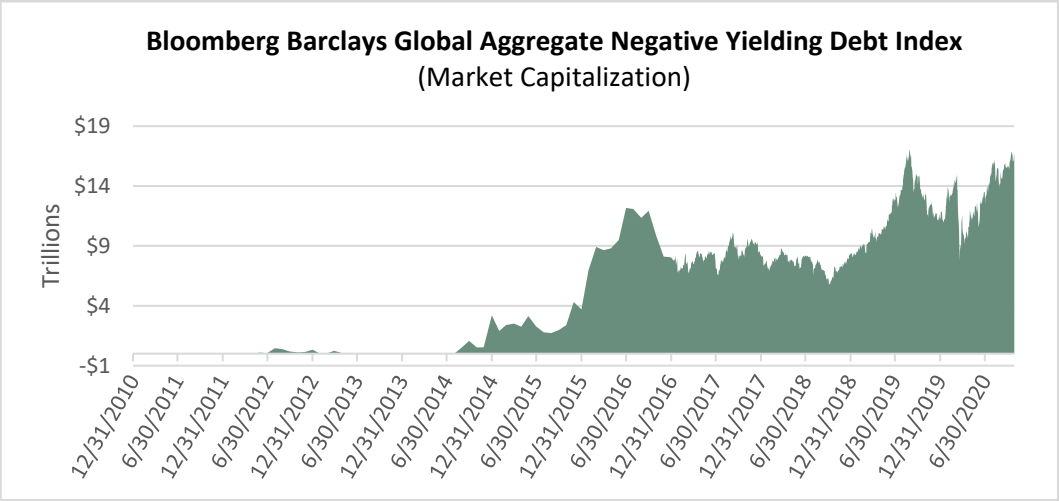
Negative Yields

And Why They are (Still) Unlikely to Happen in the U.S.

Imagine a world where lenders pay you to borrow money, debt service on a mortgage is structured so you pay back less than the amount borrowed, and bank deposits cost you money rather than earn you money. Even before the pandemic this was the new normal for a number of developed economies currently implementing Negative Interest Rate Policies ("NIRP") in order to spur growth and reduce recessionary pressures. In many cases the detrimental economic fallout from the pandemic has increased the likelihood that NIRP will be a tool used by global central banks for years to come. The paradigm shift ushered in by NIRP across the globe has grown considerably. The unprecedented growth of negative yielding debt, as well as the economic challenges presented by COVID-19, has left many investors wondering if negative yields are coming to the United States as a Federal Reserve ("Fed") policy decision, with the U.S. being one of the last developed economies continuing to eschew negative rates altogether. In fact, from a secondary market standpoint they already did, as rates on U.S. Treasury bills turned negative on March 25th; but so far, the event was short-lived and turned out to be measured in days. Although we believe negative U.S. yields are not probable, it is certainly not an impossible scenario that the Fed could use the tool should the pandemic take a turn for the worse causing additional lockdowns with corresponding economic damage. (Nevertheless, the key word in the title of this article remains "Unlikely").

How Widespread Are Negative Rates?

Global economic uncertainty made investors so fearful of the future that global negative interest rate debt expanded to approximately $17 trillion before the pandemic, and after a small decrease, recently climbed to the same level, according to a recent Bloomberg report.



Source: Bloomberg

In Germany, the Eurozone's largest economy, the entirety of their yield curve is negative, and at the time of this writing, the German bund was trading at -0.64% vs the U.S. 10-year Treasury at +0.84%. As the chart below depicts, once viewed as an aberration, negative yields are now commonplace on a global scale. Focusing on the world's advanced economies of Japan, Germany and France as of November 2nd, these three countries alone represent 69% of global negative debt.

