

Replacement Migration?!

UN Study reviewed by Leon Bouvier

For years the Population Division of the United Nations has published significant and useful demographic information for the world overall and for every nation in the world. As stated in the Preface of this most recent publication: "The Population Division of the Department of Economic and Social Affairs at the United Nations Secretariat is responsible for providing the international community with up-to-date and scientifically objective information on population and development." About every three years the Population Division (PD) updates its projections for every nation in the world. This work is done very carefully by extremely competent demographers. Every such work includes at least three optional projections for each country. When used correctly, these calculations can be of immense usefulness to policy-makers everywhere.

The PD is always on the alert for abrupt changes that could be demographically relevant to all nations. Thus, the projection publications are constantly being reviewed and updated to provide the users with the most recent and correct data possible. The PD goes further than simply developing projections. For example, with the tragic AIDS pandemic, especially in Africa, more recent population projections have taken this into account. Life expectancy in some African countries has declined from 60 to 30 years as a result of this tragedy. Unfortunately, some commentators took this as evidence that "the world population problem had subsided." They didn't bother to add that sadly, this was

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due to millions dying from AIDS in Africa.

Replacement Migration is the most recent publication from the PD that addresses a new demographic phenomenon: extremely low fertility in most European countries, Japan, and South Korea. When a country, such as Italy for example, demonstrates a total fertility rate (TFR) around 1.2 for a number of years, and when this pattern is noted in numerous other more developed countries, it is clear that new and unexpected demographic changes are taking place: population aging, to be followed by eventual population decline. This new report asks the question: Is replacement migration a solution to this new problem facing a number of advanced countries?

I will not go into detail as to the numerous scenarios that the PD develops. Taking one example: if Italy would like to continue its low fertility and still maintain its present population, 251,000 immigrants would have to be accepted annually, compared to an estimated 6,000 actually accepted. To maintain a constant age group 15-64, 372 thousand would have to be accepted annually; to maintain a constant ratio (i.e. 15-64 divided by 65 and over) the number of immigrants required per year would be over 2.2 million. Suffice it to say that the information provided in this report should keep policymakers busy for some time!

It is important to bear in mind when reading this report as well as previous PD reports that these are *projections* of future demographic behavior. They are not *predictions* of anything. Projections can be very useful tools to illustrate what would happen under certain specified demographic assumptions. Indeed, projections can sometimes be used to demonstrate the potential dangers *if* certain demographic assumptions were to prevail. Oftentimes, the person making the projections hopes very sincerely

Replacement Migration: Is It a Solution to Declining and Ageing Populations?

