Foreword: The Upside of Aging

*The economic benefits far outweigh the challenges that come with an aging society. The extension of life, and the extension of healthy life, are positive developments to be celebrated, not feared. Their impact will be an economic boon, not a drag.*

What does it mean to be old? We each have our own definition, but we probably agree that the chronological ages that used to define “elderly” are increasingly irrelevant. I’ve had many friends and colleagues who did their most important work in their 80s and 90s. Unfortunately, I’ve also lost far too many family members and dear friends to disease before they had a chance to experience full lives.

When my father was diagnosed and treated for melanoma in the mid-1970s, the doctors thought they had caught the cancer before it spread. A few years later, however, the disease recurred, and by the time it was discovered, the prognosis was terminal. I took Dad to cancer centers around the country and consulted with leading physicians and researchers before it became frustratingly clear that medical science didn’t have a solution. So I moved my family from the East Coast back to California to give my kids and their grandfather a chance to know each other. Dad passed away 10 months later.

In 1993, I was diagnosed with advanced prostate cancer and given 12 to 18 months to live. It was devastating to think that the family continuity I sought after my
father’s diagnosis now seemed impossible. There probably would be no chance to see my kids get married and start families of their own.

But the science had improved by then, and I drew upon the network of cancer researchers the Milken Family Foundation had assembled throughout the 1980s. In addition to standard therapies, I consulted nutritionists, eliminated meat from my diet, consulted Eastern medicine, and practiced yoga. There were a lot more tools to draw upon than when my father was diagnosed.

If my father’s cancer had occurred in 1993, he may have survived. Had I received my diagnosis in 1974, I may not have. The great news for my generation is that medical science advanced remarkably in the interim, and it’s moving faster today than ever.

We’re transforming what it means to be “old,” in terms not only of how we perceive aging, but also how we experience it. The personal and social benefits of living longer are priceless, and the economic benefits far outweigh the challenges that come with an aging society. The extension of life, and the extension of healthy life, are positive developments to be celebrated, not feared, and their impact will be an economic boon, not a drag.

_The Greatest Achievement in Human History_
Over the past two centuries – by far the most prosperous 200 years in human history – at least half of all economic growth can be attributed to advances in public health and medicine that led to longer, healthier lives. To understand just how much life improved in the 20\textsuperscript{th} century alone, consider the life of Jiroemon Kimura, whose name you may recognize from news stories.

Born in a western Japanese fishing village in 1897, Mr. Kimura is among a very small group of people who lived through the entire 20\textsuperscript{th} century. He witnessed some of the greatest advances and most transformational inventions in human history: horseless carriages, Marconi’s radio blast across the Atlantic, the Wright brothers’ first flights, the theory of relativity, Fleming’s discovery of penicillin, the exploration of DNA, Salk’s vaccine, Sputnik, heart transplants, man’s first steps on the moon, personal computers, MRIs, cell phones, the Internet, and … the list could go on for pages.

Kimura himself accomplished something remarkable: He was recognized by Guinness World Records as the oldest man in recorded history and was the oldest living person on the planet until he passed away at age 116. He attributed his longevity to good nutrition – light and healthy meals – and he stayed active long after his 1962 retirement from the post office, working on his son’s farm.
But of all the advances during his life, Kimura participated in what is perhaps the greatest achievement in the history of civilization: the doubling, in less than one century, of average life spans around the globe.

When Kimura was born, worldwide life expectancy at birth was 31 years. It’s now 70. The United States went from 47 to 79 years. When people pine for the “good old days,” they take for granted just how much things have improved – most notably that we live longer, healthier and more productive lives.

“*What a Drag Thrill It Is Getting Old*”

A few years ago, on a sunny Los Angeles morning, I drove up the winding, tree-shaded driveway of my longtime friend Kirk Kerkorian. We were scheduled to play doubles tennis, but I was running late. By the time I arrived, he had found a replacement player to fill my spot. It was a remarkable scene: four players on the court with a combined age of 358 years! Kirk looked young, especially for a 90-year-old. Over lunch, we talked about how playing in their 80s and 90s was different from playing when they were younger. “The guys we play against are thinner these days,” one of them told me, and the others agreed – most of their heavier friends had died years ago. I also noticed that all four men had full, thick heads of hair, but I choose to believe that’s unrelated to their longevity.

Kirk and his friends are an anomaly for that generation. But they represent the promise of what many in my generation will realize – a vibrant, active and
productive life well into their ninth and tenth decades. The late Robert Fogel, a
Nobel laureate at the University of Chicago, told me a few years ago that \textit{average}
life spans in the developed world will easily exceed 100 within the current century.
In fact, it’s probable that the first person who will live to be 150 has already been
born. There’s always seemed to be a natural limit to human life, but with advances in
genomics, immunology, stem cells, and organ “printing” and transplants, that limit
may be much higher than previously thought.

At a recent Milken Institute Global Conference, Dr. Robert Butler of the Alliance for
Health and the Future, pointed out that in terms of health, a 60-year-old woman is
equivalent to a 40-year-old in 1960. Today’s 80-year-old American man is similar to
a 60-year-old as recently as 1975.

To see those numbers come to life, look no further than the Rolling Stones, who
recently celebrated their 50\textsuperscript{th} anniversary. If you’re able to see them in concert, pay
attention to the front rows, with attendees in their 60s and 70s dancing like crazed
teenagers. This sight is as inspirational for those of us over 60 as it is unsettling for
our grandkids.

