

# The Economic Impact of Changing Demographics

## An Interview with David K. Foot

***Editor's Note:** Demographic changes have profound effects on all sectors of the economy. David K. Foot, professor of economics at the University of Toronto, uses demographic data as the foundation for economic analysis. In October 2008 he talked with the Investments & Wealth Monitor about how people's financial behaviors change as they move through each stage of the life cycle and how the number of people in each stage determines economic trends. He earned a B.Ec. from the University of Western Australia and MA and PhD degrees from Harvard University.*

**I&WM:** How do you track the economic influence of large demographic groups such as the baby boomers and their children, the echo boomers?

**David Foot:** I use two types of data in my research. First, I look at census data. I'm particularly interested in age—simply the number of people in each age group—and, to a lesser degree, gender. I also look at behavioral data—people's financial behavior during different stages of their lives. On average, people go through similar life cycles economically. They borrow when they're young, pay back their debts and accumulate for retirement during middle age, and then deplete their assets during retirement, and this behavior hasn't changed over the past 40 or 50 years. Putting these two types of data together gives me the foundation for explaining past trends and predicting future trends.

**I&WM:** You've predicted that U.S. consumers will shift from spenders to savers. How does your research account for this shift?

**David Foot:** Many of them have already shifted. The average U.S. family spends the most money between ages 45 and 55. At that point, they're at their maximum earning power, and many have teenagers still living at home. The front quarter of the baby boom generation has now moved beyond 55 into their 60s. People still spend in their 60s—not as much as in their 50s but considerably more than in their 30s. So the first baby boomers are now in their prime saving years of 55 to 64 as they try to save for retirement.

**I&WM:** How significant will the echo-boomer demographic be?

**David Foot:** The 79 million U.S. baby boomers have had 76 million echo kids, so the echo generation in the United States is almost as big as the boomer generation. Within five

years, it will probably be bigger because death rates among boomers will rise. For the past 20 to 25 years, U.S. boomers have been exactly replacing themselves; they've been having 2.1 children per family. (The extra tenth of a child compensates for women who don't bear children.) This is the highest fertility rate in the developed world; it's much higher than in Canada, Europe, or Japan.

But census data include not only the number of births and deaths but also the number of immigrants and emigrants. Young people generally move in their 20s, after finishing their education and before having a family. You don't want to look solely at the births 20 years ago to determine how many people are in their 20s today because that figure will have been supplemented by immigration.

**I&WM:** How significant is the effect of immigration on the U.S. population?

**David Foot:** Immigration into the United States is a trickle compared with the flood into Canada. Canada brings in a quarter of a million immigrants a year. As a percentage of the population, that's three times higher than the immigration rate in the United States. The United States has a population of some 300 million people; Canada has a little over 30 million. To match Canada's immigration rate, the United States would have to bring in 2.5 million people a year. Even with illegals, the rate of immigration into the United States is relatively low compared with that of Canada, Australia, or Israel. Quantitatively, it's a lot of people—three quarters of a million—but as a percentage, it doesn't augment the population very much.

**I&WM:** Do births among immigrants have much affect on the U.S. population?

**David Foot:** The fertility rate among Latinos is 2.9 children, but that number is declining and eventually it will come down to the U.S. average. The fertility rate of the white, non-Latino population in the United States is 1.9—just below replacement but higher than in other parts of the developed world. The rate for African-Americans is around 2.5.

**I&WM:** Why aren't U.S. politicians talking about the phenomenon of the echo boomers replenishing the coffers of Social Security?

**David Foot:** I can't speak for your politicians, but U.S. echo boomers will be crucial to preventing further meltdowns of the stock market. As the boomers reach their mid- to late-60s and want to sell their equities, the echo boomers will be in their early 40s, which is when most people start investing.



In Canada, people are having 1.5 children per family. In Europe the average is less than 1.4, but in some countries—Italy, Spain, Germany, and Greece—it's around 1.2. There are essentially no young people in these countries, so they'll have major challenges funding their pensions, particularly public pensions. The U.S. Social Security system is much better off than any retirement program in these European countries.

**I&WM:** Do you expect immigration patterns to change?

**David Foot:** Because global migration occurs primarily among people in their 20s, if you have countries nearby with lots of people in this age group—as is the case with Mexico and other Latin American countries—these countries will be a source of immigrants. This will remain true for at least another 20 years until Latino women get more education and reduce their fertility rate. This is already happening in Chile and Argentina.

