

Falling Global Fertility Rates and the Implications for Investors

Ariana Chiu, Wealth Management Analyst

The world is concerned about Exhibit 2A. Over the last 70 years, the global fertility rate has more than halved, falling from nearly 5 births per female in 1950 to just 2.3 in 2023. According to the United Nations' (UN) latest estimates, one in four people worldwide resides in a country whose population has already peaked. In other words, it's only a matter of time before global fertility dips below the so-called "replacement rate," or the birth rate required to sustain population levels.

The anticipated consequences of demographic decline are manifold, ranging from shrinking workforces to higher deficits to slower economic growth, to name a few. Importantly, though, impacts won't be evenly distributed. While fertility rates are falling globally, the past, present and future of population growth varies dramatically by region and country. Below, we detail some of these geographic nuances and what they mean for investors.

Asia: At the forefront of the globe's population decline is East Asia, where falling fertility rates have set off alarm bells around the region. In 2023, South Korea's notoriously low birth rate fell further to 0.72—the lowest ever for a country in peacetime³ and a government-deemed "national emergency." Japan's population declined for the 15th consecutive year in 2023.⁴ Meanwhile, China's baby recovery since eliminating its one-child policy in 2015 has been abysmal, with annual births having fallen by more than half as of 2023.⁵

While events have catalyzed periods of depopulation in the past (think war, famine, etc.), for key countries in Asia, it's different this time (think better standards of living, shifting priorities among young women, and soaring childrearing costs). Government-sponsored efforts to incentivize marriage, reward childbearing, and boost immigration have yet to move the needle. For many Asian states, the macro stakes could not be higher. Stagnant or declining population growth ultimately entails a smaller labor force, lower productivity, higher pension and healthcare costs, and depressed consumption—all of which risk weaker company earnings and economic growth.

Outside of East Asia, the population picture appears less grim. India, having already surpassed China as the most populous country in the world, contains a working-age population projected to increase well into the 2040s.⁶ In the next 30 years, Pakistan's population will exceed that of the U.S. And within Southeast Asia, while countries like Singapore and Thailand are ageing rapidly, others including Indonesia and the Philippines will skew young for decades to come.

Europe: Immigration has supported recent population growth in the European Union (EU), driven in part by the ongoing war in Ukraine. However, immigration won't be enough to stave off the region's increasingly ageing population. Indeed, the EU's working-age population peaked in size 15 years ago—and is set to decline by another 18% between 2024 and 2050 (Exhibit 2B).³ More concerning still: by the end of this decade, the contribution of labor to GDP growth in the EU is expected to turn negative.⁷

Decades of low birth rates remain a headwind to the region. More women across Europe have chosen to forego having children, with the incidence of childlessness at least doubling in Italy, Spain, Portugal, Poland, and others across generations.⁸ Perhaps it's unsurprising, then, that EU births in 2023 registered below levels not forecast for another two decades, according to Eurostat data.

Of course, Europe's low fertility is not all bad news. It's a manifestation of better health, education and economic opportunities, particularly for women. Yet if the performance of Germany, Europe's largest economy, is any indication, fewer births and more retirees ultimately translate into worker shortages, sluggish productivity growth and deteriorating fiscal positions. Looking ahead, economic growth across Europe will depend on a country's

Investment Implications

Record-low fertility rates and rapidly ageing populations have driven social, economic and fiscal stress globally. We believe investors can benefit from allocating assets toward better demographic growth stories, namely U.S. Equities with near-term support from healthy immigration, consumer fundamentals, and record-high labor force participation.

³ "East Asia's Coming Population Collapse," Foreign Affairs, May 2024.

⁴ Japan's Internal Affairs Ministry.

⁵ Calculated from World Population Prospects 2024, United Nations, July 11, 2024.

⁶ Working-age population refers to population aged 15-64.

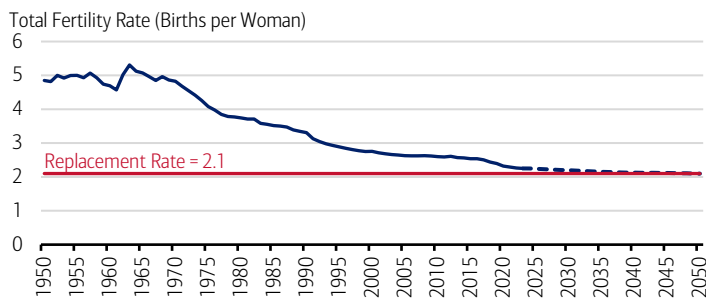
⁷ "2024 Ageing Report," European Commission, April 2024.