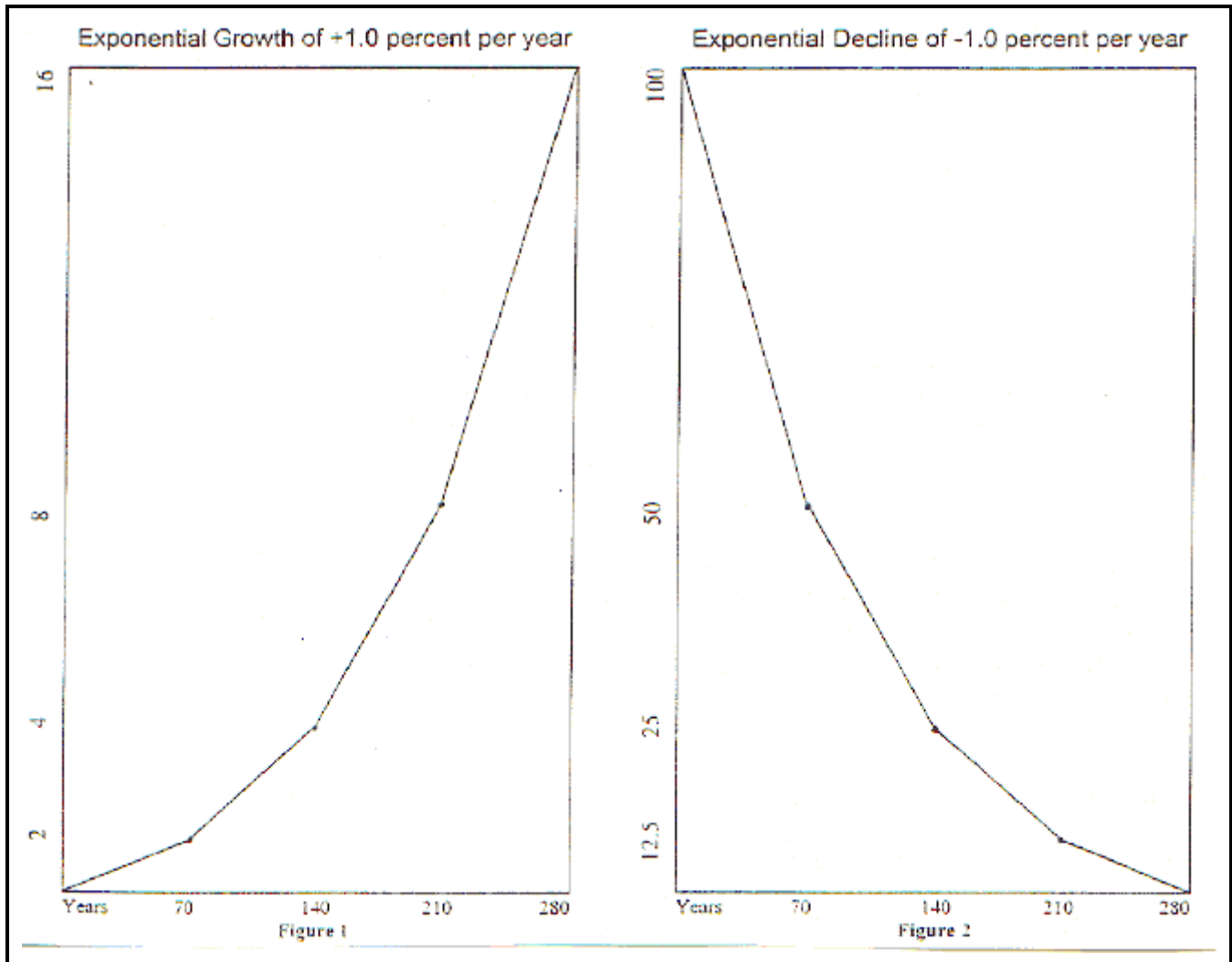
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A related earlier UN publication,
*Expert Group Meeting on Below-
Replacement Fertility*, New York,
November 4-6, 1997, is also available
free at the same UN office.





that he or she will be proven wrong!

That is to say, by illustrating the impact of a set of demographic assumptions, policy makers may react to make certain that these assumptions will not occur. This is the approach taken by the United Nations demographers. No one is advocating increased immigration nor no immigration. However, it is the responsibility of the United Nations demographers to point out what the implications are of continued low fertility. This has been done in this particular report.

To put it in plain language: If a country doesn't want its population to fall below a certain number, what are its options? Improvements in life expectancy are already included in the projections. That leaves fertility and migration. As the Report states: "Although fertility may rebound in the coming decades, few [demographers]

believe that fertility in most countries will recover sufficiently to reach the replacement level in the foreseeable future."¹

Increased fertility is an option but it is quite difficult for a country to raise its fertility, just as it is equally difficult to lower it. This leaves migration as the most malleable option. That, briefly, is what this report is all about. "What if fertility remains at its current low levels and an end to decline is desired?" The answer is increased immigration.

Below-replacement fertility over a prolonged period is a very recent phenomenon. There have been brief periods when the total fertility rate fell below 2.1 but these have always been for a few years at the most. The United States TFR was around 1.8 for about a decade in the 1980s – the so-called "baby bust" period. Never

before has fertility fallen to 1.2 and even 1.1 and remained there for relatively long periods of time.

Interestingly, the concept of “below-replacement fertility” is the mirror-image of “above-replacement fertility.” Consider exponential growth (i.e. 2-4-8-16...). A population growth of 1.0 percent per year results in a doubling in 70 years (see Figure 1). Exponential decline is the exact opposite (100-50-25-12.5...) (see Figure 2). Note, however, that when on the increase, the numbers keep doubling and the difference gets bigger. When on the decrease, the numbers get smaller and differences also get smaller. A population “growth” of -1.0 percent per year results in a “halving” every 70 years.

Let’s use an imaginary example. Assume that the population of the United States is 300 million in 2000 and that it’s annual “growth” rate is -0.7 percent. Should it remain at that rate, the population would be “halved” every 100 years (with zero net migration). When we reached the next millennium (3000), the United States population would be less than 300 thousand — again, assuming zero net immigration.

Another “mirror image” can be seen in population momentum. As is well known, this phenomenon is inherent in a young population. Even if fertility falls considerably, growth continues for another 50-70 years because there are so many young individuals in their reproductive years. Thus it is often said that “you can’t turn off the faucet on population growth.”