“ If we know roughly what the level of immigration is going to be, the projection from one census to the next is very accurate. It's more accurate than almost any other projection. That's why I like demographics as the foundation for economic analysis. ”

**I&WM:** Have demographic models provided a wide dispersion of results?

**David Foot:** It's amazing how accurate demographic models tend to be—particularly from one census to the next. Over a 10-year period, fertility rates and financial behaviors don't change much. If we know roughly what the level of immigration is going to be, the projection from one census to the next is very accurate. It's more accurate than almost any other projection. That's why I like demographics as the foundation for economic analysis.

You could say, for example, that over a period of 50 years, we couldn't have predicted the introduction of the birth control pill, but once it was introduced, we could track its acceptance and predict the consequences. Wars also have a major impact on demographics. But even if we can't predict a war, given the nature of the losses associated with war, we can fairly accurately predict a war's demographic consequences.

**I&WM:** How do various immigrant groups decide where to settle?

**David Foot:** These decisions also are fairly predictable. People in their 20s like noise and action, so they head to urban centers. They go to cities that already have a core community of people from their background. This was true for the German migrants in the 1940s and 1950s and the Italian migrants of the 1960s, so nothing new is going on with Latino migrants to the United States.

**I&WM:** As U.S. immigrants become established and enter the middle class, how will this affect the country's consumer power?

**David Foot:** Quantitatively, the immigrant population is almost insignificant relative to the boomers. The United States has 79 million boomers and brings in three-quarters of a million immigrants a year. At this rate, it would take well over 100 years for the number of immigrants to match the number of boomers. Besides, once immigrants arrive in a new country, their behavior patterns closely follow domestic patterns. So don't focus on immigration when you consider spending patterns; the stage of life of the overall population is much more important in determining future economic patterns or which investment strategies are likely to be successful.

**I&WM:** The United States has been experiencing a fair amount of internal migration from the Rust Belt to the Sun Belt. To what extent do state tax structures or tax incentives drive this pattern?

**David Foot:** The role of taxes is way overplayed. The boomers have reached their 50s and 60s, they're starting to get arthritis, and they're moving to warmer climates. Their health is more influential than their tax status. If you examine tax status across the 30 countries in the Organisation for Economic Co-operation and Development, you'll find spending patterns vary much more with differences in demographics than with differences in taxes.

**I&WM:** If you're considering buying a piece of raw land in Michigan versus Texas, and you're looking at a 50-year time horizon, do you care which state you own property in?

**David Foot:** How old are you? That's the crucial part of the question. If you're 20, you may be skiing in Colorado. If you're 55 and your knees and ankles are shot, you may be in Hawaii. Realistically, you won't own property till you're 30 at the earliest.

Understanding life cycle behavior is crucial to the way I look at the economy. You borrow in your 20s. The boomers borrowed from the mid-1960s through the mid-1980s, driving up interest rates and laying the foundation for tremendous growth in debt in North America, and nobody in the financial sector looked at the impact of life cycles on interest rates. Then you reach your 30s, you start a family, your expenditures go up dramatically, and you start trying to pay down your debt, but by this time you own more assets so your debt-to-asset ratio comes down. In your 50s, you get increasingly debt free, you acquire more assets, and you begin



building a nest egg for retirement. Over the past decade the boomers have been buying investments for their retirement. This drove up the stock market and the price of individual stocks. It drove interest rates down because the boomers weren't borrowing any more; they'd started saving. This is how life cycle demographics affect the financial sector.

**I&WM:** Let's talk about what's currently happening in the U.S. housing markets.

**David Foot:** I predicted the housing market would be soft in the first decade of the new millennium because there wouldn't be many people in their 30s at that time. In fact, the housing market went up substantially, though not so substantially in real terms if you take out the effects of inflation. But there was no demographic foundation for the growth in housing prices over the past 10 years. That told me something else was going on. We now know what it was—lenders were allowing people who couldn't afford houses to buy them.

Although I'm trained as an economist, I use demographic models to draw projections about the future based on the historical behavior of particular age groups. The data in these models come from countries and cultures around the world over the past 50 or 60 years. Economists don't bring this sort of thinking to the table. They tend to think the markets take care of everything, but markets are very short-term and their fluctuations can have devastating effects. Economists are not trained to think like sociologists, but a relatively new discipline of economic sociology is emerging. In economic sociology, age and life cycle are the key categories.

**I&WM:** How would you advise [now former] U.S. Treasury Secretary Henry Paulson and his protégé Neel Kashkari on fixing our current economic problems?

**David Foot:** Your problems are big. The United States has been totally irresponsible. It let all the investment banks get away with no regulation, and it still doesn't have any financial reform on the table. In Canada, investment banks are part of regular banks so they have reserve requirements. Investment banks in the United States have no reserve requirements. The United States has allowed the banks to privatize profits and socialize risk.

