

NPG Booknote

The Wrong Apocalypse

Gray Dawn

by Peter G. Peterson

Random House, 1999 (\$23.00 hardcover)

Reviewed by NPG Senior Advisor Lindsey Grant

Peterson and his staff have assembled an impressive array of evidence about one consequence of population change. As population growth stops or reverses in the modern world, the population ages. This generates fundamental social and economic changes, which he explores in depth. The cost of taking care of the elderly may lead to fiscal collapse in the major industrial nations. He talks of an “iceberg”, a “great hazard...that will likely dwarf the other challenges.” I think he has mistaken a secondary population issue for the fundamental one, but – particularly after one gets past the hyperbole of the first two chapters – he has effectively focused attention on issues which developed nations must face.

The Dependency Ratio

Peterson calls it “global aging”, but he is really talking about the developed world,* particularly western Europe and Japan. (The problem is less serious in the United States, Britain and Australia.) In Europe, women may be expected to bear 1.42 children on average – down from 2.57 fifty years ago. For Italy and Spain, the number (i.e. the total fertility rate) is 1.2 or less. This is just above the “one child family” that China proclaims but does not approach. (Replacement level fertility is about 2.05 children at European mortality levels.) UN statisticians expect the population of western Europe to decline by 10% to 376 million in 2050 – and Italy by 28% to 41 million, even with a rise in fertility.

The “dependency ratio” measures the numbers of the old and young as a percentage of the working age population. (It is, by the way, a rather crude measure. The UN defines the working age population as ages 15-64, but not all those people work;

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while some people 65 and over still work. Peterson follows the UN practice, and so will I, though the US Census Bureau defines “working age” as 18-64.) The book’s central point is that falling fertility raises the dependency ratio, and shrinking working age populations cannot support the rising numbers of the old – at least in the way they have become accustomed to. He documents the point well. In much of Europe, one can live almost as well on unemployment insurance as by working, and retire very young on liberal disability pensions. Let me add that it works right now because when a population stops growing, the first consequence is to lower the dependency ratio. There are fewer children, and most people are in their working years. It is a temporary phase. As time passes, those people get old, there are fewer new workers, and the dependency ratio rises. Right now, Europe can just barely afford its welfare net. Soon, it won’t be able to. The dependency ratio in Germany, for example, is now remarkably “favorable.” It went down from 59% in the early ’70s to 44% in the late ‘eighties – and with so many working age people, unemployment became the major economic problem. It has started rising and it may reach 71% in 2050.

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Peterson argues that if modern societies try to continue present retirement and health programs they will bankrupt the fiscal system, with worldwide consequences. He offers some possible solutions:

- encourage people to work to age 70 or so, partly by changing retirement systems;
- encourage more working age people to get employed;
- increase immigration (judiciously);
- encourage women to have more children;
- restore the family system, emphasizing both better child rearing and filial responsibility for aged parents rather than turning the task over to the state;
- convene a global summit to create an international Agency on Global Aging.

Most of the proposals are not new, but it is a useful checklist. His beat is fiscal policy, and the solutions he proposes are ways to get the burden off government's back and on to somebody else's, and to keep growth going. As he acknowledges, political resistance to losing benefits is the sticking point, not an unawareness of the problem.

The Primary Issue

Western Europe and Japan comprise less than 10 percent of the world's population. The traumatic problems of hunger, disease, deepening water shortages, resource depletion, and urban collapse lie elsewhere.

China hopes to expand governmental welfare programs at the same time they are lowering fertility, a combination that will in two generations put it in Europe's situation, but with a poorer economy. It should heed the lessons Europe is learning. For China, however – and for most of the developing world – the central demographic problem remains what it has been: growth to levels utterly unlike anything in the

human experience, with the certainty that demographic momentum will carry that growth even higher and with uncertain but overwhelming consequences for the inhabitants and for the ecosystems that support them.