⁸ Compares fertility of women born in 1935 and 1975. See "Society at a Glance 2024," Organisation for Economic Co-operation and Development, June 20, 2024.

ability to retain ageing workers in the labor force, spur female labor force participation, assimilate immigrants, and invest in innovation.

Exhibit 2: Amid the Decline in Global Fertility Rates, Leaders and Laggards Emerge.

A) The Global Fertility Rate Has Fallen



B) Who Leads in the Demographic Olympics?

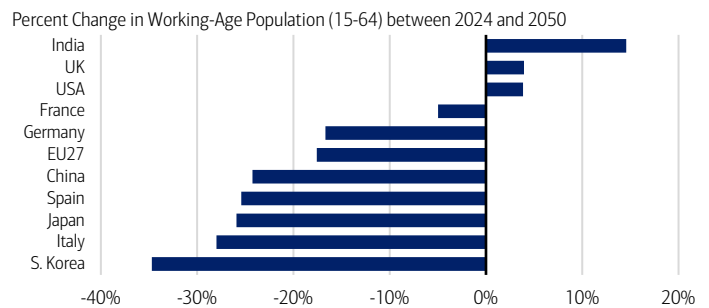


Exhibit 2A) Dotted line = projection. Source: UN World Population Prospects 2024. Data as of August 2024. Exhibit 2B) Source: UN World Population Prospects 2024. Data as of August 2024.

Africa: When it comes to population growth, Africa remains well ahead of the rest of the world, still boasting an aggregate fertility rate north of 4 births per female. Last year, 35% of global births took place in Africa, nearly double the percentage in 1990.³ By 2050, UN projections suggest the continent will be home to one out of every four people on Earth.

Africa's advantage, in other words, lies in its expanding—and young—population. Less than 4% of the continent's population is aged 65 or older, compared to 20% in Europe, 18% in North America, and 10% in Asia.³ Unlike most parts of the world, Africa contains a massive surplus of potential future workers and consumers—nearly 700 million people under the age of 18, to be sure, and set to expand for decades to come.

Yet it remains to be seen how the proverbial demographic dividend will play out in Africa. On the one hand, improvements in education and technology can help mobilize youth, driving labor force participation and more sustainable economic growth. More likely, however, a burgeoning young population may complicate already persistent poverty, political instability, and climate costs.

The U.S.: As we detailed last month, births in the U.S. fell to a record low of 3,591,328 in 2023, down 2% from the prior year. Better education, easily available contraception and career opportunities for women have contributed to America's declining fertility rate, which reached 1.62 last year. Another important driver has been a sharp decline in teen births in the U.S., with teen births accounting for just 3.9% of total births in 2023, down from 17.3% in 1970 per the Centers for Disease Control and Prevention.

At the same time, like developed countries across Asia and Europe, the U.S. is facing an actively ageing population. According to the Census Bureau, the population at or above the age of 65 in the U.S. grew from 2010-2020 at its fastest pace since 1880-1890. As such, core outlays of the U.S. government, including Medicare, Medicaid and Social Security, are expected to only expand from here.

Still, there's good news. America's workforce remains robust, particularly when compared to the country's wealthy counterparts. UN estimates suggest the working-age population in the U.S. won't begin to decline for another 40+ years, thanks in part to healthy immigration. Additional near-term supports include healthy spending among baby boomers and a female labor force participation rate which remains at all-time highs.

Investment Implications: Babies Matter. We believe the gradual and glacial global population unwind is one of the most important secular trends of today. The one-two punch of record-low fertility rates and rapidly ageing populations has triggered social, economic and fiscal stress around the world. As Paul Morland notes in his book, "we are seeing the birth pangs of a new epoch, but it's an epoch without birth pangs."⁹ This unfolding new era will create leaders (notably the U.S. and India, in our opinion) and potential laggards (Europe and many parts of Asia). And remember: A nation's population is a key determinant of its labor force, which, in turn, is a key driver of economic growth and corporate earnings. In terms of portfolio construction, asset allocation in the years ahead will likely tilt toward the more demographically enabled, and toward labor-enhancing sectors like technology and AI-driven innovation.

⁹ "No One Left: Why the World Needs More Children", Paul Moreland, July 2024.

