## Correspondence

**T**n our Summer issue, Bennett Zimmerman, Roberta Seid, and Michael L. Wise,  $oldsymbol{1}$  in their essay "Voodoo Demographics," argued that despite the common belief that Israel faces an imminent threat from an impending Arab demographic majority, a careful review of the data reveals that the source of much of Israel's demographic anxiety may be traced to inaccurate numbers issued by the Palestinian Authority, and accepted—if not actively promoted—by prominent Israeli academics.

Sergio DellaPergola, the esteemed demographer from the Hebrew University of Jerusalem and the Jewish People Policy Planning Institute, has written a full response to "Voodoo Demographics," which appears below, followed by a final comment by the authors of the original essay.

## TO THE EDITORS:

In their article "Voodoo Demographics" (Azure 25, Summer 2006), Bennett Zimmerman, Roberta Seid, and Michael L. Wise ask, "Do the Jews of Israel face a demographic threat?" In their words, "The answer is still a qualified yes-but the threat been greatly exaggerated.... Israel must realize that it has time, demographically speaking, to evaluate [policy] choices, and to make the right decisions."

Most of the article consists of a critique of the population data circulated by the Palestinian Central Bureau of Statistics (PCBS). The critique also extends to the alleged ineptitude and laziness (or, for that matter, sheer absence) of Israeli demographers, their misreading and misuse of data, their misunderstanding of ongoing changes in Israeli and Palestinian society, and their stubborn adherence to unreasonable demographic scenarios for the future. The authors' central message—though only partly stated in explicit terms—is that since the Israeli preoccupation with rapid Arab and Palestinian population growth lacks any foundation, there is no need for a policy initiative aimed at increasing, or at least preserving, the ratio of Jews to non-Jews in the State of Israel. Plans such as the disengagement from Gaza and northern Samaria, or the suggested future withdrawal from other, substantial parts of the West Bank, should be shelved as irrelevant. Ironically, however, as we will soon see, it is precisely the demographic consequences of the

disengagement from Gaza—an area with a large Palestinian population—that provides the authors with space on which to build their own demographic argument.

First of all, in assessing the strengths and weaknesses of "Voodoo Demographics," one is immediately struck by the fact that there is, simply, nothing new in it: Over the last two years, the authors have appeared at research institutes and popular gatherings, published op-eds and articles (in both the American and Israeli press), and have even testified in front of the Israeli Foreign and Defense Affairs and State Comptroller committees. 1 Over and over, the authors have criticized what they view as serious misconceptions affecting Israeli policymaking. This massive and evidently well funded media effort has been reinforced by a small group of Israelis, most notably Yoram Ettinger, a prolific publicist and formerly the attaché for congressional affairs to Israel's embassy in Washington, DC. While they have never explicitly declared any political agenda, in today's Middle East, the authors' affirmation that "Israel must realize that it has time... to make the right decisions" can hardly be taken as a value-blind statement.

What, then, is the purpose of this high-profile exercise in data ransacking? For starters, none of the three authors is a professional demographer: One is a noted historian, and while the other two have academic degrees, they are not primarily involved with the academic study of population. Thus when the authors advocate "a greater understanding of demography and the specific forces that drive it," it is unfortunately the very absence of such an understanding that shows up in their own writings. For demography is not only a problem, a demon, a ghost, or a "voodoo." Demography is a discipline in the realm of the social sciences. And as with any discipline, it constitutes an ever-expanding body of accumulated knowledge, theories and hypotheses, analytic tools and techniques, empirical observations usually synthesized in the form of quantitative data, and emerging policy recommendations although not everyone in the profession would agree on this last point.2 Clearly, however, it is not sufficient merely to compile data—particularly if that data are mostly from secondary sources—if one seeks to build a convincing demographic argument.

The authors' claim of the nonexistence of serious erosion in the current Jewish-Palestinian demographic balance is based on several assumptions, including that of a hugely exaggerated Palestinian base population; a drastic decline in Palestinian fertility rates; and the anticipation of large-scale Jewish immigration to Israel. The authors argue that once we have corrected for the first two, and taken the third into consideration, we are left with an overestimate of one and a half million Palestinians. They later downwardly revised their claim to one million, showing a rather uninhibited use of numbers.3

In the following, I would like to review-and rebut-the main arguments put forward by Zimmerman, Seid, and Wise. Issues at stake concern the quality of the authors' data and the credibility of their analysis; an understanding of the deeper determinants of the primary demographic processes, namely international migration and fertility; and the broader public implications of the emerging trends.

It is an inescapable fact of the social sciences that sciences that there are no "perfect" data. Important theoretical and practical insights have thus been based on estimates, which can only attempt to approximate, however roughly, the real world. Sometimes, in fact, the required data do not even exist, but, by means of the appropriate techniques, it is nonetheless possible to infer reasonable proxies. By definition, projections of current situations into the future cannot purport to describe the "real world," but only to provide a sense of the likely

implications of present circumstances: Whether, for instance, certain trends will continue according to known patterns, or whether they will evolve according to different ones.4 Yet, for all their limitations, quantitative data continue to constitute a key cognitive premise of theory building and policy planning. An important aspect of the collection, usability, and usefulness of data and estimates, therefore, is the nature of such unavoidable biases: Random vs. systematic, involuntary vs. premeditated, minor vs. huge.

The authors are extremely critical of the data circulated by the PCBS. Indeed, the Palestinian past claim of a population above 3.8 million in the West Bank and Gaza could not be accepted uncritically—which is precisely why, it should be stressed, no serious body in Israel ever subscribed to that figure. As the authors point out, the figure included East Jerusalem, which is also customarily included in Israeli population statistics; elementary precaution calls for avoiding double counts. Since PCBS population estimates reflect the first Palestinian census of 1997, any updates and projections based thereon should be carefully evaluated. In this, the authors are to be commended for submitting these figures to scrutiny.

Before I critique the authors' data, it is appropriate to say a word about the PCBS worldview. In light

of its dependence on the Palestinian Authority in Ramallah, it seems fair to ask: Is the PCBS primarily a data collection agency, or an instrument of narrow political propaganda? One answer comes from the founder and first director of the PCBS, Dr. Hasan Abu-Libdeh, who explains his institution's ideals thusly: "I am convinced that the Israelis [Israel's Central Bureau of Statistics are the first source... from which to learn. The Israelis were very successful in building their country and their statistical apparatus; we would be fools not to draw from their experience."5

We have here a clear admission of the Israel Central Bureau of Statistics' (ICBS) well proven record of independence and accountability. Rather than the words of a narrow-minded propagandist, these sound like the reasonable propositions of a professional trying to do his job in the face of the economic, political, and institutional constraints around him. Indeed, the PCBS has accepted regular technical assistance from the ICBS, and the 1997 Palestinian census was carried out with technical assistance from Norwegian experts.

Having thus established that PCBS data are not mere fabrications, but are in fact worth careful consideration, we must nonetheless recognize many of their inherent weaknesses. And in fact, this is precisely what I did in

my independent assessment of the demographic trends and alternative population scenarios in Israel and the Palestinian territories, based on ICBS, PCBS, and other complementary information, and corroborated by hypotheses grounded on historical and comparative evidence. This study, easily available since 2003, not only provided an analysis of current and prospective demographic trends in historical perspective, but also utilized a wide sampling of material from the international literature on population that is noticeably absent from the authors' article.6

For instance, one bone of contention for the authors is the alleged over-enumeration of Palestinians in the 1997 census: They complain that non-residents with ID cards who lived abroad for more than one year were also included. However, only very limited information (such as their gender) was collected for these persons, and they were not included in the final totals and detailed census tabulations.