Advertisers and the media have taken note and updated how they portray older
people. (As well they should: By 2017, nearly half the U.S. population will be over
50 and will control 70 percent of disposable income. This is a population that doesn’t
want to be called “old.”) In the late 1980s, LifeCall’s commercials featured a
capsized woman, next to her walker, moaning: “I’ve fallen and I can’t get up!”

Today, Cialis asks the male segment of her age cohort: “When the moment is right, will you be ready?”

Ron Howard’s 1985 film “Cocoon” featured Wilford Brimley as the lead actor and part of a group of retirement home residents who were visited by aliens. Brimley was 51 when the movie was released. Imagine a reprisal of that role today by Tom Cruise, Jim Carrey, Steve Carell, or Matthew Broderick – all of whom turned 51 in 2013.

At a conference a few years ago, I estimated the median attendee age was about 35. As a speaker, whatever concern I had about the age gap was allayed when I saw the entertainment: Bob Dylan; Rod Stewart; and Crosby, Stills and Nash. I was the youngest person on stage that night.

**The Long View: Never Underestimate Human Ingenuity**

The Milken Institute has focused on aging for the past several years. One of my favorite panels remains the 2009 discussion called “Life After 80: Always Looking Forward,” featuring five prominent octogenarians. All the panelists were still active in business and philanthropy. Jim Pattison, chairman of the Jim Pattison Group, who was 80 at the time, said that “retirement is not in the cards.” (True to his word, he remains chairman of his company as I write this.) For most of the panelists, social
interaction was important, too – they echoed the finding that people with more friends live longer. Diet and exercise were also common themes.

While the benefits of extended life spans are undeniable, developed nations also need to make economic adjustments. When America’s Social Security system was introduced in 1935, life expectancy was 61.7 years. It made sense for people to start collecting pension checks as early as age 62. As the program was expanding in the early 1950s, there were 17 workers supporting every beneficiary. By 2012, there were fewer than three workers, and that ratio is expected to drop closer to 2:1 by 2035.

The simplest solution to this challenge is to increase the age at which individuals become eligible for retirement benefits. Ideally, the retirement age should be indexed to average life expectancy. Such a policy shift is inevitable – not for political reasons, but because of simple math. We should summon the will to make this change now, not leave the problem to our children and grandchildren.

Another frequently cited challenge is the cost of health care. With an older global population, it’s reasonable to expect that the prevalence and cost of many diseases will increase. As one example, the World Health Organization (WHO) predicts that by 2050 more than 115 million people worldwide will suffer from dementia, up from 36 million in 2012. In addition, WHO predicts that the global cost of dementia,
currently $604 billion per year, will rise even faster than the prevalence, suggesting that by mid-century, dementia alone will be a $2 trillion challenge.

That outlook may grossly underestimate the potential of medical breakthroughs. In the 1950s, economists predicted that caring for polio patients in “iron lung hotels” would be economically ruinous. But then came the polio vaccine, which has saved the United States an estimated $800 billion since 1955. More recently, Oprah Winfrey told her talk show audience in 1987 that AIDS was expected to take the lives of up to one-in-five Americans by the early 1990s. That, of course, never happened, and researchers have since produced therapies that have transformed that disease from a virtual death sentence into a chronic condition for many patients. An AIDS-free generation may well be within sight.

While the challenges we face today may seem more complicated, the tools we’ll use to solve them are also much more powerful and sophisticated. Genomics provides one important example: The original sequencing of the human genome took 13 years and cost $3 billion; today it takes a few hours and the cost is approaching $1,000.

So while it’s possible that dementia will cost $2 trillion per year by 2050, advances in medical research and prevention have the potential to render that prediction wildly overstated. Don’t underestimate the ingenuity of humankind.

More Than Just a Number
John Adams took a dim view of aging. In his personal journal, our second President wrote: “The remainder of my days I shall rather decline, in sense, spirit, and activity. My season for acquiring knowledge is past.” He was 36 years old.

Adams had accomplished much as a lawyer by that young age and was well known throughout the colonies. He had already outlived the average global life expectancy, and conventional wisdom told him to retire to his farm for his remaining years. Fortunately, he decided to launch a three-decade encore career in nation-building that culminated, at age 61, when he took the presidential oath of office. In fact, he lived to age 90 – half a century after signing the Declaration of Independence.

Coincidentally, he passed away on July 4, 1826 – the same day as Thomas Jefferson, exactly 50 years after they signed the Declaration. That also happens to be exactly 120 years before the day I was born – July 4, 1946 – the first year of the postwar baby boom that lasted until 1964. My generation was the first to be told that one person could change the world, and I’m encouraged by how many of them are doing so.

In fact, many of the contributors to this book are boomers, and their work is influencing policy, creating a better understanding of the social and biological science of aging, and upending outdated stereotypes about what it means to grow older.
As this is written, I’m 67, as active as any time in my life, feeling great and looking forward to many more years of pursuing my personal and professional goals. But compared with some of my octogenarian and nonagenarian business colleagues, friends, and tennis partners, I’m still just a youngster. Age is more than just a number. It’s also about perception. The baby boomers are discovering the truth of the adage that you’re only as old as you feel.

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