The Reports of the Death of the 60/40 Portfolio Are Greatly Exaggerated

Matthew Diczok, Managing Director and Head of Fixed Income Strategy

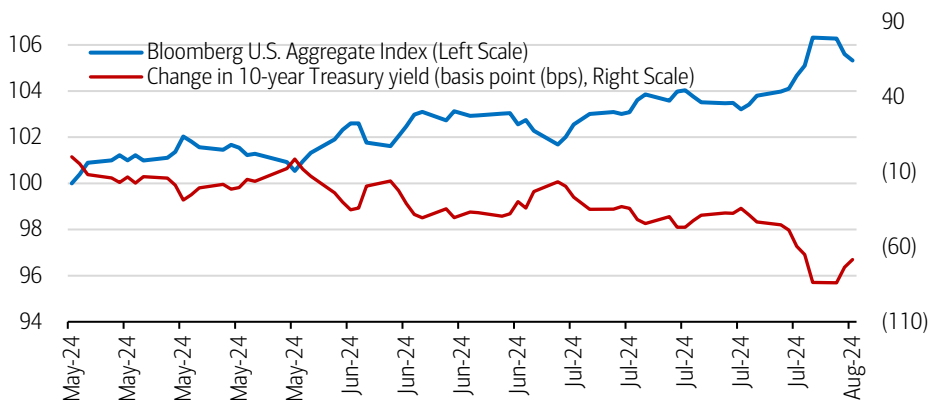
The post-pandemic era witnessed one of the worst bond bear markets of all time. From peak valuations in 2020 until the nadir in 2022, high-quality bonds returned a -18.4% total return. This was not due to inherent flaws in Fixed Income, however, in our opinion. It was rather the unapologetic reality of bond math. An old bond adage tells us, “there are no bad bonds—only bad prices.” That was certainly the case in 2020: The 10-year Treasury wasn’t a “bad bond” —it was almost certain to deliver all its payments on time—but at its lowest yield of 0.51%, it certainly wasn’t at a great price. The consequent inflation shock drove bond prices much lower, as interest rates increased significantly.

That reminds us of Mark Twain’s admonition to learn from an experience only specifically what it teaches us; “lest we be like the cat that sits on a hot stove-lid. She will never sit down on a hot stove-lid again—and that is good; but also she will never sit on a cold one anymore.”

Many investors—burned by the hot stove-lid of longer duration bonds at extremely low yields—remained cautious on bonds even as those stove lids cooled dramatically as yields rose. There was serious debate about 60% Equity/40% Bond portfolios being irrelevant, bonds no longer serving as diversifiers in a balanced portfolio, higher deficits causing persistently high rates, and recommendations to replace bonds with other assets in a portfolio.

We were careful not to draw similar conclusions. We continued to suggest high quality Fixed Income as the cornerstone of a diversified portfolio to balance out equity risk, and counseled increasing duration as rates rose. Recent market action has been very instructive. A massive Equity sell-off coincided with strong Fixed Income performance; from July 1 until August 2, high-quality Fixed Income returned around 4.5% in total return—measured by Bloomberg U.S. Aggregate Index. At the higher nominal and real yields over the last 12 months—some of the highest in 20 years—we remained convinced that Fixed Income was priced to perform its role adequately: delivering steady, predictable and reliable income, while potentially able to increase in price if Equity or macro risk increased dramatically. While we are more cautious on expecting further price increases from here—and may see bond prices decline, as risk stabilizes—we do believe this recent episode of volatility validates to “stay the course” in maintaining significant exposure to Fixed Income at current valuation levels.

Exhibit 3: Duration Has Been A Positive Contributor To Fixed Income Performance.



Equities

	Total Return in USD (%)			
	Current	WTD	MTD	YTD
DJIA	39,497.54	-0.6	-3.3	6.0
NASDAQ	16,745.30	-0.2	-4.8	12.0
S&P 500	5,344.16	0.0	-3.2	13.0
S&P 400 Mid Cap	2,935.55	-0.4	-5.2	6.5
Russell 2000	2,080.92	-1.3	-7.7	3.5
MSCI World	3,447.75	0.0	-3.4	9.8
MSCI EAFE	2,283.64	-0.3	-4.0	4.0
MSCI Emerging Markets	1,063.43	0.3	-1.9	5.8