In my own work—contrary to the authors' allegations—we only marginally used PCBS data and assumptions. We did *not* use the population size indicated by the 1997 Palestinian census, although we did need to apply census-derived distributions by age. Rather, our base population for the West Bank and Gaza was derived from the ICBS, which was in charge of

statistical documentation for the territories up until the Oslo agreements. When Israel stopped collecting data for these areas, we updated the baseline according to then-prevailing rates of growth, inclusive of international migration and the balance of birth and death rates. During the 1990s, Palestinian growth rates, and especially the balances of births and deaths, reached peak levels—above 4 and 5 percent a year, probably unmatched worldwide. These high rates had been seriously underestimated by the ICBS in an earlier set of population projections, which therefore turned out expected population figures significantly below the eventual real ones.7 It should be added that, given the poor quality of extant vital records, the ICBS had assessed the population of the West Bank and Gaza using model death rates that may have been too high, again leading to an underestimate of the real population size there.8 Poor quality of vital records in the territories is a well known problem, one that has also plagued Arab villages in Israel.9

Imitating Israeli practices, the PCBS established a population register in which demographic data were updated independently of the census and of current vital statistics. <sup>10</sup> Facing a choice between all these Palestinian sources—the PCBS census, the PCBS population register, and the Palestinian

Ministry of Health (PMOH) vital records, each of which provided data or estimates on the number of Palestinian births—the authors resolutely preferred the PMOH's lower figures. After all, the authors likely reasoned, these lower figures were compatible with the lower population growth rates. Yet on neutral logical ground, it is not clear why the authors should consider one Palestinian source legitimate and another one not. The only serious way to verify the quality of data would be to undertake an independent, post-census sample survey of the Palestinian population using a multiplicity of techniques aimed at reconstructing the frequency of vital events, or else to proceed with some other independent field assessment of the accuracy of vital-records reporting. The authors adopted neither path, preferring instead to focus on consistency checks between Palestinian population data and other statistical sources.

For example, in one instance, the authors checked the correspondence between the number of births reported by the PMOH and the number of elementary-school pupils registered with the Palestinian Ministry of Education (PMOE). The authors indeed found a good correspondence, but failed to ask whether school dropouts, or even a lack of school enrollment, might be conceivable in Palestinian society. In fact, I would argue that

the higher the *agreement* between the number of births and the number of actual pupils, the more *suspect* is the birth data of under-reporting.

A second check by the authors concerns the consistency between population data and the Palestinian Electoral Registrar. Here again, the number of registered voters looked substantially lower than the PCBS population estimates for the relevant ages. But the authors do not appear to think that, registration being voluntary, many Palestinians might not have done so. On this, we may look to an interesting testimony from Mustafa Khawaja, one of the chief statisticians at the PCBS in Ramallah:

The projected population in the Palestinian territory as of mid-2005 was 3.8 million. The Population Register in the Palestinian territories as of August 2005 was 3.6 million. The percentage of population age 18 years and above amounted to 47.3 percent of the total Palestinian population. The registered voters as of November 4, 2005 amounted to 1,340,673, of whom 811,198 were in the West Bank and 529,475 in the Gaza Strip [Source: Central Election Commission—Palestine]. The percentage of registered voters was about 72 percent of eligible voters. The number of eligible voters who were not registered amounted to about 0.5 million.... For the 0.5 million people who are not registered, the reason

is basically because the registration is voluntary.... Maybe they are not interested, for political and ideological reasons... [or else for] reasons like the inability to move [from place to place], especially from places behind the "wall"... but there is no study of the reasons for why they didn't register. Hence, as a result it is clear that no relation [exists] between the number of registered voters and the Population Register, nor with the projected Palestinian population. <sup>11</sup>

True, no matter how "unilateral" the study, Khawaja's explanation indeed focuses on "Occupationinduced" difficulties as a cause for the under-registration of Palestinian voters. But other, more general causes for non-registration might as easily have been mentioned, such as old age, poor health, low education levels, or simply the lack of recognition of the importance of registration as part of the political process—phenomena well known even in advanced democracies such as the United States. Thus, while the authors' point that the quality of the PCBS data could be better is well taken, their efforts at validation—by means of either school enrollment statistics or voter registration—cannot be considered conclusive proof of inflated population estimates.

Others, however, *have* undertaken a serious effort at data comparison

across different Palestinian sources and through the use of more sophisticated statistical evaluation tools.12 Their conclusions confirm the basic soundness of the PCBS 1997 census and the satisfactory consistency between census data and vital statistics in the preceding years. Apart from minor corrections, due to census under-reporting and other distortions such as age misreporting (typical of less developed societies), the total population in the West Bank and Gaza (excluding East Jerusalem) was just above 2.6 million in 1997—a figure consistent with the Palestinian report regarding the population actually counted. 13

Incidentally, having re-evaluated all available evidence, the baseline of our own independent estimates for 1997—which, as noted, did not use the Palestinian census, but instead relied on Israeli sources-called for a slight downward revision of about 70,000. No serious scholar should feel embarrassed if, in light of new research, minor changes need to be adopted with regard to previous evaluations. Far more significant is the fact that, since 1997, the population has continued to grow steadily in the Palestinian territories and in Israel, and both the amount of that growth and its consequences call for further evaluation.

The State of Israel has maintained a solid Jewish majority since 1948. In the territory between the Mediterranean Sea and the Jordan River, a Jewish majority emerged at the beginning of the 1950s, following the 1948-1949 Palestinian exodus and waves of mass Jewish immigration through 1951. The determinants and consequences of population change should now be re-assessed to verify the likelihood of a Jewish majority over the long term. To do so, we must first turn to the role of international migration and aliya in Israeli population growth.

In the past, aliya—or, rather, the balance between Jewish immigration and emigration—played a fundamental role in boosting population size. Israel's Jewish majority (excluding the territories) was 82.1 percent in 1948; grew to 85.8 percent in 1967; and diminished in 2005 to 76 percent, excluding non-Jewish immigrants, and 80.3 percent including non-Jewish immigrants under the Law of Return.<sup>14</sup> This decline in Israel's Jewish majority occurred despite massive immigration from Former Soviet Union (FSU). Therefore, the latent assumption by the authors and others<sup>15</sup> that millions of new immigrants will continue to arrive, as they did after the breakup

of the FSU, needs verification. Where will the next millions of new Jewish immigrants come from?

Zimmerman, Seid, and Wise go out of their way to point to past failures in predicting significant increases in *aliya*. They even quote me in a recent *Hadassah Magazine* interview, in which I stated that "very few forecasters saw the influx of one million Russian Jews even a few years before it started to happen in the 1990s." Yet a fairer (and more complete) quotation from my writings of the late 1980s might have been

This finding also illuminates aliya trends from the Soviet Union (which, of course, forbids or severely regulates free migration).... An analysis of domestic and international political conditions likely to foment a dramatic change of Soviet emigration policies is beyond the scope of this article.... Circles that have devoted themselves to the cause of Soviet Jewry often estimate the current aliya potential from that country at some 400,000 persons. This figure represents about 25 percent of the total number of Iews in the Soviet Union.... Furthermore the institutional systems competing with the Zionist movement in aiding and directing Jewish emigration from countries of distress are today operating more vigorously than they did years ago. The logical conclusion is that in the event of large-scale Jewish emigration from the USSR, only a fraction will turn to Israel, as, indeed, the experience of the past few years has already shown. 17

It is unfortunate that the authors neglected to provide their readers with the full context for that quotation, available in the same Hadassah Magazine interview. In fact, the sentence preceding the above-mentioned quotation read, "Of course, any dramatic upheavals in the West might change conditions." The unequivocal meaning of this sentence was that analysts in the late 1980s did not fail to predict the incoming millions of new immigrants. Instead, what they failed to predict was the collapse of the Soviet Union. The question now becomes one of the ability to predict the likelihood of such upheavals in Western nations.

