

# POLICY IMPLICATIONS OF DEMOGRAPHIC CHANGE: PANEL DISCUSSION

## RECENT DEMOGRAPHIC ACHIEVEMENTS AND THE CHALLENGES AHEAD

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This audience seems to be composed mainly of economists and demographers. I am reminded of a story about an economist who did not like teaching very much. He had a hobby of hot air ballooning, and one day he took his hot air balloon out and went up into the sky with ten of his students. It quickly became cloudy. They were pushed far away from their home and were up in the clouds for several hours. When the clouds at last opened up, they came down and saw a man walking by with some young people. The economist yelled to this man, "Where are we?"

The man looked up and said, "You are fifteen yards up in the sky."

The economist looked at his students and said, "That man is a demographer." The students wanted to know how he knew this. "Well," he said, "when he answered my question, he was very precise but not very helpful."

The person on the ground, the demographer, looked at his students and said, "That man is an economist." His students asked how he knew. "He is lost, and his head is up in the clouds," the man on the ground replied.

As you know, I am a demographer. I consider myself fortunate in this regard because it is an exciting time to be a demographer. The last century, the twentieth century, has been the most revolutionary, the most unparalleled in human history, in terms of demographic events, and it is likely to retain that distinction into the future.

## DEMOGRAPHIC ACHIEVEMENTS OF THE TWENTIETH CENTURY

Let me cite for you some of the demographic gold medals achieved by the twentieth century. First, in the twentieth century, the world

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population practically quadrupled. We started at 1.6 billion people, and we ended at 6.1 billion. As I tell some of my students, it is easy to remember—just reverse the numbers, 1.6, 6.1. Second, the twentieth century recorded the highest year-over-year population growth rate ever, 2 percent. Currently, growth is about 1.2 percent per year worldwide, and we are not going back to 2 percent. Most demographers see such record growth as over. Third, in the late 1980s, we experienced the highest annual global population increase ever, about 86 million. Now, growth is about 77 million per year. Fourth, the twentieth century saw the shortest time ever to double the world's population, from 3 billion in 1960 to 6 billion in 1999. We also saw the shortest time to add a billion people, twelve years. We will probably never do that again. Fifth, we had revolutionary improvements in mortality and longevity. In my view, the declines in mortality and increases in longevity constitute humanity's greatest single achievement.

Sixth, we have had unprecedented declines in fertility and family size. The declines in fertility in the last thirty to forty years have been remarkable. When I was studying at Michigan, Ron Friedman saw the first numbers for China, and we asked him, could it be possible that fertility could drop that fast in China, by nearly a billion people, by edict? He said he wanted to see more numbers. After he saw the numbers for a few more years, he said he believed it—absolutely remarkable. We have seen the same thing in Iran since the Islamic Revolution. We are seeing it in Catholic Brazil. We are seeing it virtually everywhere—extremely rapid declines in fertility, declines in family size, and rapid increases in contraceptive use.

Seventh, we have seen significant international migrations in the twentieth century, often large. Even when the migration has been relatively small, it has often been extremely significant politically, and undocumented migrants have been a major concern for many countries, especially in Europe.

Finally, the twentieth century has seen a very rapid increase in urbanization and the growth of mega-cities.

## WHERE WE ARE GOING

Now, I have only a few minutes to speak to you this morning, and you may be wondering what my main message is. Perhaps it can best be illustrated by another story, this one about an immigrant, actually a refugee, the brilliant and famous scientist Albert Einstein. As many of you know, Einstein worked at the Institute for Advanced Studies at Princeton University. One day, he was taken to the train station by his colleague, Professor von Neumann, who helped him on the train. After fifteen minutes on the train, the conductor came into the car and asked for tickets. Professor Einstein instinctively reached into his pockets looking for his ticket. He couldn't find it. He got up, took his overcoat from the

rack above, and brought it down, looking for the ticket. He became a bit concerned as the conductor began moving down the aisle toward him. He took out his suitcase and opened it up, looking for that damned ticket. He took out his socks, his ties, his shirts, and his underwear, placing them all over the corridor, blocking everything. By this time, the commotion was noticeable.

