Market Bulletin

September 11, 2019

Entering uncharted waters: Understanding negative bond yields

In brief

- Fixed income markets have entered uncharted waters, with over USD 17trillion of debt trading with a negative yield.
- The concept of negative-yielding debt goes against most financial theories: any investor who holds the bond until maturity is guaranteed a loss. Despite this, appetite for these bonds remains.
- The growing amount of negative-yielding debt overseas is weighing on U.S. yields as Treasuries become the best house in a bad neighborhood.

The Handbook of Fixed Income Securities by Frank Fabozzi, widely considered to be one of the most trusted resources for bond investing, has no mention of negative yields in its 1,803 pages. And yet today, negative yields are pervasive around the developed world. In many ways, these are uncharted waters for bond markets. For investors, the arrival of negative yields may seem paradoxical, and many have questioned how something theoretically impossible can now be so widespread. In this paper, we address five of the most pressing questions on negative-yielding bonds and discuss their investment implications.

How do negative-yielding bonds work?

Negative-yielding bonds are theoretically nonsensical: an investor that purchased one and held it until maturity would effectively guarantee themselves a loss. But how does negative-yielding debt work in practice?

Alex Dryden, CFA
Vice President
Global Market Strategist

Negative-yielding bonds are not issued with a negative coupon, which would force the lender to pay a coupon to the borrower, a complex structural arrangement. Instead, negative-yielding bonds are issued with a zero or just-above-zero coupon, but their selling price is higher than face value.

To put this in more practical terms, let us consider a real-life example of a 30-year German bund. The bond was auctioned in August 2019 with a coupon of 0% and with a face value of EUR 100. However, at the initial auction the bond sold for EUR 103.61. As the price of the bond exceeded its face value, the bond effectively traded with a yield of -0.11%.

Who invests in negative-yielding bonds?

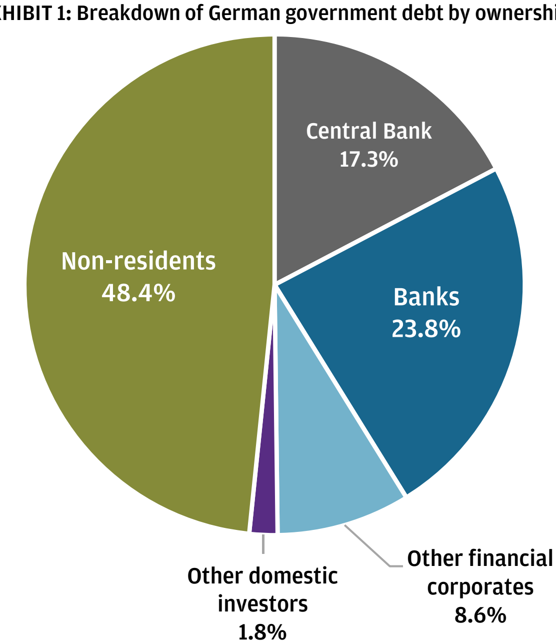
Ownership of negative-yielding debt can be broken down into two distinct groups: forced buyers and speculative investors.

Forced buyers are profit-agnostic: they are holding the bond for a reason other than making a profit. One example of a forced buyer is a central bank buying bonds in order to achieve asset purchase targets. In places like the eurozone and Japan, for instance, central banks own 21% and 48% of their own outstanding government debt, respectively.[1] Another example of a forced buyer is large financial institutions required to hold high-quality debt to meet capital requirements set by regulators.

Speculative investors, on the other hand, hold negative-yielding instruments in an attempt to profit off of price appreciation, but do not look to hold the bond to maturity. Investors like hedge funds and traders, for example, may attempt to buy a negative-yielding bond, assuming that yields may fall further, thereby making a small profit. Speculative investors can also include those holding negative-yielding debt because they are nervous and willing to pay the government for protection. In reality, this subset is likely to be quite small, as nervous but rational investors would likely prefer to hold other safe haven assets like gold rather than guarantee themselves a loss.

Unfortunately, there is no exact data series on the global ownership of negative-yielding debt. Instead, **Exhibit 1** identifies and quantifies debt ownership in one particular country: Germany. As all maturities of German government debt trade with a negative yield, we can use this as a proxy for estimating the positions of the different bond investors. In this instance, forced buyers of German debt include central banks, the domestic banking sector and other financial corporations like pension funds. By this definition, approximately 40%-50% of the holders of German government debt are forced buyers. The remaining 50% of debt holders are “non-residents,” and while a detailed breakdown is not available, this group likely includes hedge funds, sovereign wealth funds, traders, investment funds and pension funds. These holders are likely motivated by the potential for profit on falling yields.