As a result of steady migration to Israel over the past decades, and more recently due to the impact of assimilation and aging, the Jewish diaspora has steadily diminished in size.<sup>18</sup> The FSU's large Jewish population reservoir is now largely spent. As I have clearly demonstrated elsewhere although the authors fail to mention it—there is a consistent relationship between a country's standard of living and the propensity of its Jews to leave. 19 Similar rules govern mobility propensities across different regions within the same countries. The good news in this regard is that over 90 percent of world Jewry currently lives in

the most developed countries, where it enjoys economic opportunity and civil rights. The bad news is that immigration propensities from those countries are very low. With the possible exception of Latin America and the former Soviet Union, the vast majority of today's Jews outside of Israel live in relatively calm, democratic countries whose average standard of living is higher than that of Israel. Clearly, then, under the present economic and political circumstances, large-scale immigration from Western countries is unlikely.

True, there have been many newspaper accounts of increased aliya from the United States of late, thanks largely to organizations like Nefesh B'Nefesh: there has also been much written about immigration from France, driven by the resurgence of anti-Semitism and pressure from Islamic fundamentalists there. And some increase in Jewish immigration has indeed occurred, but very marginally. The statistics so far do not yet point to a conclusive new trend. When discussing future scenarios, the authors postulate an immigration level (they presumably mean a netmigration balance) of 20,000 a year. They should be sure they can deliver the goods.

In 2005, Israel's total international net-migration balance (the difference between immigrants and emigrants) was 16,300.20 This total broke down as follows: 7,200 Jewish immigrants (3,100 under the Law of Return, and 4,100 returning Israelis); 7,400 non-Jewish immigrants related to Jewish households (4,400 under the Law of Return, and 3,000 under familyreunion provisions); and 1,700 Arab immigrants (mostly Muslims under family-reunion provisions). In other words, what we have here is a continuing trickle of immigration, mostly composed of non-Jews. This is not a scenario bound to affect Jewish population growth in any notable way, or certainly the Jewish-Arab population balance.

In the context of these recent data. the vexed question of the 300,000 non-Jewish immigrants and children of immigrants who came to Israel under the Law of Return cannot simply be reduced to the sociological truth that they are not Palestinians, either.<sup>21</sup> Much needs to be done by all the relevant institutions, starting with the Israeli Rabbinate and continuing on down to the Knesset and Israeli Courts, to help these immigrants develop a full sense of belonging and gain full access to civil rights, such as the right to marry in Israel. The 1,900 conversions to Judaism that were performed in Israel in 2005 are a pale response to the magnitude of the need.<sup>22</sup> Nor can we ignore the fact that over 180,000 foreign workers are not included in either our or the authors' population projections. While neither Jews nor Palestinians although some of them are Muslims—these people, too, somehow affect the cultural makeup and character of Israeli society, and thus they cannot be ignored altogether.

On the Palestinian side, not only during the 1970s but also during the 1960s—that is, long before the Israelis entered the territories at all—there was a definite negative-migration balance from the territories to other countries, including Jordan and the countries of the Gulf, where large communities of Palestinians were formed. This was a very significant process in slowing down the Palestinian population growth. But, after the Gulf War, quite a few Palestinians re-entered the territories, and currently opportunities for leaving have diminished significantly.<sup>23</sup> Many of those who left continue to maintain a home, or even part of their nuclear families, west of the Jordan, and are no more than temporary absentees who continue to commute. By the same token, many young Israelis who are currently touring in distant and exotic lands such as Nepal, India, Peru, or Ecuador, and others who spend most of the year abroad but return for a few days out of the year, are customarily included in Israel's accountancy of resident population.

The quality of unpublished data on migration out of the territories is quite poor. Those data-based on Israel Border Police records—are collected for purposes other than demographic research, and thus need to be crosschecked with other sources. The data reported by the authors showing an identical number of Palestinian men and women crossing the border into third countries are obviously defective. Yet, even if we were to assume that the authors are correct in their rather rough estimates of a continuing negative-migration balance among the Palestinians, its overall impact is only about 100,000 individuals. This is not a figure that will drastically alter the ongoing demographic process.

Another problem regards the notion that since 1993, some 150,000 Palestinians have legally moved to Israel, thus altering Israel's demographic balance and again providing a large amount of double population accountancy.<sup>24</sup> If one looks at ICBS data, however, there is no trace of this. According to ICBS publications, about 20,000 Muslims have been statistically incorporated into the Israeli population since the early 1990s.<sup>25</sup> Israel's Muslim population grew mostly due to the difference between high birth and low death rates.

On the matter of Palestinian family re-unification in Israel, there is indeed

an ongoing disagreement between two official Israeli authorities, the ICBS and the Population Registrar at the Interior Ministry. Clearly, it is the former that establishes the more authoritative population estimates, while the latter's are notoriously plagued by hundreds of thousands of inaccuracies, due largely to late or missed reporting of personal changes. But even if 150,000 Palestinians had actually transferred into the Green Line, they are still in the region—that is, merely in Afula, rather than in Jenin. Such internal movements do not affect the overall demographic balance between the Mediterranean and the Iordan.

S o let us turn to the major engine of population growth in Israel and Palestine: Fertility and the birth rate. In 2005, 105,112 births and 35,043 deaths of Jews and non-Jewish relatives produced a net enlarged Jewish population increase of 70,069 persons. Importantly, this is the only source of growth in the entire Jewish population worldwide. In Israel in 2005, 38,801 births and 3,844 deaths of Arabs represented, respectively, 27 percent of total births and 10 percent of total deaths, and generated a natural increase of 34,957 persons. As a consequence, out of Israel's total natural increase of 105,026, 66.7 percent was Jewish (enlarged to include

non-Jewish relatives), and 33.3 percent was Arab—as against the Arabs' approximately 20 percent share of the total population (see below). <sup>26</sup>

A natural increase of merely 35,000 persons in the territories added to the natural increase of Israeli Arabs (35,000) would suffice to equalize the Jewish (enlarged) natural increase (70,000). This would correspond to a yearly growth of 1.5 percent if the total number of Palestinians in the territories were 2.4 million, and 1 percent if it were 3.5 million (see below). However, the actual vearly rate of natural increase in the territories likely stands at or around 3 percent, thus generating absolute population increases twice or three times higher than the virtual figure of 35,000—probably closer to 100,000. Therefore, it can easily be seen that a striking majority of the annual overall population increase between the Mediterranean and the Iordan comes from Arabs and/or Palestinians.

Paradoxically, on account of the Israeli presence in the territories, infant mortality there declined dramatically, and life expectancy rose to a level comparable to some European countries, and definitely one much higher than in most Arab countries and even Russia. Proximity and access to the well developed Israeli public-health system enhanced the Palestinian rate of population increase.

The striking differentials in the incidence of vital events obviously reflect the different age compositions of the main population groups—hence the different likelihood of vital events at each stage of life among Jews and Palestinians. Lack of attention to this fundamental facet of demography is perhaps the most serious flaw in "Voodoo Demographics." Because the birth rate and the death rate depend heavily on age compositions that may change over time and reflect previous demographic history (namely migration waves), yearly fluctuations in the frequency of such events provide no conclusive proof of underlying trends. Therefore, a more sound measure of birth frequency in a given population is the so-called Total Fertility Rate (TFR). TFRs compute the total number of children that would be born to a woman on the average if the age-specific birth patterns of a given year remained constant. Since patterns are not constant and there are actual upward and downward shifts, it is the trend that emerges from several successive TFRs that can provide a better sense of ongoing demographic transformations.