The conductor looked down the car and recognized the silhouette of the famous scientist. He quickly walked up to him and said in a very comforting voice, "Professor Einstein, please don't worry about the cost of your ticket. I am sure that Princeton University can cover the cost."

In reply, Einstein looked up and said, "My dear mister conductor, I am not so much concerned about the cost of the train ticket. My main concern is trying to figure out where I am supposed to be going."

I will come back to this. All of us on this planet Earth are on a trip together. The challenge facing us is that not only must we keep track of where we started and the significant milestones and achievements along the way, but also, and most important, we need to understand as much as possible where we are supposed to be going. I will try to indicate today a bit about where we are going.

In the United Nations Population Division, one of our major activities is producing the publication *World Population Prospects*, published every other year. For every country and area of the world, from 1950 to 2050 in five-year intervals, we produce for five-year age groups as many demographic statistics as most of you can possibly consume. There are something like 5 million separate statistics on these countries and areas. Highlights of the *2000 Revision* are available on our web site. Two volumes of data will be published near the end of the month, and an analytic report will follow later.

A second report that we have issued is *Replacement Migration: Is It a Solution to Declining and Ageing Populations?* For the journalists present today, the answer to this question is yes and no. This report was issued last year, and it has been the most contentious report in our fifty-five-year history at the United Nations. It has generated more news articles, more complaints, more discussion, and more interest than any other single report since 1946. I think we hit a nerve in Europe, maybe even the entire nervous system of Europe, with this report. We do not recommend that migrants go to Europe. Nevertheless, among the hate mail and criticisms I received was a communication from someone in France suggesting that I, as Director of the Population Division, was advocating the replacement of a Christian European population with a non-Christian, non-European population—clearly a misinterpretation.

## MIGRATION

Now can migration influence population? Of course it can. Can it be a solution to aging? No. Let me give you Korea as an example. If you

want to keep constant the total size of the Korean population, which is about 47 million today, you need immigration of about 100,000 per year. Demographically, that is not much for Korea. If you want to keep the labor force of Korea the same, you need to double this immigration to about 213,000 per year. But what if you want to keep constant the ratio of the working-age population to the population above age 65? For Korea today, this ratio is 12.6, not 5 or 4 as in the developed countries. In order to keep this ratio at 12.6, Korea would need an average of 94 million immigrants every year for the next fifty years. By 2050, the total population of Korea would be 6.2 billion people! Clearly, this is not possible. That is why we said migration as a solution to aging is not realistic.

As the title of this conference indicates, the seismic demographic developments currently under way will have profound economic consequences for the world. Rapid rates of population growth in some regions, declines in others, aging, international migration, urbanization, HIV/AIDS, epidemics, and other demographic trends are ushering in what I have referred to as the New International Population Order. This new order is profoundly influencing not only economies but also social and cultural circumstances and conditions, political influence and representation, international relations among countries and regions, and interactions among various groups within countries and states and cities. This morning I will highlight five areas in particular: size and growth, distribution, migration, urbanization, and aging.

## CURRENT DEMOGRAPHIC DEVELOPMENTS

An important aspect of the new order is population growth. In today's world of 6.1 billion people, six countries—India, China, Pakistan, Nigeria, Bangladesh, and Indonesia—account for half of the world's current population growth of 77 million per year. Moreover, the population growth of India alone in one year is equivalent to the population growth of China, Pakistan, and Nigeria combined. For another view, consider the comparison between the European Union and India. India has approximately a billion people—about two and one-half times the population of the fifteen-country European Union. For the entire year 2000, the natural population increase of the European Union was 343,000 people. India achieved this growth in the first six days of the year.