Fertility is declining in many developing countries, but it is down to replacement level in only a few of them – fortunately including the major player, China. (Replacement level fertility brings growth to an end, but not right away.) The UN middle projection assumes that fertility and mortality will continue to decline, but it still foresees developing world population rising by 73 percent to 7.75 billion in 2050. In the most desperate countries (the UN's 48 “least developed countries”), fertility has hardly started to decline; it remains above five children, and their total population is expected to almost treble by 2050. In some of them, mortality is already rising, and I think it will intervene to interrupt that incredible growth curve.

In the United States, our central problem is not the dependency ratio, which is 52% now and is likely to be 69% in 2050 – just above the level in 1960, but with a very different ratio of old and young. Our problem is population growth and the environmental burden our consumption habits impose on the entire world. We are passing 275 million now and are headed toward a half billion in the next century. Because of the higher fertility of most immigrants, our fertility is rising, not stable; the Census Bureau medium projection (1996) anticipates a rise from 2.07 now to 2.24 in 2050, which is a prescription for endless growth.

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Lopsided retirement programs in Europe and Japan – or the United States – can be adjusted. People can work longer if necessary. International free trade may be incompatible with high living standards as a labor-short industrial world faces the competition of developing countries with abundant labor and low wages. (As an international financier and free trader, Peterson chooses not to address that problem.) Such problems may be ameliorated by continued technological growth of productivity, which Peterson downplays. The point is that developed countries face a problem, not a catastrophe. With the will, the solution is at hand. The same cannot be said about hunger, urban collapse and disease in most of the world.

The Infinite Earth Fallacy

Peterson admits to a fondness for growth. He describes economies as “stagnant” if they do not grow. He regards a declining GDP (gross domestic product) as “unthinkable”, even if GDP per capita is rising (pp.183-184). Yet perpetual material growth in a finite world is an absurdity. He has not reconciled his contradictions; he recognizes that a “steady state” economy is an ultimate goal, but his proposals would have the effect of pushing it into an infinitely remote future.

Growth is beguiling to economists and politicians because it seems to solve a problem that concerns them: making a bigger pie, right away. And it offers the businessmen who finance politicians the prospect of slicing that pie. The side effects are those that concern biologists, resource managers, ecologists, philosophers and environmentalists. Unfortunately, the two camps are seldom in touch.

Peterson is a conservative financier, and his emphasis can be understood, but his is a provincial view. Along with most economists, he simply ignores issues of scale and limits. He dismisses the population issue thus: “‘overpopulation’ anxieties of the early post-war era... led, by the 1960s, to newspaper headlines about the ‘population bomb’ and anti-birth movements...”. He thinks (wrongly) that the world problem was the result of the baby boom, “an historical anomaly” (pp.11-12). I find it remarkable that he can make such statements about a world that has doubled in population since 1960 and is on the way to adding another three billion by 2050 – if life support systems permit it.

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He does not list population growth as an issue now or for the coming century, while he calls “global aging” the “transcendent” issue. He is dubious about the reality of climate warming and puts aside environmental issues with the remark that single nations cannot do much about them because other nations may not cooperate. He regards population growth in the developing world as a threat to us (pp.50-52, 197), but not as a problem for them. He talks about their age distribution, not about the intolerable conditions they face or the growth that generates the conditions.

Because of recent population growth, the world is facing, not simply a threatening future, but a dangerous present. Given the damage that that growth is already doing, one should ask whether present population levels are tolerable, to say nothing about the future. Peterson’s dismissal of population growth is a bit premature. I would urge that he take a holiday from fiscal data and spend some time listening to the biologists.

Peterson has dismissed the greater issue to ring the alarm about a smaller one. Europe knows about its fiscal problem, and so do we in the United States. By downplaying the larger issue, he diverts Americans from two fundamental decisions: What are we doing to help the developing world in its desperate efforts to bring a halt to population growth? And, in this Age of Migrations, what are we doing to control the growth of U.S. population, which is driven primarily by immigration?