EXHIBIT 1: Breakdown of German government debt by ownership



Source: Bruegel, J.P. Morgan Asset Management. Data are as of September 9, 2019.

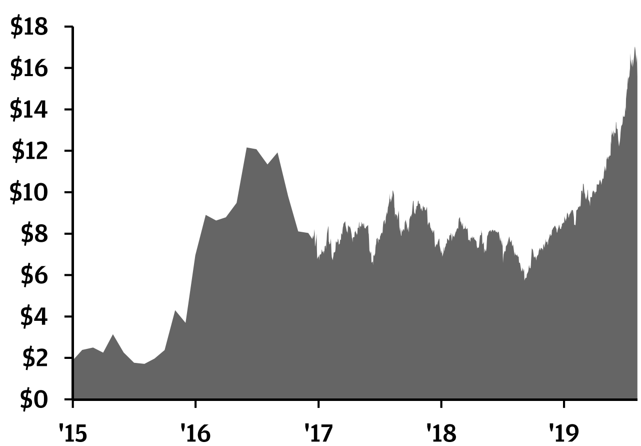
[1] For comparison, the U.S. Federal Reserve owns 14% of the U.S. Treasury market.

How much negative debt is there, and where is it?

As of September 2019, there was approximately USD 16.8trillion of global debt trading with a negative yield. As highlighted in **Exhibit 2,** this has risen by USD 7.2trillion so far this year. Negative-yielding debt is present in 19 different countries, including numerous European countries and Japan.[2] Over 90% of this USD 16.8trillion is government debt, meaning that nearly 40% of the developed market government bond market has a negative yield.

The corporate bond market has followed suit, though to a lesser degree, with over USD 1trillion of corporate debt trading with a sub-zero yield. Fascinatingly, 3.5% of the European high-yield index trades with a sub-zero yield.

EXHIBIT 2: Amount of negative-yielding debt
USD trillions



Source: Bloomberg, J.P. Morgan Asset Management. Data are as of September 9, 2019.

How did negative yields happen, and do they even work?

Unorthodox monetary policy in Europe and Japan, including the cutting of interest rates into negative territory and aggressive asset purchase schemes, resulted in negative-yielding debt across the yield curve. The European Central Bank (ECB) was the first central bank to explore negative interest rates in June 2014; other regional central banks followed suit thereafter.

It remains to be seen if negative interest rate policies (NIRP) succeed in stimulating economic activity. Traditionally, lower interest rates stimulate growth by encouraging borrowing. However, banks are unwilling to pass on negative interest rates to customers as it would be a cost to the bank; the extension of loans becomes a costly exercise for banks and pushes away depositors. Furthermore, negative interest rates act as a tax on banks that are forced to hold capital at the central bank to meet regulatory requirements. This may mean that in practice NIRP has done more harm than good.

Would U.S. bond yields ever go negative?

Now that the Federal Reserve (Fed) has begun to cut interest rates, investors are concerned that yields in the U.S. Treasury market may fall below 0% in the near future. As the jury remains out on the effectiveness of NIRP, it seems unlikely that Fed officials will follow their European and Japanese peers in the near future. Instead, should the Fed reduce interest rates back to their record lows of 0.25% and the economy requires further stimulus, the Fed will likely lean on the balance sheet to provide additional stimulus.

Nonetheless, even without the adoption of NIRP, it is not impossible for U.S. Treasury yields to fall below 0%. If the Fed were to cut interest rates to 0.25% and restart its bond purchase program, U.S. yields across the curve would likely move lower. If this were combined with weak outlooks for the economy and inflation, the resulting forces may be enough to drive Treasury yields into negative territory.

[2] Countries include Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Netherlands, Portugal, Slovakia, Slovenia, Spain, Sweden and Switzerland.

Even if bond yields in the U.S. don't turn negative, investors are likely to contend with lower U.S. bond yields for the foreseeable future. A growing amount of negative-yielding bonds overseas incentivize both international and U.S. investors to hold U.S. Treasuries as it essentially becomes the best house in a bad neighborhood.

Investment implications

- Unorthodox monetary policy in Europe and Japan has led to USD 16.8trillion of global debt trading with a negative yield. Negative yields exist in both the government and corporate bond space.
- Negative-yielding debt is theoretically impractical. Nonetheless, forced buyers (like central banks and financial institutions) and speculators will help maintain demand.
- Negative-yielding bonds overseas are weighing down yields in the U.S. However, without the adoption of NIRP by the Fed it is difficult, but not impossible, for bond yields in the U.S. to go into negative territory.

The Market Insights program provides comprehensive data and commentary on global markets without reference to products. Designed as a tool to help clients understand the markets and support investment decision-making, the program explores the implications of current economic data and changing market conditions.