Because of low fertility rates and limits on migration, the populations of Japan and virtually all of the European countries are growing very little if at all. By mid century, the populations of thirty-nine countries are actually expected to be smaller than they are today. Italy is even projected to be smaller in 2050 than it was in 1950. Some have referred to Italy as Europe's future theme park, where people will visit and see the sights and then go back home, a sort of Disney World on a country scale. Other

examples include Japan and Germany, whose populations are expected to be 14 percent smaller, Slovenia and Hungary, which are projected to be 25 percent smaller, and Russia, Georgia, and Ukraine, which may be 28 to 40 percent smaller than they are today.

The United States is a notable contrast to Japan and Europe. It is likely to be much bigger, some 40 percent bigger, depending on the estimates, by 2050. Canada is also expected to have a larger population in 2050, about a third larger, as is Australia, with about 38 percent more people. The populations of less developed countries are also expected to continue to increase, despite the rapid declines in fertility that some have experienced. In the past fifty years, Africa's population more than tripled—from around 220 million to around 800 million. In the coming decades, even with AIDS, we expect that the population of Africa will double, reaching some 2 billion by 2050. To take one specific case, in 1950, Kenya's population was 6 million. Today, it is about 30 million, and in 2050, we expect it to be somewhere around 55 million.

The AIDS crisis is a terrible situation, and it is going from bad to worse. Every two years, we see ever higher rates of infection. An article in today's *New York Times* talks about AIDS being on the march in Eastern Europe. In Ukraine in 1995, 300 cases of HIV were reported. Today, there are 38,632. Clearly, the dimensions of the AIDS crisis are still expanding. Yet our projections still show populations continuing to grow. Even the AIDS crisis has not changed the direction of our population projections.

The redistribution of the world's population is and will be significant. In 1950, the ratio of the developing world's population to the developed world's was about two to one. Today, it is about four to one, and in 2050 it is likely to be seven to one. Consider also the example of Spain and Morocco. In 1950, Spain's population was three times larger than Morocco's. Fifty years from now, Morocco's population is going to be 60 percent greater than Spain's. Consider the Russian Federation and Pakistan. In 1950, the Russian Federation was approximately three times larger than Pakistan. In fifty years, Pakistan's population will be three times larger than the Russian Federation's. As a final example, compare Israel and the Palestinian population in Occupied Palestinian Territory. Today, the population of Israel is nearly twice the size of the Palestinian population in Occupied Palestinian Territory. By 2050, the Palestinian population in Occupied Palestinian Territory is projected to be 17 percent larger than Israel's population.

Migration trends are immensely important. At issue are not only the migration numbers, which in some cases are quite large, but also their political significance and the enormous social difficulties that confront some countries in dealing with immigration flows. We heard earlier some optimism about the European response. However, I should tell you that every time migration is an agenda item at the United Nations, it is pushed

forward two years, simply because many countries, especially the more developed, are not yet ready to deal with it at the global level.

Urbanization is another important development. It has changed the lives of so many people, and continues to do so, that we see a completely different world now and in the future than we had not long ago. Thirty-five years ago, for example, approximately two-thirds of the world's population lived in rural areas. We project that thirty-five years from now, two-thirds will be living in urban areas.

Population aging is going to be pervasive. In many countries, we are going to see one out of three people over age 65. As a result of population aging, we are going to see changes in production, consumption, marketing, and so on. Many of you are familiar with the chain store Toys'R'Us. Soon, there will probably be a chain called Old'R'Us, working with the elderly and marketing to this age group. A very important consideration is the sex ratio among the elderly. Increasingly, this ratio is in favor of women. Among those aged 60 years and older, there are 1.2 women for every man. At age 80 and over, there are nearly two women for every man, and for those above 100, usually four women for every male. This, I think, is a very big incentive for us men to live as long as we can. The ratio improves tremendously.