Are we willing to restrain consumption? Rising numbers and rising consumption are the twin forces that drive the destabilization of the world environment today. A smaller population can live better within a sound environment, but we cannot afford – or realistically expect – to have more people, all of them living better.

The European Future

When population has been growing, an end to growth forces any country through a period of high dependency ratios. It is a transient but mathematically inescapable phase. The swifter the change, the higher the dependency ratio. Eventually, it will peak, then drift downward and stabilize. Granted, that population will be older. Aging is the price we pay for low mortality. Unless he believes that growth can go on forever, Peterson must accept that transitional high dependency levels are inescapable. Unless he wants to see mortality rise, he must recognize that future populations will be older.

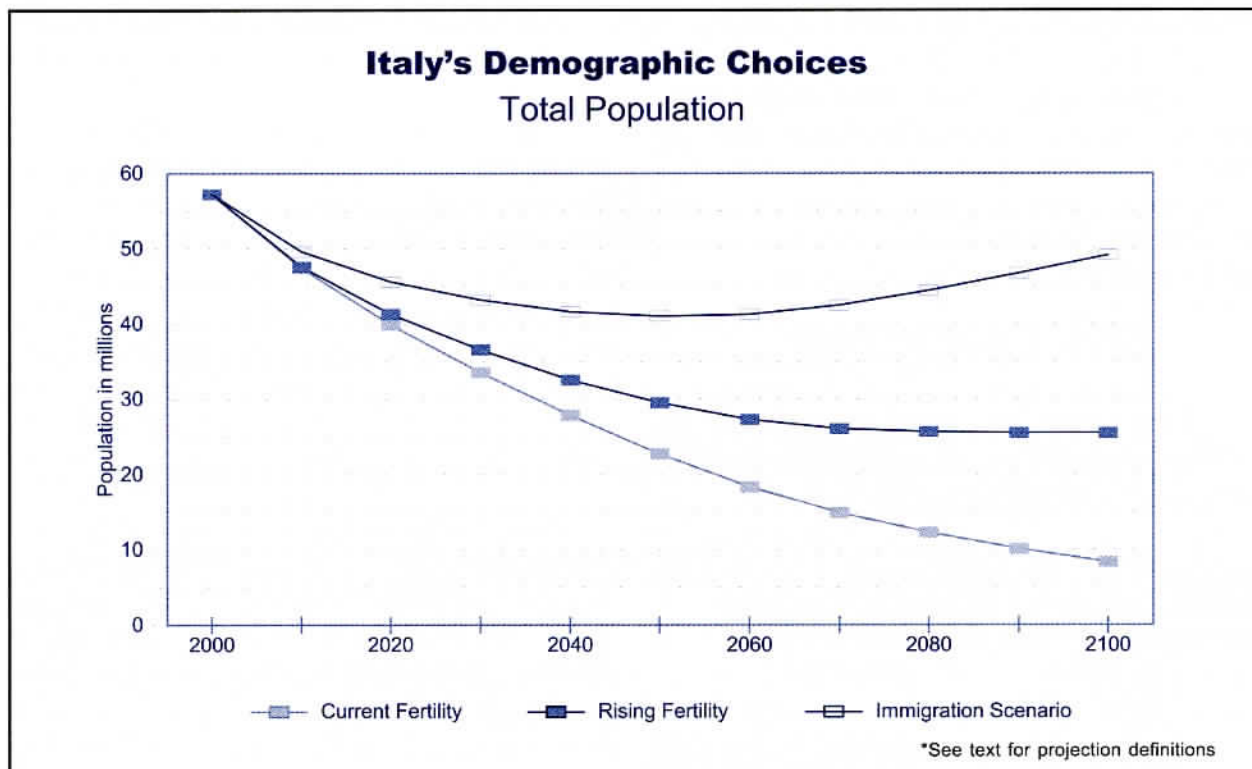
As Peterson points out, countries with fertility below replacement level will need to bring fertility back up, or invite immigration, if they are not to wither away. The issue is “just when?”