For the purposes of MiFID II, the JPM Market Insights and Portfolio Insights programs are marketing communications and are not in scope for any MiFID II / MiFIR requirements specifically related to investment research. Furthermore, the J.P. Morgan Asset Management Market Insights and Portfolio Insights programs, as non-independent research, have not been prepared in accordance with legal requirements designed to promote the independence of investment research, nor are they subject to any prohibition on dealing ahead of the dissemination of investment research.

This document is a general communication being provided for informational purposes only. It is educational in nature and not designed to be taken as advice or a recommendation for any specific investment product, strategy, plan feature or other purpose in any jurisdiction, nor is it a commitment from J.P. Morgan Asset Management or any of its subsidiaries to participate in any of the transactions mentioned herein. Any examples used are generic, hypothetical and for illustration purposes only. This material does not contain sufficient information to support an investment decision and it should not be relied upon by you in evaluating the merits of investing in any securities or products. In addition, users should make an independent assessment of the legal, regulatory, tax, credit and accounting implications and determine, together with their own professional advisers, if any investment mentioned herein is believed to be suitable to their personal goals. Investors should ensure that they obtain all available relevant information before making any investment. Any forecasts, figures, opinions or investment techniques and strategies set out are for information purposes only, based on certain assumptions and current market conditions and are subject to change without prior notice. All information presented herein is considered to be accurate at the time of production, but no warranty of accuracy is given and no liability in respect of any error or omission is accepted. It should be noted that investment involves risks, the value of investments and the income from them may fluctuate in accordance with market conditions and taxation agreements and investors may not get back the full amount invested. Both past performance and yields are not reliable indicators of current and future results.

J.P. Morgan Asset Management is the brand for the asset management business of JPMorgan Chase & Co. and its affiliates worldwide.

To the extent permitted by applicable law, we may record telephone calls and monitor electronic communications to comply with our legal and regulatory obligations and internal policies. Personal data will be collected, stored and processed by J.P. Morgan Asset Management in accordance with our Company's Privacy Policy (https://www.jpmorgan.com/global/privacy). For further information regarding our local privacy policies, please follow the respective links: Australia (https://www.jpmorgan.com/country/AU/EN/privacy), EMEA (https://am.jpmorgan.com/us/en/asset-management/gim/mod/legal/external-privacy-policy), Japan (https://www.jpmorganasset.co.jp/wps/portal/Policy/Privacy), Hong Kong (https://am.jpmorgan.com/hk/en/asset-management/per/privacy-statement/), Singapore (http://www.jpmorganam.com.sg/privacy) and Taiwan (https://www.jpmrich.com.tw/wps/portal/Footer/Privacy).

This communication is issued by the following entities: in the United Kingdom by JPMorgan Asset Management (UK) Limited, which is authorized and regulated by the Financial Conduct Authority; in other European jurisdictions by JPMorgan Asset Management (Europe) S.à r.l.; in Hong Kong by JPMorgan Asset Management (Asia Pacific) Limited, or JPMorgan Funds (Asia) Limited, or JPMorgan Asset Management Real Assets (Asia) Limited; in Singapore by JPMorgan Asset Management (Singapore) Limited (Co. Reg. No. 197601586K), or JPMorgan Asset Management Real Assets (Singapore) Pte Ltd (Co. Reg. No. 201120355E), this advertisement or publication has not been reviewed by the Monetary Authority of Singapore; in Taiwan by JPMorgan Asset Management (Taiwan) Limited; in Japan by JPMorgan Asset Management (Japan) Limited which is a member of the Investment Trusts Association, Japan, the Japan Investment Advisers Association, Type II Financial Instruments Firms Association and the Japan Securities Dealers Association and is regulated by the Financial Services Agency (registration number "Kanto Local Finance Bureau (Financial Instruments Firm) No. 330"); in Australia to wholesale clients only as defined in section 761A and 761G of the Corporations Act 2001 (Cth) by JPMorgan Asset Management (Australia) Limited (ABN 55143832080) (AFSL 376919); in Brazil by Banco J.P. Morgan S.A.; in Canada for institutional clients' use only by JPMorgan Asset Management (Canada) Inc., and in the United States by J.P. Morgan Institutional Investments, Inc., member of FINRA; J.P. Morgan Investment Management, Inc. or J.P. Morgan Alternative Asset Management, Inc.

In APAC, distribution is for Hong Kong, Taiwan, Japan and Singapore. For all other countries in APAC, to intended recipients only.

Copyright 2019 JPMorgan Chase & Co. All rights reserved.

0903c02a826c00b9