, such as adoption of successive generations of cell phones, can provide magnified benefits in developing countries. These kinds of progress in the developing world will increase productivity, extend longevity and reduce morbidity. Additionally, the recent convergence of the living standards among rich and poor countries is likely to continue, as contrasted with the great divergence that was caused by the industrial revolution 150 years ago^{xii}.

Conclusion

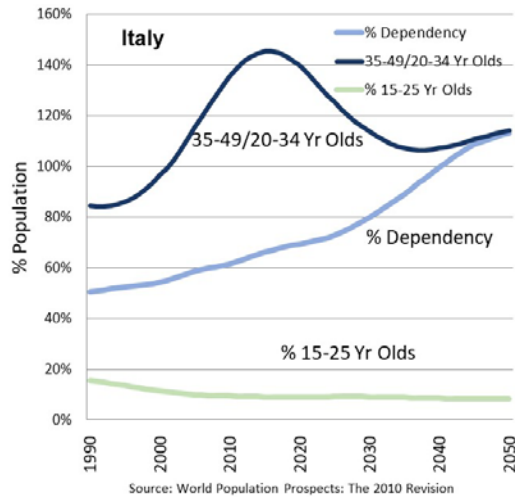
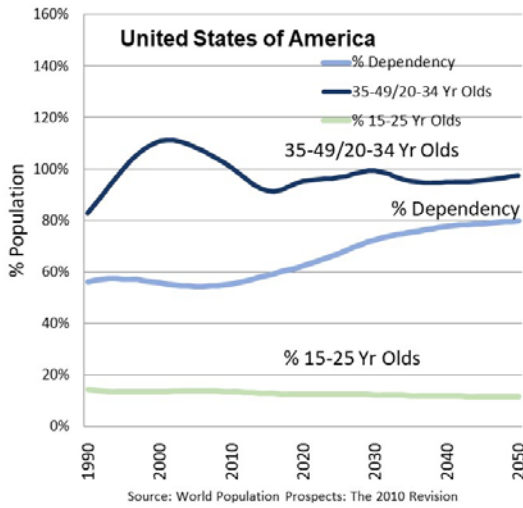
I believe that demographic changes will lead to rising inflation and possible stagnation in parts of the developing world, while there will be opportunities elsewhere.

The frontier and emerging countries in the developing world are on track to benefit from positive trends in demographics, health and education, and this progress will combine with new opportunities in communications, fintech and other technologies adopted and adapted from the developed world.

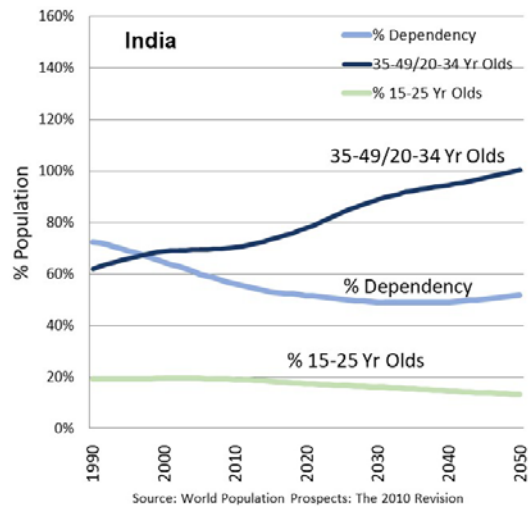
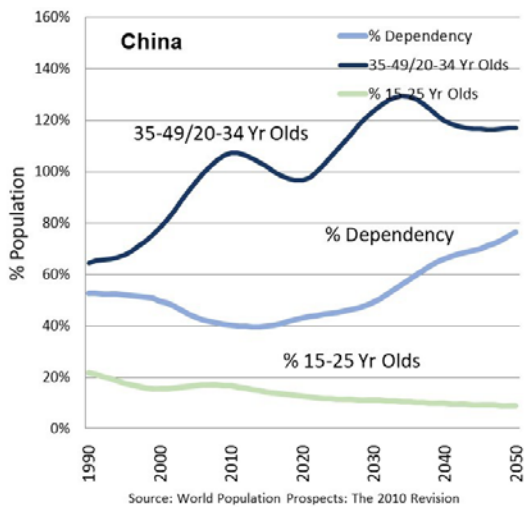
The result can be a significant developing opportunity in the developing countries, with the potential for attractive investment rewards in frontier and emerging markets.