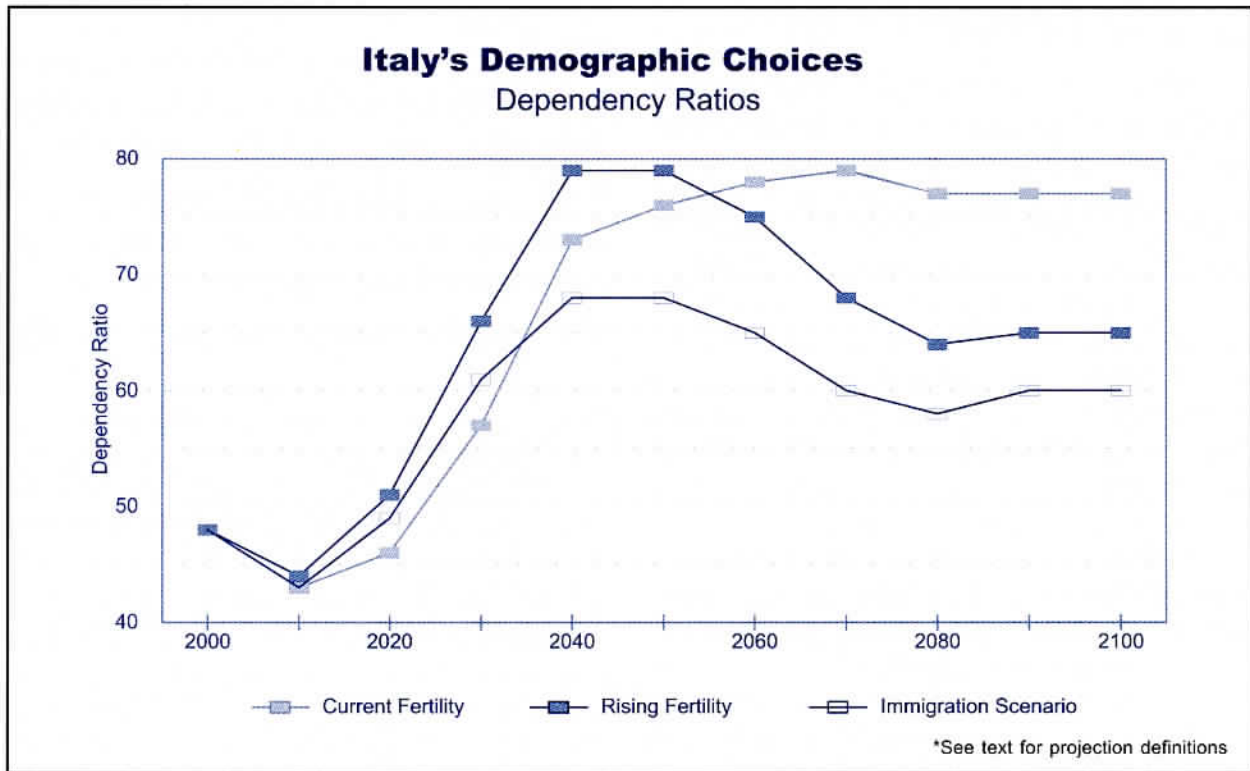
The go-go growth syndrome of our era has been built on a temporary foundation of cheap fossil energy. The remarkable economic growth of Western Europe and Japan in recent decades has been achieved mostly with imported energy, and both are particularly vulnerable to price shocks and supply uncertainties as world oil resources decline in the next

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generation. Both Europe and Japan are poorly placed to benefit from the most promising renewable sources – wind and direct solar energy – and potential tidal energy sources are localized along the Atlantic coast. The energy transition will involve some major economic shifts, and it will be expensive. It will be easier with a smaller population, even if it is an older one.