Regarding Israel's Jewish population, there has been extraordinary stability in fertility rates. Unlike in other advanced societies in Europe and to some extent also in North America, fertility rates did not go down beginning in the 1970s. Rather, since the second half of the 1980s, Israel's Jewish fertility rate has been stable overall through minor fluctuations around 2.6-2.7 children. This is a very high level indeed, considering that a Catholic country like Italy has a TFR of 1.2, Spain and Greece the same, and Russia even less.<sup>27</sup> The authors' affirmation that fertility "has been steadily rising in the Jewish sector" is unsupported by facts. Yet fertility resilience is nonetheless unique and seems to be explained by the peculiar social and cultural framework of Jewish society more than by any economic factors. Also, inclusive in this fairly high average are sub-groups with higher or lower fertility levels. Overall, significant stability also characterizes norms about ideal family size across the Jewish sector in Israel.<sup>28</sup>

By contrast, the fertility rate of Israeli Christians, who are Arab ethnics, has indeed diminished to a level somewhat lower than that of the Jews, while the Druze fertility rate has declined from a once-high plateau maintained up until the 1970s. It, too, has now reached the level of the Israeli Jewish population.<sup>29</sup>

But the authors' assertion that "the Israel Arab [fertility] rate has dropped... echoing the more dramatic drops reported throughout the Middle East" is only half true.<sup>30</sup> The

fertility rates of Israeli Arabs peaked in the 1960s at about ten children on average, then diminished to 4.5 by 1985 (one year before the first Intifada), and then remained more or less constant for the subsequent 20 years, notwithstanding the very significant process of modernization that Palestinian society underwent, as well as the improved education of Muslim women living in Israel. In 2005, Muslim fertility in Israel declined from 4.4 to 4.0, a definite symptom of change and, perhaps for the first time, a sign of the beginning of convergence into the Israeli demographic mainstream. Nonetheless, Israeli Muslims continue to display significantly higher fertility rates than Arabs in many neighboring countries. In this, Palestinians in the territories seem more connected to Muslims in Israel than to Muslims in Iran or in Morocco.

Zimmerman, Seid, and Wise have repeatedly stated that Palestinian fertility rates are lower than assumed. As already noted, they relied on birth records provided by the PMOH, but they cannot have it both ways. When asked by professional demographers to run their data through demographic software, the authors were forced to accept the fact that a given number of births must reflect the average fertility among women in the same population. To comply with the lower birth data they chose in their earlier reports,

the authors had to fit a Palestinian TFR of about 3.8 children. This is not supported by any evidence and is, in any case, quite unrealistic. The TFR is a ratio between the number of births and the number of women, corrected for age distribution biases. To compute it, one needs numbers of births by age of mother and total numbers of women at each age. The PMOH may have birth records, but information on the total number of women at the respective ages can only come from the PCBS. If it is true that the population was overestimated and the birth records were right, the resulting TFRs were way too low. If the TFR was too low, the number of births projected for subsequent years using that same TFR was consistently wrong, too—a typical circular mistake. If, on the other hand, the population was not overestimated, then the lower TFRs would actually be correct, but the whole argument about population size would flounder.

Nonetheless, relying on their own low TFRs, the authors are on record as having made a very odd reference to demographic transition theory and a quite extravagant mention of the Swedish model as being applicable in Gaza.31 They now seem to have retreated from their sanguine claims about demographic modernization in the territories, and in their more recent projections they significantly *raised* their estimates of current Palestinian fertility rates.<sup>32</sup>

The most recent Palestinian fertility estimates range between 5.8 and 6.6 in Gaza, and between 4.1 and 5.1 in the West Bank.<sup>33</sup> These data are based on survey techniques that overcome the usual shortcomings of vital records. Validation can be obtained through internal consistency checks of reported events, population size, and age composition. Such high values significantly affect projected populations through the effects of a young-age composition—a fact all but ignored in the authors' writings. Incidentally, in a piece published on the Arutz Sheva website, the authors refer to the "theory" of demographic momentum.34 But demographic momentum is not a theory; it is a fact. Momentum synthesizes the intensity of vital processes compounded by a population's age composition. Clearly, the likelihood of a birth or a death in a given population is affected by the share of young or elderly adults in that population. Changes in the age-specific intensity of such demographic events will eventually affect their overall occurrence. But in the medium term, the effects of change are heavily mediated by age composition. We may use the example of a conductor suddenly slamming on the brakes of a train running at full speed. The train's momentum will cause it to

stop several hundred meters *ahead* of the breaking point, with quite significant consequences along the way. Demographic momentum reflecting a young-age composition substantially postpones the effects of any possible decrease in current Palestinian fertility levels on the number of future newborns.

Dopulation size and growth rates cannot be determined without separate reference to each of the components of growth (mortality, fertility, migration). Therefore, let us return to the fundamentals of the current situation. The 5,313,800 Jews who, according to the ICBS, lived in Israel at the end of 2005 represented 76 percent of a total population of 6,990,700 in the State of Israel, including East Jerusalem, the Golan Heights, and the Jewish population in the West Bank and Gaza. This figure relates to the core Jewish population concept—namely, the people defined as Jewish according to the criteria of Israel's Ministry of the Interior, which follows the ruling of Israel's Rabbinate. In addition, 299,800 non-Jewish members of Jewish households (mostly not classified by religion) constituted another 4.3 percent of Israel's population. Thus, the enlarged Jewish population of 5,613,600 represented 80.3 percent of Israel's

population. The 1.377 million Israeli Muslims, Christians, Druze, and others constituted 19.7 percent of the total. Of the total core Jewish population, 5,073,800 were within the pre-1967 borders, including East Jerusalem and the Golan Heights, where they formed 75.2 percent of the total legally permanent population, and about 240,000 were in the West Bank, where they formed over 10 percent of the total population.

Regarding the Palestinian population in the West Bank and Gaza, the PCBS, after a downward revision of about 200,000 to account for expected immigration that did not materialize, estimated the population in the Palestinian territories at 3,888,292 by July 1, 2006.35 Our own independent assessment, after allocating 240,000 East Jerusalem Arabs to the Israeli side, taking into account estimated negative-migration balance of 100,000 Palestinians and the related natural increase, and reexamining population bases and growth rates through the 1990s, among other corrections, was 3.33 million at the end of 2005.36 Thus at the end of 2005, we placed the total legal population resident in Israel and the territories at 10,320,700. Core Jews comprised 51.5 percent, and enlarged Jews 54.4 percent of the total. On the other hand, with the further addition of about 180,000

non-Jewish foreign workers residing in Israel, core and enlarged Jews represented, respectively, 50.6 percent and 53.5 percent of a total population resident in Israel and the territories estimated at 10,500,700 at the end of 2005.37 These estimates are affected significantly by the assessment of the total Palestinian population of the West Bank and Gaza. The faster pace of population growth among Arabs resulted in annual increases well above 3 percent in the West Bank and Gaza, and of 2.7 percent among Arabs as against 1.5 percent among Jews in Israel in 2005.38 No doubt, the extant Jewish majority in the whole territory between the Mediterranean Sea and the Jordan River, and within the State of Israel itself, was exposed to continuous attrition.

In our population projections for the years 2000-2050,39 East Jerusalem was included on the Israeli side. Estimates of future births and deaths reflected assumptions about both current and future fertility and life-expectancy levels. We developed three scenarios: A higher one, assuming an unrestrained continuation of current Israeli Arab and Palestinian high fertility; a lower one, assuming instant convergence of Arabs to Jewish fertility standards—which naturally established an excessively low result, strictly for the sake of comparison; and a medium one, assuming

gradual convergence of Arab to Jewish fertility levels within a time span of two generations. Mortality was assumed to decrease across all population groups, although we preserved a moderate "survivorship edge" on the Jewish side. International migration was assumed to play a minor role, as indeed observed during the last years.

According to our medium projection, which, as noted, assumed a decline of Arab fertility and a migration balance of Palestinians equal to zero, Jews by the enlarged definition—that is, inclusive of non-Jewish household members—would, by 2010, constitute about 51 percent of the total population in the whole territory between the Mediterranean Sea and the Jordan River, shrinking to 47 percent by 2020. 40 The respective shares within a smaller Israel (without the territories) would be 79 percent in 2010, and 77 percent in 2020. As already noted, net Palestinian migration since 1995, the natural increase pertaining to those migrants, and other minor adjustments should be factored into the projections, which would raise only modestly the expected Jewish population shares. Keeping in mind these corrections, the actual demographic scene continues to evolve substantially in accordance with our medium scenario.

