

Prof. Foot is convinced that if you want to understand the world's key economic levers you have to immerse yourself in birth rates, death rates, immigration patterns and actuarial tables of life expectancy. And that data suggest the world has trouble in store.

Indeed, the recent financial crisis may have been one of the first manifestations of the problems heading our way. According to Prof. Foot's theory, the period of low economic volatility in the West between the beginning of the 1990s and 2007, which encouraged high levels of debt and an under-appreciation of risk, was not the result of central bankers setting irresponsibly low interest rates, as some have argued. Rather, it was a result of the demographically out-sized "baby-boomer" generation reaching the heights of its spending powers, flooding the markets with liquidity and driving down the costs of borrowing. Cheap money, according to Prof. Foot, "had nothing to do with central banks."

Such trends can take a while to assert themselves. The "baby-boomer" generation was born in the immediate aftermath of World War II. In the short term, governments and central banks still have some power. But over periods of five years or more the demographic effect becomes more significant. Over a decade or more, demographics dominate, says Prof. Foot. "The change that comes about as a result of demographic trends can be glacial, but it is inevitable," he says.

At last year's World Economic Forum in Davos, a panel on demographics outlined the scale of the problem. It showed that the world's population will grow by 50% in the next four decades to more than 9 billion from about 6.5 billion now—a prediction that tallies with that of the United Nations. The population of China—whose barnstorming economy is hailed as the key to a global recovery—will contain more people over 60 years old in the year 2050 than were alive in the entire world a year ago.

Ahead of this year's event, the World Economic Forum published a paper on risks to the global economy. It warned that overstretched government budgets could spark the next global crisis and that an aging population in many developed countries threatens to widen budget deficits. Aging, the paper said, was a "creeping risk."

Timothy Dyson, professor of population studies at the London School of Economics and Political Science, says: "In demographic terms, population growth was the main feature of the 20th century. Aging will be the main feature of the 21st century, although there will be substantial further population growth too."

However, he remains sanguine. "We'll adapt to population aging—indeed, there is no real alternative," he says. "There will be technological developments which make the process of adaptation easier—increases in the use of assisting robots, and better drugs to combat degenerative physical and mental diseases."

But we will also have to work harder or longer—or possibly both at the same time. By 2030, every 100 workers in Europe will have to support 40 people aged 65 or over, compared with just 25 pensioners per 100 in the workforce in 2008, according to research published last month by Eurostat, the statistics arm of the European Union.

Research published by the International Monetary Fund last March revealed the extent of the burden: Group of 20 countries will have to spend over four times their current yearly economic output to pay for the health care, pensions and long-term residential care associated with aging over the next four decades. By way of comparison, that is about 15 times the cost of the financial-sector bailouts in those countries, according to the IMF.

Those countries not faced with an aging population have a whole different set of problems to deal with. Sub-Saharan Africa, much of the Middle East, and parts of Asia are likely to experience explosive population growth, according to Prof. Dyson.

Rapid population growth will put a strain on natural resources that could damage the environment, exacerbate poverty and lead to political unrest.

The good news is that countries with a burgeoning population can receive a "demographic dividend"—an increase in the rate of economic growth thanks to a rising share of working-age people in the population—although the process has to be carefully managed.

George Magnus, a senior adviser to Swiss bank **UBS** and author of "The Age of Aging," believes that if people in the U.K. work two or three years longer and pension provision is rethought, the worst difficulties can be avoided in the near term.

However, over the longer term, more fundamental changes will be needed. "The banking crisis has happened at a time when the great demographic transition was just starting," Mr. Magnus says. "If we in the West are going to resolve it, we need a root and branch reform of what we understand as the economy and what the government might or might not do

Mr. Elliott is the news editor at Financial News in London. He can be reached at dominic.elliott@dowjones.com.

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