Recent world economic growth has put very heavy pressure on the environment. It has driven up the natural carbon, nitrogen and phosphate load in the biosphere – generating fundamental changes in the world ecology. It has led to water pollution and atmospheric acidification, and it drives the worldwide problem of atmospheric carbon loading and climate change. Moreover, Europe and Japan are two of the





most crowded regions on Earth. Western Europe has grown by 27 percent since 1950, Japan by 50 percent. With populations more like those of 1950, or even earlier, they could enjoy the benefits of prosperity without the environmental costs that have come to characterize it.

They should be moving toward a smaller population but not quite so fast. A higher fertility rate would still lead to a smaller population, but it would slow down the aging process and ameliorate the problems that concern Peterson. Europe and Japan need to ask themselves: what fertility is desirable?

The Case of Italy

Perhaps, since this is a very hot topic, we should explore the question: just where do different assumptions about fertility and migration lead?

I will take Italy, as the extreme example of low fertility. In the two graphs, I plot Italy's population and dependency ratios through the coming century, using three different sets of assumptions:

1. **Current Fertility** of 1.2, with current mortality (on the assumption that decreased budgets for medical care – especially for the old – will

counterbalance medical improvements leading to greater longevity), and zero net migration.

2. **Rising Fertility** to replacement level (2.05) in 2020, and staying constant thereafter.

3. **The Immigration Scenario**, with annual net immigration of 200,000 men and women (in equal numbers), added to the preceding scenario.

Any scenario short of a fairly swift return to replacement level fertility is indeed frightening once fertility has gone so low as 1.2 children. A rise to 1.6, for instance, would only lead to a population in 2100 of 15 million rather than 8 million, and still declining. Given the intense migratory pressures generated by third world population growth, by political turmoil, and by the demands of employers in Italy for labor, extreme low-fertility scenarios would probably be overwhelmed by migration.

I find #2, the Rising Fertility option, beguiling. With population numbers stable at the level of the 1920s, Italy will have more space, and the opportunity to move away from its present dependence upon intensive (and destructive) agriculture, chemicals and fossil energy. However, it still results in a brief peak in the dependency ratio because there will be more children.

The Immigration Scenario holds the dependency ratio down. It preserves a larger population, if that is what they want, but it would transform Italy as post-2000 immigrants and their descendants become about half the total population. It is not unthinkable. Italy has gone through such changes before; Roman Emperor Trajan was of African descent. But that scenario would lead again to growth unless immigration or fertility decline.

These are just three of an infinite number of possible scenarios. It is by no means certain that demographic change can be engineered. For one thing, industrial nations, even where there is some consensus as to desirable family size, have had notoriously little success in influencing personal decisions about child-bearing. For another, Italy has traditionally exported people. Under the Schengen agreement, it is part of a Europe with free movement of people, and the net flow of people within Europe is unpredictable. For a third, it has yet to be established whether the movement across borders can be controlled in the face of intense migratory pressures generated by the gulf between industrial nations and most of the third world. In Japan, perhaps yes; in Europe, maybe not. Finally, there is no more evidence of a consensus about population policy in Europe than in the U.S.

Nevertheless, if they want to preserve viable societies, Italy (and all of Europe and Japan) have every

reason to look with hope, not despair, at the prospect of smaller populations. They need to manage the transition. Given the difficulties I have cited in engineering population change, that management process is far more complex than Peterson has described, but that – and not the single issue of fiscal solvency – is the overriding issue facing Europe and, eventually, all nations where population growth has come to a halt.

Notes

* A note on definitions: Peterson defines “developed countries” as the members of the Organization for Economic Cooperation and Development (OECD), consisting of the European countries (excluding those which were Communist) plus Japan, Canada, the United States, Australia, New Zealand and now Mexico. For statistical purposes, we both use “western Europe” in the popular sense, i.e. roughly the UN’s “Northern, Southern and Western Europe.”

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