After the disengagement from Gaza, the political status of the territories has partially changed and the demographic balance over the whole area between the Mediterranean Sea and the Jordan River has changed accordingly. Based on our original estimates, the Jewish majority, including non-Jewish immigrants but excluding foreign workers, in the entire area without Gaza was 63 percent in 2000, and looked to decline to 59 percent by 2010 and 56 percent in 2020. According to the authors, thanks to the withdrawal from Gaza, the Jewish majority now stands at 67 percent, and will be 63 percent by 2025.41 It is intriguing how the authors' high-profile polemics, aimed at exposing—to use their own term—a most dramatic conceptual and political mishandling, boil down to a difference of only about 4 to 7 percentage points.

In spite of our preceding claims, it would be interesting, for the sake of argument, to explore what the demographic situation would be were the authors' claims of a significant inflation of the number of Palestinians proven correct. Against the background of the previous data, we can test two alternatives for the number of Palestinians in the territories, excluding East Jerusalem:

My independent claim of about 3.3 million to 3.4 million (which is still quite lower than the figure provided by the PCBS); or the authors' claim of 2.49 million. The question is: To what extent would subtracting one million Palestinians from the ten and a half million inhabitants of the region affect the overall demographic balance?

As we saw, there are different ways of calculating the percentage of Jews of all the inhabitants between the Mediterranean and the Iordan: For example, with or without including the non-Jewish immigrants covered by the Law of Return, or with or without including the other non-Jewish foreign workers in the total population. Let us use a middle alternative, which includes non-Jewish immigrants related to Jewish households in the numerator of the calculation, and the foreign workers in the denominator.

Of course, the smaller the number of Palestinians, the higher the percentage of Jews. But the trend that shows a narrowing of the Jewish majority until, by 2020, it is eventually lost is common to all the scenarios. For even if the number of Palestinians in the territories is significantly reduced by about one-third, and even if their fertility rate declines to the same level as that of the Jewish public, the demographic momentum stemming

from past high birth rates will keep them growing. A young population mix ensures high birth rates in the coming years.

Therefore, reducing by one million the number of Palestinians is tantamount to raising the percentage of Jews by 5-6 percent of the anticipated total over the whole territory between the Mediterranean Sea and the Jordan River. Yes, one million Palestinians equal a mere 5-6 percent. These are the draconian rules of numerator and denominator when the entire population at stake between the Mediterranean Sea and the Iordan River is well above ten million persons (or, for the sake of argument, well above nine million). Therefore, if the demographic tie doesn't arrive in 2010, it will come in 2020. Put differently, we can expect the quantitative ratio that existed between Jews and Palestinians with Gaza (i.e., before the disengagement) to prevail once again about twenty years later without Gaza. In demographic terms, then, leaving Gaza has provided Israel with, at best, twenty years of oxygen.

fter so much struggling with **1** numbers, however, the key questions remain the same—and remain to be asked by Zimmerman, Seid, and Wise. These concern the implications of demography for Israeli society in the long term. These are not questions to be asked by demographers as such, but rather by any and all concerned citizens, for whom the tools of demography may be helpful in substantiating an informed opinion. For clearly, the fundamental issue in this debate is not the specific percentage point of the extant Jewish majority, or the specific date at which Jews will or will not lose their current majority over the entire territory between the Mediterranean Sea and the Jordan River (or even within the Green Line). Neither a difference of 1 or 5 percent, nor advancing or deferring the date of the demographic "tie" by one or five years, is the main issue at stake.

Rather, the real issue is what kind of civil society we mean to build in the State of Israel. Do we want one that has a clearly recognizable Jewish identity of which it is proud, or a multi-national conglomerate inherently plagued by ethnic tensions, such as Lebanon, Cyprus, Burundi, or the former Yugoslavia? Do we want a society that respects the fundamental premises of democratic governance and popular representation, or one that rests on the domination of one segment of society over another, such as the former South Africa or, for that matter, most contemporary Islamic countries? A society whose

human capital can express its huge potential not only through mending its many outstanding social gaps but also through cultural creativity, or one that is mortgaged forever to regional conflict? A society that functions as a high-profile spiritual center and symbolic core to world Jewry, or one confined to a marginal role as one of the least-secure spots worldwide for the unfolding of Jewish life? The answers to these and other questions unavoidably pass through the definition of Israel's physical boundaries, and the choice of which populations are willingly part of it and which ones are not.

Zimmerman, Seid, and Wise should be credited for having helped to enhance the public dimension of the debate on the matter of Israel's population and that of the Palestinian territories. Hopefully, some of their concerns with data quality will stimulate better data collection and research in the future. But at this stage, the main concern relates to the nature of Israeli society, which, while ensuring the security of its inhabitants, must at the same time consolidate its historical and civil identity. Through their fascination with demography as a "voodoo" rather than a discipline, the authors have largely neglected the crucial dimension of the quality of life in Israel as a Jewish, democratic, and attractive society.

All of these prerogatives cannot be preserved in the long run under the present and foreseeable demographic trends unless strategic decisions are taken. Sensitive and brave policies need to be developed in multiple directions, including new ideas on immigration and absorption; support for the family and new generations; rules for the incorporation into the Israeli Jewish mainstream of the many non-Jews who arrived under the cover of the Law of Return;

modes of enhancing Israel's Jewish cultural identity; and the definition of the State of Israel's population, territory, and boundaries.

Sergio DellaPergola is the Shlomo Argov Chair in Israel-Diaspora Relations and director of the Division of Jewish Democracy and Statistics at the Avraham Harman Institute of Contemporary Jewry of the Hebrew University of Jerusalem and a senior fellow at the Jewish People Policy Planning Institute.

Bennett Zimmerman, Roberta Seid, and Michael L. Wise respond:

Unfortunately, Professor Della-Pergola responded to our article by repeating the obfuscations and errors in his methodology, numbers, and forecasts, which invariably produce his gloomy scenarios. Most damaging is that, despite all the numbers he offers, he still fails to present one crucial model (including startingpopulation figures, annual births, migration, and deaths) that we have repeatedly requested—his own. If, as he claims, he uses mid-1990s ICBS numbers for his population base, he would have to raise Palestinian birth and fertility rates, already high, to astronomical levels of 6.5 percent for the 1996 ICBS number of 2.1 million to grow to his own 2005 number of 3.5 million, or nearly the same high levels to arrive at the 3.3 million he offers in this Azure response.

But DellaPergola is caught in a bind. He cannot lower his current Palestinian population estimates too much, because he would then have to admit that the dire forecast he has repeated since 2003 is not only wrong, but also mathematically impossible given normal growth rates and his own admission that Palestinians have been emigrating in recent years.

DellaPergola's forecast, presented in the *American Jewish Year Book* (2003), predicts that Jews will drop from 63 percent of the population in the West Bank and Israel in 2000 to 59 percent in 2010, and 56 percent in 2020. In this forecast, DellaPergola uses Israel's official population figures for Israeli Jews and Israeli Arabs, and claims that West Bank Arabs numbered 1.85 million in 2000, a figure derived, according to his footnote, from the PCBS and almost identical to the PCBS number.

Yet this past summer, DellaPergola contracted his own forecast. He told Hadassah Magazine that after the Gaza disengagement, the percentage of Jews in areas controlled by Israel "has risen to 63 percent." Given DellaPergola's acceptance of current ICBS numbers of 5.613 million Israeli Jews and 1.377 million Israeli Arabs, if Jews form 63 percent of the population in Israel and the West Bank, then the West Bank population is 1.9 million today. Perhaps DellaPergola doesn't report today's West Bank population anywhere in his Azure response because it would reveal that the population has hardly grown since 2000, when it was 1.85 million, and that the ratio of Jews to Israeli and West Bank Arabs has not declined since 2000, as he had predicted, but rather stayed at 63 percent. Either his beginning population figure was too high, his growth rates too big, or both.