Global Yields as of November 2, 2020

Region	2 Year	3 Year	5 Year	7 Year	10 Year	15 Year	30 Year
Switzerland	-0.862	-0.866	-0.787	-0.703	-0.570	-0.418	-0.360
Denmark	-0.715		-0.687		-0.525		
Germany	-0.812	-0.858	-0.828	-0.766	-0.641	-0.456	-0.234
Netherlands	-0.789	-0.792	-0.764	-0.685	-0.530	-0.454	-0.139
Finland	-0.831	-0.785	-0.727	-0.629	-0.455	-0.211	-0.066
Austria	-0.816	-0.795	-0.744	-0.659	-0.466	-0.206	0.065
France	-0.743	-0.752	-0.714	-0.591	-0.355	-0.194	0.339
Belgium	-0.771	-0.755	-0.718	-0.562	-0.400	-0.172	0.305
Sweden	-0.472		-0.426		-0.120	N.A.	
Portugal	-0.622	-0.546	-0.421	-0.197	0.088	0.443	0.790
Spain	-0.599	-0.551	-0.344	-0.181	0.118	0.430	0.920
Japan	-0.140	-0.142	-0.098	-0.082	0.035	0.238	0.636
Italy	-0.354	-0.278	0.167	0.394	0.745	1.079	1.590
Israel	0.080	0.170	0.360		0.856		1.840
United Kingdom	-0.083	-0.119	-0.082	0.015	0.215	0.451	0.784
Australia	0.106	0.113	0.273	0.492	0.819	1.110	1.770
New Zealand	-0.021		0.023	0.188	0.541	0.988	
Norway	0.176		0.404	0.562	0.683		
Canada	0.253	0.267	0.384	0.437	0.630		1.220
United States	0.156	0.194	0.373	0.617	0.840		1.616
Hong Kong	0.063	0.094	0.153	0.357	0.488		
Singapore	0.227		0.410		0.785	1.058	0.995
Iceland	1.700				3.030		

Source: Bloomberg; Global Yields data as of 11/2/2020

How Do Negative Interest Rates Work?

Negative Interest Rate policies are being implemented in order to stimulate slowing economies. Here's how it works: Commercial banks earn interest on reserves kept at a central bank such as the Fed, Bank of England, European Central Bank, or Bank of Japan. A commercial bank depositing reserves at a central bank that has implemented NIRP will find itself paying a fee to maintain those deposits rather than earning interest on their deposit. This is a penalty designed to discourage cash hoarding in the face of economic uncertainty and encourage banks to lend out these funds rather than hold them in reserve.

With longer-term debt such as bonds, negative rates start with buying a bond for a greater amount than its face value because demand has fueled its fair value. If the total amount of interest the bond pays over its remaining lifetime is less than the premium the investor paid for the bond, the investor loses money and

the return to the investor will be negative. Why would an investor do this?

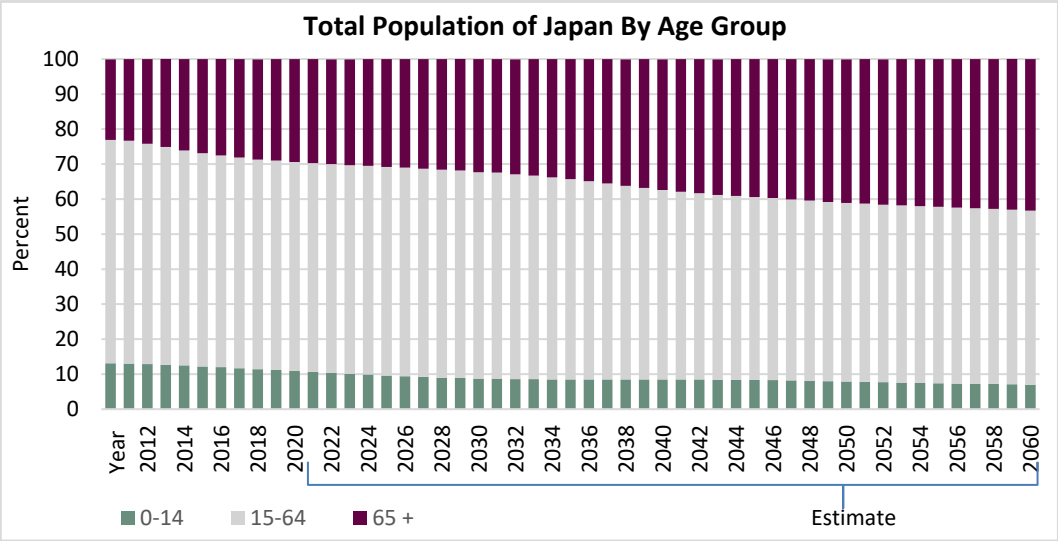
Large investors such as financial institutions, pension funds and insurers have minimal lower risk options from which to choose. A significant portion of the institutional money has guidelines to follow directing billions of dollars into bonds, whether their yield is negative or not. This "forced" allocation of investable funds is placing additional downward pressure on global yields. Money markets for example can typically invest in securities with final maturities up to 13 months. Currently, most of the euro market debt shorter than 13 months is negative yielding. Investors need returns, but many must balance this with a need, and sometimes, a requirement for liquidity.