This imbalance in the sex ratio often leads to unusual behavior. For example, there is the story of the widow who was at a retirement center in Miami Beach. She saw a new man coming into the lobby and said to him, "Excuse me, have you been at the center before?"

The older man looked at her and said, "No, I was just let out of prison for murdering my wife some thirty years ago."

She looked at him and said, "So I can take it that you are single?"

The imbalance in the sex ratio at older ages is common knowledge and has been widely discussed. Another sex ratio that is increasingly important is at the other end of the life spectrum, at birth. Normally, about 105 males are born for every 100 females. However, with sonograms and other new technologies, couples can learn the sex of the fetus. In some populations where one gender is preferred over another, this could have a dramatic impact on the sex ratio. The effects have yet to be seen.

## TO SUMMARIZE

In closing, what do we see by the middle of the twenty-first century? First, we will be substantially larger. The world's population will be much greater in 2050 than it is today. Indeed, I stand ready to take the wager of anyone who says that we will be smaller by 2050. So far, I have not had any takers on that kind of wager. We will be larger by at least 2 or 3 billion people. Second, we will be significantly older; there is no question about that. How much older will vary by country, but in some

countries, we will see one out of three people over age 65. Third, without question, more of the world's population will be concentrated in the developing world. About 80 percent of the world's population is in developing countries now, and we should reach 90 percent by 2050. Fourth, there is also no question that we will be more urban by 2050. Fifth and finally, by mid century, we are going to see greater ethnic and cultural diversity within countries than we see today. Certainly, migration will contribute to this diversity and will raise many questions for us to discuss with regard to ethnic differences, issues of equity, and so on.

Given this likely future, what should be done? Well, there are some who say the numbers are not correct. They say that the future is uncertain. Your projections have been wrong in the past, they say, and they can be wrong in the future. The evidence is mixed or unclear, they say. The results are inconclusive and, therefore, we should ignore them. Postpone action, they say—let's have another research study, let's get a committee, let's get a national task force, let's get a balanced view of this. The result is delay. When the eventual date comes for action, a decision is often made to do nothing. Do nothing because everything is going along fine, they say. People can take care of themselves. We want them to be responsible. Don't interfere with the market. The market can do very well.

Well, what do I recommend should be done? I recommend a very different course of action. I recommend that we embrace the expected future challenges. First, we should acknowledge that for hundreds of millions of people or perhaps even billions, their markets are failing them, their governments are failing them, and the international community is failing them. These people are in urgent need of help today simply for their basic needs of food, shelter, and clothing. A second challenge confronts many developed countries. Population decline and aging will have far-reaching consequences in some developed countries, forcing governments to reconsider many existing economic, social, and political policies, including those relating to migration. These issues will be especially relevant for women, who outlive men and are usually the principal caregivers for elderly parents and grandparents.

In order to embrace these challenges, I see at least three important ingredients. First, bold vision is called for. We must anticipate. We must look for the critical trends and focus beyond the immediate to the medium and long term. People in the past who have demonstrated this longer-term vision include Winston Churchill, Franklin Delano Roosevelt, Margaret Sanger, Mahatma Gandhi, Dag Hammarskjöld, Martin Luther King, and most recently, Nelson Mandela. Second, in addition to vision, we need strong and enlightened leadership, often in short supply. Strong leadership, combined with bold vision, can perhaps address some of these seismic changes that we are undergoing. Finally, we need resources: financial resources of all sorts, sound and healthy environmen-

tal resources, and, of course, human resources, based on respect of internationally recognized human rights. All three types of resources are essential to implement needed action.

Rather than simply being passengers on a train, not knowing where the train is headed, I recommend that together we set the course of the train toward a new agenda. We must determine where we are supposed to be headed, rather than simply sitting and waiting for the train to move along. In my vision of this new agenda, the twenty-first century should be and can be a much better place, not only for a fortunate few like those of us in this room but for all the citizens of the world.