Fixed Income†

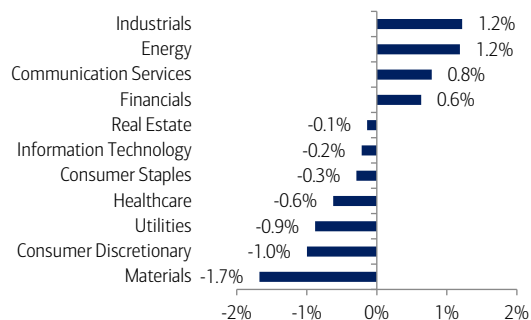
	Total Return in USD (%)			
	Current	WTD	MTD	YTD
Corporate & Government	4.41	-0.79	0.70	2.26
Agencies	4.42	-0.43	0.53	2.87
Municipals	3.49	-0.44	0.51	1.01
U.S. Investment Grade Credit	4.51	-0.82	0.74	2.36
International	5.08	-0.76	0.43	2.32
High Yield	7.66	0.25	-0.05	4.52
90 Day Yield	5.21	5.17	5.28	5.33
2 Year Yield	4.05	3.88	4.26	4.25
10 Year Yield	3.94	3.79	4.03	3.88
30 Year Yield	4.22	4.11	4.30	4.03

Commodities & Currencies

	Total Return in USD (%)			
	Current	WTD	MTD	YTD
Commodities				
Bloomberg Commodity	226.55	0.9	-0.8	0.0
WTI Crude \$/Barrel††	76.84	4.5	-1.4	7.2
Gold Spot \$/Ounce††	2431.32	-0.5	-0.7	17.9

	Total Return in USD (%)			
	Current	Prior Week End	Prior Month End	2022 Year End
Currencies				
EUR/USD	1.09	1.09	1.08	1.10
USD/JPY	146.61	146.53	149.98	141.04
USD/CNH	7.17	7.16	7.23	7.13

S&P Sector Returns



Sources: Bloomberg; Factset. Total Returns from the period of 8/5/2024 to 8/9/2024. †Bloomberg Barclays Indices. ††Spot price returns. All data as of the 8/9/2024 close. Data would differ if a different time period was displayed. Short-term performance shown to illustrate more recent trend. **Past performance is no guarantee of future results.**

Economic Forecasts (as of 8/9/2024)

	2024E	Q1 2024A	Q2 2024A	Q3 2024E	Q4 2024E	2025E
Real global GDP (% y/y annualized)	3.2	-	-	-	-	3.3
Real U.S. GDP (% q/q annualized)	2.7	1.4	2.8	2.5	2.0	2.2
CPI inflation (% y/y)	2.9	3.2	3.2	2.7	2.5	2.2
Core CPI inflation (% y/y)	3.4	3.8	3.4	3.2	3.1	2.7
Unemployment rate (%)	4.0	3.8	4.0	4.1	4.1	4.1
Fed funds rate, end period (%)	4.88	5.33	5.33	5.13	4.88	3.88

The forecasts in the table above are the base line view from BofA Global Research. The Global Wealth & Investment Management (GWIM) Investment Strategy Committee (ISC) may make adjustments to this view over the course of the year and can express upside/downside to these forecasts. Historical data is sourced from Bloomberg, FactSet, and Haver Analytics. **There can be no assurance that the forecasts will be achieved. Economic or financial forecasts are inherently limited and should not be relied on as indicators of future investment performance.**

A = Actual. E/* = Estimate.

Sources: BofA Global Research; GWIM ISC as of August 9, 2024.

Asset Class Weightings (as of 8/6/2024)

Asset Class	CIO View		
	Underweight	Neutral	Overweight
Global Equities	●	●	●
U.S. Large Cap Growth	●	●	●
U.S. Large Cap Value	●	●	●
U.S. Small Cap Growth	●	●	●
U.S. Small Cap Value	●	●	●
International Developed	●	●	●
Emerging Markets	●	●	●
Global Fixed Income	●	●	●
U.S. Governments	●	●	●
U.S. Mortgages	●	●	●
U.S. Corporates	●	●	●
International Fixed Income	●	●	●
High Yield	●	●	●
U.S. Investment-grade Tax Exempt	●	●	●
U.S. High Yield Tax Exempt	●	●	●
Cash	●	●	●

CIO Equity Sector Views

Sector	CIO View		
	Underweight	Neutral	Overweight
Energy	●	●	●
Healthcare	●	●	●
Consumer Discretionary	●	●	●
Industrials	●	●	●
Information Technology	●	●	●
Communication Services	●	●	●
Financials	●	●	●
Real Estate	●	●	●
Utilities	●	●	●
Materials	●	●	●
Consumer Staples	●	●	●

CIO asset class views are relative to the CIO Strategic Asset Allocation (SAA) of a multi-asset portfolio.

Source: Chief Investment Office as of August 6, 2024. All sector and asset allocation recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be in the best interest of all investors.