There is an additional sought-after effect: Negative Interest Rate policies also tend to deflate currencies, which also stimulates the economy. For example, negative rates in Europe lowers demand for sovereign debt from European issuers. As a result, fewer investors will demand Euros needed to pay for European sovereign debt. While this may decrease the amount of financial capital flowing into European shores, it also causes the value of the Euro to fall, which has the effect of making European-manufactured goods to be more competitive on the global market.

How and why did we get here?

Numerous factors can be attributed to the current predicament of negative rates, but we will focus on what we believe to be the primary issues: *central bank policies, demographic factors, and technological influences.*

- **Central Bank Policies.** Central banks led by the European Central Bank (ECB) and the Bank of Japan have sought to stimulate economies through negative interest rate policies and bond purchases. In theory, negative interest rates should encourage lending by cutting borrowing costs and ultimately stimulating economic growth. Unfortunately, these policies have not yet achieved their objectives. In fact, it was over twenty years ago when Japan first cut interest rates to zero, followed ten years later by the U.S. and Europe during the financial crisis. Japan was the first major economic power to adopt a zero-interest rate policy, exceed 100% government debt - to-GDP, and experience an aging population and shrinking workforce. Unfortunately, these dynamics have resulted in lower inflation expectations in Japan, and slow to anemic economic growth. Now, major countries around the world seem to be following in Japan's footsteps inclusive of zero or negative interest rates, high debt and aging demographics.
- **Demographic Shift.** Japan isn't alone - many developed countries in the world are experiencing a significant demographic transition, with slower population growth, and an aging of the existing population. An aging population can have a significant impact on growth because aging populations tend to expand the "savers" vis-à-vis "spenders" who drive consumption. As a result, we are living in a world of weakening global aggregate demand and aging populations. Fewer "spenders" should assist in keeping inflation in check as the pressures on the supply-side are diminished. Demographic movements tend to be long-term, ultra-low and negative yields could be a challenge for economies world-wide for a long period of time.