Azure readers also won't discover that DellaPergola's estimate of the

population in the territories has varied from the 3.5 million he claimed in 2005 to the 3.1 million (1.2 million in Gaza and 1.9 million in the West Bank) derived from his Hadassah Magazine interview earlier this year, to the 3.3 million he advances in this response. Nor will readers see that the forecast he presents in his 2003 article and cites in Azure is deceptive. He claims he developed his own population forecasts to 2050, with one scenario including "instant" drops in Arab fertility, but he also revealed in his 2003 article that he didn't actually include and calculate the effect of such "instant" drops until after 2020. Instead, for the 2000 to 2020 period, his "figures for Israel are based on Central Bureau of Statistics (ICBS) projections until 2020." In short, he did not include a scenario for instant drops despite his claim to the contrary.<sup>2</sup>

Furthermore, DellaPergola's rigid use of the ICBS forecast further discredits his conclusion. As we pointed out at the Herzliya Conference in 2006, the ICBS underestimated Jewish demographic growth and significantly overestimated Israeli Arab growth in the six consecutive years between 2000 and 2005. The ICBS admitted its errors on September 19, 2006, when it announced that new data showed that its forecast was flawed and would have to be

revised.<sup>3</sup> When DellaPergola simply plugs in outdated ICBS fertility and immigration assumptions for the 2000 to 2020 period, he inevitably produces a gloomy scenario for the Jewish sector.

DellaPergola can justify his claims only by convincing people that the PCBS did not include a significant overseas population, and that high natural Arab growth rates are continuing unabated, *and* by ignoring the rising fertility and net *aliya* in the Jewish sector and continuing West Bank emigration. He will be off the hook only if an "unpredictable" demographic event actually occurs and if no one forces him to provide a model proving all his intermediate claims along the way.

Instead of addressing these inconsistencies in his own work, DellaPergola attacks our findings because he can defend his forecast only by making *ad hominem* attacks about our credentials, fantasizing about our purported politics and funding, and mischaracterizing our arguments, data, and sources, thereby creating straw men to attack.

DellaPergola claims that we lowered our estimate of the Palestinian population gap from one and a half million to one million people. This charge purposely confuses the titles of our releases with the conclusions in them. Our January 2005 study indeed was titled "The 1.5 Million Person Gap" because our research had found gaps that ranged from 600,000 to 1.5 million between the PCBS population estimates and Israeli and especially Palestinian agency reports for actual demographic activity from 1997-2004. We set up hypothetical scenarios to determine which figure was correct and systematically continued research on each item, including repeated requests to DellaPergola to provide contrary evidence, all the while gathering more hard evidence and further corroborations that led to a final determination of the 1.34 million figure. Our 2006 BESA publication was called "The Million Person Gap" because the publisher preferred that title, but that study, too, documented a 2004 gap of 1.34 million people.4

Our findings were robust. Table 5.3 in our publication "The Million Person Gap: The Arab Population in the West Bank and Gaza" matches data from an ICBS population pyramid with birth data from the PMOH. It yields the same high but declining fertility rates that were reported in the PCBS "Household Survey 2004." In demography that is a home run, and led one of the United States' foremost demographers, Nicholas Ebersdadt, to tell the sixth Herzliya Conference that our research had "found Israeli demographers asleep at the switch."

One of the major findings of our research was that the Palestinians' "highest in the world" natural growth rates were the result of assumptions of mass immigration. No one in Israel had ever identified this hidden item. The acceleration in the Palestinian population was not, in fact, from actual demographic momentum or high births, but instead was from extra immigration that had been added to a Microsoft Excel spreadsheet even while Palestinians were emigrating. True, the PCBS reduced its immigration assumptions to zero from 2000 to 2015, after our study came out, and reduced its 2006 population figure by 300,000 and its 2015 forecast by 750,000. However, the PCBS has not yet removed the immigration assumptions built into its 1997-2000 figures, subtracted the births built on those assumptions (that never happened), or subtracted the Arabs who emigrated from the territories. Della-Pergola has acknowledged the reality of emigration, but if he is using PCBS numbers, his beginning base population is wrong.

One of DellaPergola's major contentions is that it is wrong to state that the 1997 PCBS census was inflated by the inclusion of non-residents living elsewhere. But the evidence that it was is overwhelming; indeed, the PCBS explicitly stated that it had amended the customary definition of

a de facto census to mean something else. The normal definition is a census "based on the enumeration of individuals according to their existence in the area of enumeration at census moment."<sup>5</sup>

But the PCBS instead created an idiosyncratic definition of de facto. In its Census Standards, it reported that "For the first ever Palestinian census, the de facto approach was adopted with some exceptions."6 The census count then went on to include certain categories. The "Palestinians Abroad" category, for example, includes "Palestinians who live abroad for more than one year and who have a usual place of residence in the Palestinian territories and have identity cards... irrespective of the purpose of stay abroad." A different section of the PCBS census is called "Background and Justifications," and it also acknowledges including overseas Palestinians in its de facto count, except for household data.

The preliminary results of the census... provided the de facto population in the Occupied Palestinian Territories (OTP) (2.6 million) without annexed parts of Jerusalem, as well as their distribution by region, type of locality, and governorates, desegregated by sex. The same distributions were also presented for households, while it stopped at both the region and the type of locality for resident Palestinians who are living abroad

for more than a year on census night (325.3 thousand). It also provided estimates for the overall population considered currently permanent residents of the OPT (2.9 million), which include the de facto population, estimates for non-response, and the population of the annexed part of Ierusalem.<sup>7</sup>

There is still more proof: In a March 1998 press conference, Hassan Abu-Libdeh, then head of the PCBS, said: "We counted 325,258 people living outside of the Palestinian lands for more than one year, who carry Palestinian ID cards and can return at any time."8

This inclusion of non-residents was confirmed yet again, seven years later, by the new PCBS director, Luay Shabaneh, at the Neaman Institute at the Technion in June 2005 when he angrily charged that the PA Ministry of Health fertility rates were calculated too low because they divided the Ministry of Health field birth data for the West Bank and Gaza by PCBS population figures for childbearing women—and noted that the number of women is based on a "population registrar where this includes women whose usual residence is abroad."9

In Israeli demographic circles, the PCBS's inclusion of overseas residents in its census is a well understood issue. The number of IDs that Israel's Civil Administration issued had to be

reduced in 1990 because 15 percent of the West Bank population and 8 percent of Gaza's population had left the region. DellaPergola tries to suggest that this inclusion is similar to the way the ICBS counts residents who are abroad. 10 But if tourists or others stay away for a full year, they are subtracted from Israel's counts and not re-entered until they return for a minimum of ninety consecutive days. Since 1948, Israel has subtracted 633,000 people from its population counts for precisely this reason.<sup>11</sup> Israel's top demographer should be aware that there is no comparison between Israel's practices and those of the PCBS.

et us move on to discuss the manner in which DellaPergola misrepresents and obfuscates the corroborating evidence for our data, which we obtained by examining other Palestinian ministries, such as those of Health and Education. He contends that our data from the Ministry of Education do not account for high-school dropouts. This is a willful misreading of our reports, which were concerned not with high-school students but with students in the first grade. We merely sought to use school enrollment records to verify which birth figures, among the several available, were the most reliable. PCBS birth projections had anticipated,

for example, 143,000 births for 2003 largely because they included the 13 percent of the population that lives elsewhere, plus the Jerusalem Arabs. 12 The carefully recorded birth data from the PMOH showed that there were between 90,000 and 100,000 births per year, 13 and we corroborated that number by using a PA Ministry of Education report that indicated the number of children entering first grade was 95 percent of the births recorded by the Ministry of Health. DellaPergola's reference to school dropouts is simply a smokescreen to confuse readers.