Index Definitions

Securities indexes assume reinvestment of all distributions and interest payments. Indexes are unmanaged and do not take into account fees or expenses. It is not possible to invest directly in an index. Indexes are all based in U.S. dollars.

S&P 500 Index is a market-capitalization-weighted index that is widely regarded as the best single gauge of large-cap U.S. equities. The index includes 500 leading companies and covers approximately 80% of available market capitalization.

Bloomberg U.S. Aggregate Index is a broad base, market capitalization-weighted bond market index representing intermediate term investment grade bonds traded in the United States. Investors frequently use the index as a stand-in for measuring the performance of the US bond market.

Important Disclosures

Investing involves risk, including the possible loss of principal. Past performance is no guarantee of future results.

This material does not take into account a client's particular investment objectives, financial situations, or needs and is not intended as a recommendation, offer, or solicitation for the purchase or sale of any security or investment strategy. Merrill offers a broad range of brokerage, investment advisory (including financial planning) and other services. There are important differences between brokerage and investment advisory services, including the type of advice and assistance provided, the fees charged, and the rights and obligations of the parties. It is important to understand the differences, particularly when determining which service or services to select. For more information about these services and their differences, speak with your Merrill financial advisor.

Bank of America, Merrill, their affiliates and advisors do not provide legal, tax or accounting advice. Clients should consult their legal and/or tax advisors before making any financial decisions.

This information should not be construed as investment advice and is subject to change. It is provided for informational purposes only and is not intended to be either a specific offer by Bank of America, Merrill or any affiliate to sell or provide, or a specific invitation for a consumer to apply for, any particular retail financial product or service that may be available.

The Chief Investment Office ("CIO") provides thought leadership on wealth management, investment strategy and global markets; portfolio management solutions; due diligence; and solutions oversight and data analytics. CIO viewpoints are developed for Bank of America Private Bank, a division of Bank of America, N.A., ("Bank of America") and Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S" or "Merrill"), a registered broker-dealer, registered investment adviser and a wholly owned subsidiary of Bank of America Corporation ("BoFA Corp.").

The Global Wealth & Investment Management Investment Strategy Committee ("GWIM ISC") is responsible for developing and coordinating recommendations for short-term and long-term investment strategy and market views encompassing markets, economic indicators, asset classes and other market-related projections affecting GWIM.

BoFA Global Research is research produced by BoFA Securities, Inc. ("BoFAS") and/or one or more of its affiliates. BoFAS is a registered broker-dealer, Member SIPC and wholly owned subsidiary of Bank of America Corporation.

All recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be in the best interest of all investors.

Asset allocation, diversification and rebalancing do not ensure a profit or protect against loss in declining markets.

Investments have varying degrees of risk. Some of the risks involved with equity securities include the possibility that the value of the stocks may fluctuate in response to events specific to the companies or markets, as well as economic, political or social events in the U.S. or abroad. Small cap and mid cap companies pose special risks, including possible illiquidity and greater price volatility than funds consisting of larger, more established companies. Investing in fixed-income securities may involve certain risks, including the credit quality of individual issuers, possible prepayments, market or economic developments and yields and share price fluctuations due to changes in interest rates. When interest rates go up, bond prices typically drop, and vice versa. Treasury bills are less volatile than longer-term fixed income securities and are guaranteed as to timely payment of principal and interest by the U.S. government. Bonds are subject to interest rate, inflation and credit risks. Investments in foreign securities (including ADRs) involve special risks, including foreign currency risk and the possibility of substantial volatility due to adverse political, economic or other developments. These risks are magnified for investments made in emerging markets. Investments in a certain industry or sector may pose additional risk due to lack of diversification and sector concentration. There are special risks associated with an investment in commodities including market price fluctuations, regulatory changes, interest rate changes, credit risk, economic changes and the impact of adverse political or financial factors. Investing directly in Master Limited Partnerships, foreign equities, commodities or other investment strategies discussed in this document, may not be available to, or appropriate for, clients who receive this document. However, these investments may exist as part of an underlying investment strategy within exchange-traded funds and mutual funds.

Nonfinancial assets, such as closely-held businesses, real estate, fine art, oil, gas and mineral properties, and timber, farm and ranch land, are complex in nature and involve risks including total loss of value. Special risk considerations include natural events (for example, earthquakes or fires), complex tax considerations, and lack of liquidity. Nonfinancial assets are not in the best interest of all investors. Always consult with your independent attorney, tax advisor, investment manager, and insurance agent for final recommendations and before changing or implementing any financial, tax, or estate planning strategy.

© 2024 Bank of America Corporation. All rights reserved.