Now let’s look at the opposite situation. Suppose women average just above one birth for a generation or so. The population begins to fall. In my view, in most instances this is a good thing for the society, given the size of many populations. Demographer Meredith Burke has pointed this out very clearly and succinctly.² With smaller populations, nations can do so much more for their people — be it more education, better housing, better roads — the list goes on. But at some point, fertility must rise to replacement levels if the society is to survive.

“Although fertility may rebound in the coming decades, few [demographers] believe that fertility in most countries will recover sufficiently to reach the replacement level in the foreseeable future.”
— From the UN Report

However, just as you “can’t turn off the faucet on population growth,” you “can’t (easily) turn it back on.” Let’s assume that instead of 100 million, the politicians choose 50 million as a far better number for their hypothetical country. If the country waits until it reaches 50 million before deciding to increase fertility back up to the replacement level of about two births per woman, this will not end the decline. Numbers would continue to fall for some time before the decline ended, and by

then the population would be substantially below the desired level of 50 million.

Thus momentum works both ways. Herein lies the importance of the United Nations report. In my example, I did not include migration. Presumably, when a country reached its desired smaller size it could then admit immigrants to maintain that size.

Another intriguing matter refers to the sending countries. These countries have above-replacement fertility and continued population growth — some of it quite rapid. The UN report indicates how many immigrants each of the eight receiving countries chosen as examples would require to maintain their present population. Perhaps a future UN report could look at typical sending countries and estimate how much emigration would be required for them to see an end to population growth. Again, this is a “mirror image.”

In 1982, Thomas Espenshade, Bryan Arthur and I pointed out that a region exhibiting a constant below-replacement fertility rate and a constant level of immigration would eventually reach a stationary state.³ Could the “mirror image” be present here as well? In a region with constant above-replacement fertility, what level of emigration would be necessary to attain a stationary level? I don’t have the answer; perhaps some reader will take this research further. It remains a fascinating question and I would hope that the PD looks into this issue in a later publication.

I now turn to the social and cultural implications of massive changes in the composition of countries as a result of low fertility and migration. The Report

comments:

In many countries, additional large volumes of immigrants are likely to face serious social and political objections, even as a means of slowing population decline and population aging. Therefore, regulating the level and composition of replacement migration streams to reach a desired population size or population age structure poses enormous challenges for Governments that may wish to do so.⁴

That is about as close to governmental policy as any PD report will get and this is as it should be. The responsibility of the PD as stated at the outset of this review is to provide current and accurate demographic data for the United Nations membership. The numbers developed by the PD do allow for policy makers and others to speculate on what these demographic changes really mean for a nation and indeed, for an entire continent.

In my view, we are witnessing a tectonic change in the population distribution and eventually in the political power distribution of our planet. It rivals, if it doesn't surpass, the fall of the Roman Empire, the "discovery" of the Americas, and the Industrial Revolution. We may be witnessing the onset of the end of the dominance of Western Civilization over the rest of the world.

To the best of my knowledge, no group has ever inflicted societal suicide upon itself. That is what is occurring now in Europe, in Japan, and South Korea and elsewhere. It is being projected that "UK Whites will be a minority by 2100." All of the economically important G-8 countries exhibit fertility well below replacement, while sixty-nine "modern" or modernizing nations now have at or below-replacement fertility⁵ (see Table 1, previous page). This is not good; nor is it bad. Over the long course of history, numerous other massive shifts have taken place. I have enumerated a few. We are apparently entering a new phase of human history. I suspect that the historians in the year 2500 will simply have yet another "shift" to analyze. Where will the next center of power be located? That is pure speculation but

the two demographic billionaires — China and India — would seem to be possible choices.

I have deliberately gone well beyond the UN report to illustrate how important these publications are. The UN demographers give us sets of numbers; they tell us

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very clearly what assumptions have been made; they never suggest policy changes. To recall Jack Webb and the television show "Dragnet," "these are the facts, ma'am, just the facts."

Congratulations to Joseph Chamie and his excellent staff at the Population Division for another job well done.

NOTES

¹ United Nations, *Replacement Migration: Is It a Solution to Declining and Ageing Populations?*, p.7.

² B. Meredith Burke, "Upcoming Growth from Prosperity: The US versus Japan," *NPG Forum*, August 1997.

³ T. J. Espenshade et al, "Immigration and the Stable Population Model," *Demography*, Feb. 1982, pp.125-133.

⁴ United Nations, *op.cit.*, p.11.

⁵ Population Reference Bureau, 2000 World Population Data Sheet.