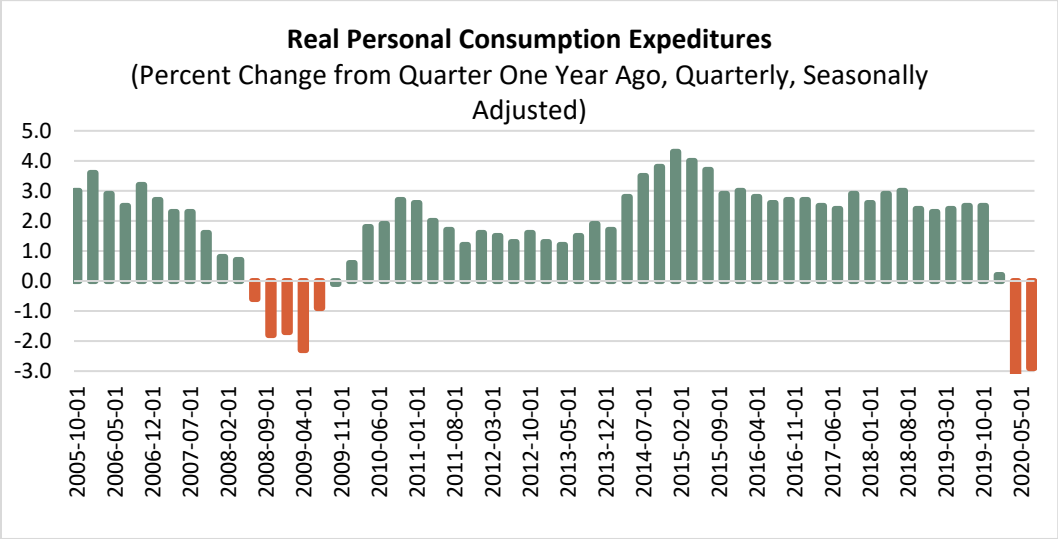


Source: National Institute of Population and Social Security Research

- **Technological Influences.** Technology might also be a factor in keeping inflation in check. We live in a world of increased production automation, growth of artificial intelligence (AI), and advancing automation delivery. Technological advances tend to increase competition and suppress wages, both of which lower costs. I know it typically takes me less than a minute to check the lowest available price on an item that I can have delivered the next day. In fact, Federal Reserve Chairman Jay Powell recently noted "technology may be playing a role" in keeping inflation subdued.

Are Negative Rates Coming to the U.S?

We continue to believe the short answer to this question is: Not Likely. Yes, markets could drive short-term Treasury yields into negative territory again, but we think the likelihood of negative yields occurring through Fed policy action or fixed income markets driving negative yields across the curve remains low. Although former Federal Reserve Chairman Alan Greenspan stated, "There is no barrier to U.S. Treasury yields going below zero", we think there are a number of factors that make negative yields in the U.S. less probable. To begin with, even with the detrimental effects of the global pandemic one can quickly point to the consumer sector in the United States, and its resilience. Consumption comprises approximately 67% of Gross Domestic Product in the United States, and its relative long-term strength (not withstanding COVID-19-related dislocations), continues to drive growth domestically. One could easily argue the fiscal support provided by the CARES Act was a key factor to this resilience, but we believe additional Fiscal support is likely to occur after the election and possibly before year end.



Source: Federal Reserve Economic Data

Demographically-speaking, the growth of the United States population is very different from Europe and Japan, where shrinking populations have resulted in diminishing labor force numbers. This has made strong economic growth elusive—the United States has avoided this problem thus far.

Another reason it would be unlikely that U.S. investors would have to contend with negative rates relates to Federal Reserve Open Market Committee (FOMC) preferences. In the past, rather than utilizing negative rates, the FOMC has implemented bond buying programs alongside of low interest rates to stimulate the economy, as they did during the great recession with quantitative easing. As we have witnessed with this crisis, Fed actions have been consistent with the aforementioned policies but this time they have included additional liquidity programs. In addition, after the Fed's emergency rate cut on March 15th, Fed Chair Jerome Powell stated that he didn't see negative rates as "an appropriate policy tool". More recently on October 6th, he said, "negative rates are not a tool that we see as something that we are looking to use" and "the evidence on negative rates is mixed".

It is very likely the FOMC wishes to avoid some of the pitfalls associated with NIRP. Among these are the propensity of bank profit margins to be squeezed by negative rate mortgages. Non-bank financial institutions like insurance companies and pension funds, which are mandated to maintain asset allocations that include fixed-income components, may struggle to meet their obligations. Lastly, there is very little NIRP can do to stop savers and investors from withdrawing reserves and keeping their cash in mattresses.

Although the crisis presented by COVID-19 does increase the probabilities the Fed might have to turn to a negative interest rates as a policy tool, we believe the likelihood remains low. Negative interest rate policies in other developed countries have failed to achieve their desired goals of economic growth. In the U.S. we have the benefit of learning from the ineffective policies of others. If we are perceptive students of history, we can avoid the same pitfalls.

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Questions?

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