Indeed, the accuracy of the PMOH birth records as opposed to the PCBS forecast was re-confirmed by the PCBS director himself, Luay Shabaneh, at the Neaman Institute in June 2005. He produced Palestinian birth registrar reports of 100,000 births per year in the territories, and disagreed with the Ministry of Health only over a matter of 10,000 births—numbers dramatically below the 143,000 figure in the PCBS 2003 population report.<sup>14</sup>

Similarly, DellaPergola misrepresents and tries to obfuscate our use of PA Central Election Commission (CEC) numbers, contending that we used the number of registered voters. We were never interested in the number of voters successfully

registered by the PA, because regardless of the number registered, the CEC estimates for the number of eligible voters would remain unchanged. The CEC's October 2004 and January 2005 reports unequivocally showed 1.62 million eligible adults, 120,000 of whom resided in Jerusalem and 200,000 overseas. 15 The total resident adult population was therefore 1.3 million in the West Bank and Gaza, which confirmed the ICBS population pyramids of how many residents would reach voting age in late 2004. The number of registered voters was thus irrelevant—especially since that statistic was released ten months after our findings were released. The claim that we used the lower number of registered Palestinian voters is ridiculous.

DellaPergola then tells readers that the proportion of Jews in the region will inevitably decline because, in his judgment, there is little potential for meaningful *aliya*. But all of DellaPergola's assessments about future immigration are pure speculation and, as he admits, his past predictions have been radically wrong. He defends these past errors by saying that no one could have predicted the fall of the Soviet Union and the massive influx of Russian immigrants that followed. But this is precisely the point: No one can reliably predict the future.

His obligation as a demographer is to model different scenarios in order to demonstrate the demographic impact of various numbers of immigrants. The Jewish Agency plans on a net immigration of 20,000 per year. Former Prime Minister Ariel Sharon envisioned 50,000 per year. DellaPergola should be modeling the impact of these possibilities, not announcing, mirabilis dictum, that they can't happen. He needs to provide a range of outcomes that will allow policymakers and others to have informed discussions in order to determine the strategies they wish to pursue.

DellaPergola's pessimism his assessments of aliya. He ignores the fact that only six years ago, in 2000, a net 27,000 Jews made aliya among a net 54,000 immigrants who arrived, most of whom wished to be called Jews. Between 1996 and 2000, an average of 34,000 Jews arrived per year among a net of 57,000 immigrants, most of whom also wished to be called Jews.<sup>16</sup> Yet DellaPergola minimizes their impact by splitting hairs about how many of them are technically Jewish, thereby avoiding the heart of the matter: What impact will they have on the Arab proportion of the total population?

DellaPergola then tries to discredit our work by pointing out that the ICBS reports that 20,000 Palestinians, not 150,000, have legally moved to Israel. But we had already pointed out in our published work that the Ministry of the Interior, which reported the 150,000 figure, and the ICBS were in disagreement, and we recommended that they reconcile their differences.<sup>17</sup> Not unexpectedly, DellaPergola blindly chose to accept the ICBS assessment with its lower numbers without even inquiring into which figures were more accurate. Now, our concern was the double counting of Palestinians who had moved to Israel, but whether a Palestinian lives in Jenin or Afula doesn't impact the Jewish/Arab ratio in the combined areas of Israel and the West Bank. That said, a more precise number is of the utmost importance if Israel pursues a disengagement policy, for Israel could find itself with more than 1.377 million Israeli Arabs, while the West Bank's population shrinks because of emigration. Exact counts of legal and illegal immigration are essential for an informed debate about separation. Yet DellaPergola appears to be committed to the ICBS count and singularly uninterested in figuring out the cause of the discrepancy between the Ministry of the Interior and the ICBS numbers.

Finally, to confirm his pessimistic vision, DellaPergola raises the issue of demographic momentum. But, since

DellaPergola's data are incorrect, and since he relies on an obsolete 2000 ICBS forecast, his analysis of demographic momentum is equally flawed. He cannot even begin to chart momentum accurately until he corrects the present PCBS statistics, or at least agrees with his most recent estimates. Clearly, however, he cannot present a static forecast from the past.

In our "Population Forecast for Israel and the West Bank 2025," we found that the ICBS errors in its own forecasts had led to an unwarranted demographic fatalism. Actual Jewish fertility from 2000 to 2005 was above any range considered by the ICBS, and Israeli Arab fertility was so far below the ranges considered that the ICBS scenarios became irrelevant. <sup>18</sup>

In truth, the "momentum train" that passed while DellaPergola was "asleep at the switch" was full of Jewish, not Israeli Arab, passengers. The number of Jewish and Jewishaffiliated births has gone up 30 percent a year since 1995, while the number of Israeli Arab births plateaued and then started dropping to 1995 levels. Israeli Arab fertility plunged from 4.4 in 2000 to 4.0 in 2004 and 3.7 in 2005, and has continued to drop markedly in 2006. With Arab births still declining throughout Israel in 2006, the Arab fertility rate

for 2005 in northern Israel is now at three births per woman; in Jerusalem, Jewish fertility is at 3.9, surpassing Arab fertility in the city.<sup>20</sup>

Furthermore, as Arab birth rates continue to decline, they will be divided into larger age cohorts and the TFRs will drop even further. It is true that the former high fertility rates of Israeli Arabs might cause a spike in their proportion of births. Israeli Arab females are now 20 percent of the 20-year-olds in Israel and 28 percent of the 10-year-olds.<sup>21</sup> But this will be temporary: As the infants of the current Jewish baby boom (that now comprises 74 percent of births) reach their childbearing years, the proportion of Jewish births will propel forward again.<sup>22</sup> But during the interval of a lower percentage of Jewish births, the Jewish majority can maintain its current levels with a net aliya of just 20,000 a year, a level DellaPergola refuses to consider, much less model.

Today, the greatest demographic momentum is in the Orthodox Jewish population, which also has the highest fertility rates, followed by Israeli Arabs and then secular Jews and Russian immigrants (who are becoming indistinguishable from each other), both of whom have robust birth rates. Any forecast that extends to 2050 has

to take these trends into consideration. Our forecast showed continuing stability in the Jewish/Arab ratio in Israel and the West Bank, caused both by the momentum in the religious Jewish sector and by the fact that, with time, the bulk of young Arabs will age, and their death rate will become more similar to the Jewish one.

Similarly, our research revealed that West Bank population growth is slowing and that its fertility rates are also on a downward slope. Since 1997, the Israeli Jewish population has been growing faster than the West Bank Arab population, in part because so many West Bankers are emigrating. Yet to counter our findings, which we likened to the Swedish model. DellaPergola ridiculed us, claiming we seemed to think there was snow in Gaza. This is sheer nonsense. DellaPergola certainly knows that the Swedish model refers to how population patterns are affected when modernization and health care are introduced into a region. Population growth rates soar as death rates plummet—until birth rates adjust and a new equilibrium is reached. It appears that the high growth in the Israeli Arab and West Bank populations during the last few decades was exceptional, and indeed had a strong resemblance to the Swedish model. And, given recent trends, it appears that West Bank growth rates are declining and reaching a new equilibrium.

ellaPergola has presided over a demographic fatalism that prevents him from objectively analyzing the data we have presented. While he accuses us of ulterior political motives, his work openly advocates a certain political solution to the Arab-Israeli conflict, and he does not seem averse to manipulating the figures to support this agenda. In this, he has been both creator and judge of his own demographic studies.

Demography in Israel and the territories is not just another arcane, academic subject. It has enormous ramifications for Israel's self-image and its policy choices. Israel should establish a national commission to review all demographic data to ensure that they are transparent and use upto-date statistics.

The real demographic danger—and the real tragedy—is that DellaPergola and others refuse to identify the 2-to-1 majority now existing in 98.7% of the land of Israel, the result of over 120 vears of Zionism. For Israel's founding visionaries this is a triumph, and must be considered against the fatalistic and ill-considered views of prognosticators like DellaPergola.