Appendix

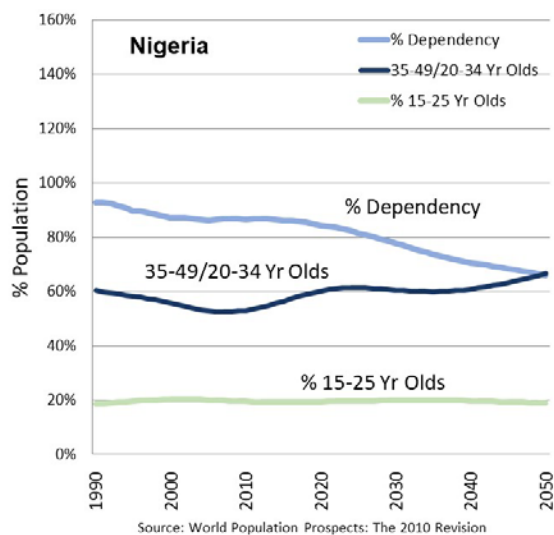
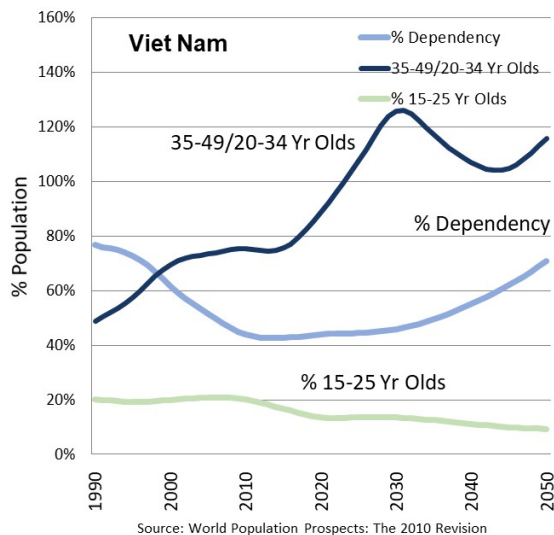
The U.S. is in a better position than Italy.



China will continue to have more experienced workers than India.



Vietnam looks good, while Nigeria will have too many young and inexperienced workers for years to come.



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ⁱ The Real Majority, Richard Scammon and Ben Wattenberg (New York: Coward-McCann), 1970, <https://weekspopulation.blogspot.com/2013/11/the-origins-of-demography-is-destiny.html>

ⁱⁱ "Tail risks - A surge in inflation looks unlikely, but it is still worth keeping an eye on", The Economist Dec 12 2020

ⁱⁱⁱ The Great Demographic Reversal, Ageing Societies, Waning Inequality and an Inflation Revival" Charles Goodhart and Manoj Pradhan, Palgrave Macmillan, 2020, also an article in the European Money and Finance Forum, SUREF Policy Note 197, Oct 2020: https://www.suerf.org/docx/f_fa99ccdbea597263a88f27075bd6eb49_17385_suerf.pdf

^{iv} "Will Demographic Trends Drive Higher Inflation and Interest Rates", Laurence Siegel, February 2021,

<https://larrysiegel.org/will-demographic-trends-drive-higher-inflation-and-interest-rates/>

^v United Nations Dept of Economic & Social Affairs, <https://population.un.org/wpp/DataQuery/>

^{vi} Dependency Ratio https://en.wikipedia.org/wiki/Dependency_ratio

^{vii} Old-child policy in China, https://en.wikipedia.org/wiki/One-child_policy

^{viii} Can demography affect inflation and monetary policy? Mikael Juselius and Elód Takáts,

<https://www.bis.org/publ/work485.pdf>

^{ix} Aging and the Economy, The Regional Economist, Oct 2015, St Louis Fed,

<https://www.stlouisfed.org/~media/Publications/Regional-Economist/2015/October/aging.pdf>

^x "The main difference between fate and destiny is that fate is unavoidable or inevitable whereas destiny can be changed", <https://pediaa.com/difference-between-fate-and-destiny/>,

<https://grammar.yourdictionary.com/vs/difference-between-fate-and-destiny-meaning-and-use.html>

^{xi} "Difference Between Fate and Destiny: Meaning & Use", <https://grammar.yourdictionary.com/vs/difference-between-fate-and-destiny-meaning-and-use.html>

^{xii} Hans Rosling's 200 Countries, 200 Years, 4 Minutes - The Joy of Stats – BBC, Nov 2010,

<https://www.youtube.com/watch?v=jbkSRLYSojo>