If you apply demographics to criminal behavior, aging criminals move from breaking and entering to fraud. With more and more people in their 40s and 50s, fraud has become a bigger problem around the world. There's no data on who commits fraud. There's no data linking the current economic situation in the United States with fraud, but I can't help believing fraud is part of the situation. The first thing I'd do is root that out. Otherwise, it will come back to hurt you again.

**I&WM:** Have investment consultants asked for your help in thinking through short-term investment strategies?

**David Foot:** I'm not a consultant. I speak to organizations and companies about how big-picture demographic

trends will affect their industries, whether they produce automobiles or provide financial services, and I use income from these speaking engagements to help fund my academic research.

Here's how I would apply demographic data to the financial services business. Because people in their 20s are borrowers, they're concerned about lending products—credit and, in their late 20s, perhaps mortgages. Young people also are champions of new technology, so they'll apply for their mortgages online. This means the way products are presented to the marketplace matters. If you're offering lending products, you want them online.

People in their 30s and 40s are trying to keep their debt under control and gradually pay it back, so asset management is important. In their 50s, it's asset accumulation that matters. People in this age group may go quite risky in their portfolios because they're trying to get capital gains; they don't need income yet because they haven't retired. In their 60s, they want to generate income from their investments, so investments that pay dividends become important. In their 70s, they look for fixed-income investments because they want to minimize risk.

These are the types of financial instruments individuals need in various stages of the life cycle. The number of people in each of those stages determines the trends of the entire industry.

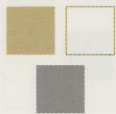
**I&WM:** You said European countries have much lower fertility rates than the United States. What about Asia?

**David Foot:** China has a one-child policy. Its fertility rate is 1.6; that's half a child less than in the United States. The big question for the Chinese is will they get old before they get rich or will they get rich before they get old? The Chinese government knows it has a huge retirement-funding problem. It's even trickling down to rural land reform. One of the issues being discussed is whether farmers will be allowed to own some land or at least have rights to rental land so they can use that income for retirement.

The fertility rate in Japan is 1.3. Japan is probably the most rapidly aging country in the world; its population has been declining for the past five years. It's a power of the past, not of the future. In India, people are having 2.8 children per family. There are lots of young people and not enough jobs, so India's challenge is whether it will have the resources to handle its growing population. The fertility rate is under control in Thailand. It's not under control in the Philippines. The populations in Korea and Taiwan are aging dramatically; their fertility rates are down to 1.3, below Europe.

**I&WM:** What about fertility rates in the Middle East?

**David Foot:** The fertility rate in Afghanistan is 6.8 children per family; in Iraq it's around 4.6; in Pakistan it's 4.0 children per family. These are countries where women are generally less educated. Saudi Arabia also is in real trouble.



## FEATURE

Its women are not getting sufficient education, it has a huge population under the age of 20, and jobs are scarce. The only Middle Eastern country with a low fertility rate is Iran.

**I&WM:** Do low fertility rates put a lot of stress on economic growth?

**David Foot:** Why do you want economic growth? Economic growth pollutes the planet. So long as economic growth is faster than population growth, per capita incomes go up. A country can have negative economic growth and still be getting richer. When population growth slows down, economic growth can slow down—and we won't have such a devastating effect on the world.


**I&WM:** Are any of the major business schools focusing on this way of viewing economics?

**David Foot:** Absolutely not. Business schools, like the business community in North America, are short-term oriented. Demographic trends unfold over three to 10 to 15 years, so a person responsible for producing immediate economic returns for a corporation is not going to look at demographics. The short-term reward system we've given North American business leaders and politicians means they seldom take account of demographics.

**I&WM:** Is there any country in which politicians and business leaders understand and use demographic data?

**David Foot:** I see bits of evidence that the Chinese are doing this today. Japan is very aware of its aging population. In Europe, there is wide awareness of changing demographics but not a lot of action. In North America, we give our business leaders annual bonuses; they think one year at a time. Our politicians are elected in short electoral cycles; they think no more than two or three years at a time. But if you keep ignoring demographic trends, they catch up with you.

**I&WM:** What other thoughts would you like to leave us with?

**David Foot:** We need more long-term thinking. We keep having short-term crises and coming up with short-term solutions. That's what's happening now with the bailout for Wall Street. A short-term solution was required to get liquidity back in the system, but we've got to start thinking long-term. Demographics provide a foundation—not the only one but one of the best ones—for clear, analytical, number-based, long-term thinking. 

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