## Notes on DellaPergola Response:

- 1. Other major publications by the same team include Bennett Zimmerman, Roberta Seid, Michael L. Wise, Yoram Ettinger, David Shahaf, Ezra Sohar, David Passig, and Avraham Shyout, The Arab Population in the West Bank and Gaza: The Million and a Half Person Gap (2005), at www.pademographics.com/Demog raphic%20Study%20January%2010%20200 5.ppt#2; Bennett Zimmerman, Roberta Seid, and Michael L. Wise, "Population Forecast for Israel and the West Bank 2025," presentation at the Sixth Annual Herzliva Conference, January 23, 2006, at www.pademographics.com/ Forecast%20for%20Israel%202025.ppt; and Bennett Zimmerman, Roberta Seid, and Michael L. Wise, "The Million Person Gap: The Arab Population in the West Bank and Gaza," Mideast Security and Policy Studies 65 (February 2005), at www.biu.ac.il/Besa/ MSPS65.pdf.
- 2. For a recent review, see Dominique Tabutin and Bruno Schoumaker, "The Demography of the Arab World and the Middle East from the 1950s to the 2000s: A Survey of Changes and a Statistical Assessment," *Population* 60 (English edition), 2005, pp. 505-616.
- 3. See the difference in titles in note 1, above.
- 4. United Nations, Population Division, World Population to 2300 (New York: United Nations, 2004); Sergio DellaPergola, Uzi Rebhun, and Mark Tolts, "Prospecting the Jewish Future: Population Projections, 2000-2080," American Jewish Year Book 100 (2000), pp. 103-146.
- 5. Hassan Abu-Libdeh, "Palestinian Territories: Demographics," in Simonetta Della Seta, ed., *The Price of Non-Peace: The Need for a Strengthened Role for the European Union in*

- the Middle East, Working Paper, Political Series POLI 116 EN (Brussels: European Parliament, 1999), p. 174.
- 6. Sergio DellaPergola, "Demographic Trends in Israel and Palestine: Prospects and Policy Implications," *American Jewish Year Book* 103 (2003), pp. 3-68.
- 7. Israel Central Bureau of Statistics (ICBS), *Projections of Population in Judea, Samaria, and Gaza Area up to 2002 Based on the Population in 1982*, Special Series No. 802 (Jerusalem, 1987).
- 8. ICBS, Demographic Characteristics of the Arab Population in Judea, Samaria, and the Gaza Area, 1968-1993, Publication No. 1025 (July 1996).
- 9. Roberto Bachi, *The Population of Israel* (Jerusalem: Hebrew University, 1977).
- 10. Abu-Libdeh, "Palestinian Territories," p. 173.
- 11. Mustafa Khawaja, Palestinian Central Bureau of Statistics (PCBS), personal communications, January 18, 2006.
- 12. "Population Projections for Socioeconomic Development in the Gaza Strip," Working Paper 1 (Cambridge, Mass.: Harvard University Program on Humanitarian Policy and Conflict Research, June 2006).
- 13. "Summary Final Results of 1997 Census," at www.pcbs.gov.ps/DesktopDefault. aspx?tabID=3820&clang=en. The base population included: (i) persons present on census day, including foreigners (the latter numbering 4,053 in the West Bank and Gaza); (ii) unmarried persons studying abroad, irrespective of the study period; (iii) persons whose usual place of residence was the Palestinian territories, but who were temporally living

abroad for less than one year from the night of the reference data (December 9, 1997); (iv) persons detained in Israeli jails, regardless of the detention period.

- 14. ICBS *Statistical Abstract of Israel* 2006, 57 (Jerusalem: Central Bureau of Statistics, 2006), p. 86.
- 15. Dov Friedlander, "Demographic Demagogery," *Haaretz*, July 14, 2002.
- 16. Charley J. Levine, "Interview: Sergio DellaPergola," *Hadassah Magazine* 87 (June/July 2006), at www.hadassah.org/news/content/per\_hadassah/archive/2006/06\_jun/interview.asp.
- 17. Sergio DellaPergola, "Mass Aliyah: A Thing of the Past?" *The Jerusalem Quarterly* 51 (Summer 1989), pp. 96-114. Instead of addressing this or other professional publications, the authors have, in their longer reports, preferred to rely on the following press clipping: "Prof. DellaPergola contended that Soviet Jews would not immigrate to Israel, due to technological, economic, social, and cultural reasons." *Yediot Aharonot*, October 23, 1987. Coincidentally or not, the same source is quoted in Benjamin Netanyahu, *A Place Among the Nations: Israel and the World* (New York: Bantam, 1993), pp. 294-328.
- 18. Sergio DellaPergola, "World Jewish Population 2005," *American Jewish Year Book* 105 (2005), pp. 87-122.
- 19. Sergio DellaPergola, Uzi Rebhun, and Mark Tolts, "Contemporary Jewish Diaspora in Global Context: Human Development Correlates of Population Trends," *Israel Studies* 11 (2005), pp. 61-95.
- 20. ICBS, *Statistical Abstract*, pp. 87-88. The following figures rely on the same source and on unpublished ICBS data.

- 21. ICBS, Statistical Abstract, p. 87.
- 22. ICBS, unpublished data.
- 23. Elia Zureik, "The Trek Back Home: Palestinians Returning Home and Their Problems of Adaptation," in Are Hobdenak, Jon Pedersen, Dag H. Tuastad and Elia Zureik, eds., Constructing Order: Palestinian Adaptations to Refugee Life (Oslo: Fafo, Institute for Applied Social Science, 1997), pp. 79-102.
- 24. Zimmerman, Seid, and Wise, "The Million Person Gap," p. 29.
  - 25. ICBS, Statistical Abstract, p. 87.
  - 26. ICBS, Statistical Abstract, p. 190.
  - 27. ICBS, Statistical Abstract, pp. 200-201.
- 28. Shayndi Raice, "Social Scientist Finds that Israelis Want More Kids," *Jewish Advocate*, June 16, 2006, at www.thejewishad vocate.com/this\_weeks\_issue/news/?content\_id=1402. See also Sergio DellaPergola, "Fertility and Population Policies in Israel," Conference in Memory of Professor Roberto Bachi on the 10th Anniversary of His Death (Jerusalem: Israel Academy of Sciences, 2006).
  - 29. ICBS, Statistical Abstract, pp. 200-201.
- 30. Zimmerman, Seid, and Wise, "Voodoo Demographics," p. 70.
- 31. Zimmerman, Seid, and Wise, *The Arab Population in the West Bank and Gaza*.
- 32. Zimmerman, Seid, and Wise, "Population Forecast for Israel and the West Bank 2025."
- 33. PCBS, Demographic and Health Survey, 2004: Main Findings (Ramallah, 2005).
- 34. Bennett Zimmerman, Roberta Seid, and Michael L. Wise, "Jewish Demographic

Momentum," *Arutz Sheva*, July 31, 2006, at www.israelnationalnews.com/article.php3?id=6424.

- 35. See www.pcbs.gov.ps.
- 36. As noted, this is a slight downward revision based on DellaPergola, "Demographic Trends in Israel and Palestine." The values for 2005 were obtained by interpolation of the calculated growth rates over the period 2000-2010.
- 37. Statistics regarding foreign workers in Israel taken from ICBS unpublished data.
  - 38. ICBS, Statistical Abstract, p. 87.
- 39. DellaPergola, "Demographic Trends in Israel and Palestine."
- 40. DellaPergola, "Demographic Trends in Israel and Palestine," p. 42.
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## Notes on Zimmerman, Seid, and Wise Response:

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- 3. Ilan Shahar, "New Demographic Forecasts," *Haaretz*, September 21, 2006.
- 4. Bennett Zimmerman, Roberta Seid, and Michael L. Wise, "The Million Person

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- 15. Palestinian Central Election Commission, "Central Election Commission (CEC) Upcoming Presidential Elections: Facts and Statistics," Press Release, January 8, 2005; Palestinian Central Elections Commission, "Focus on Elections in East Jerusalem," Press Release, January 6, 2005. Both appear in Zimmerman, Seid, and Wise, "The Million Person Gap," Appendix F.
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- 18. Bennett Zimmerman, Roberta Seid, and Michael L. Wise, "Population Forecast for Israel and the West Bank 2025."
  - 19. ICBS, Statistical Abstract, p. 202.
- 20. ICBS, Statistical Abstract, p. 190; ICBS, Vital Statistics 10 (2006).
  - 21. ICBS, Statistical Abstract, p. 105.
  - 22. ICBS, Statistical Abstract, p. 202.

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