US negative interest rates policy checklist

SIFMA Operations & Technology Committee | US Negative Interest Rates Readiness Working Group

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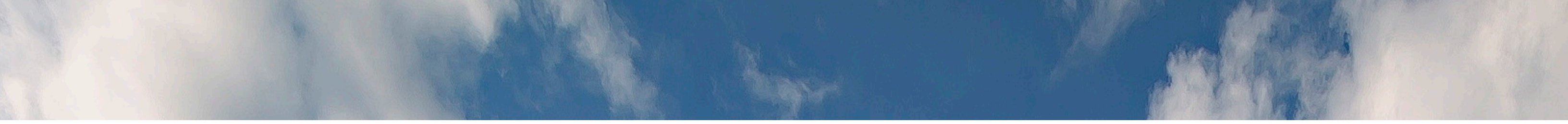

Introduction

The potential impact of a negative interest rate (NIR) policy in the US continues to be discussed by market participants. Federal Reserve Chairman Jerome H. Powell has previously stated that the US does not see negative interest rates as an appropriate policy response to economic disruption caused by the pandemic. However, the uncertainty of US economic recovery and the current 0% to 0.25% monetary policy target range for the federal funds rate continues to lead market participants to consider the future possibility of an NIR policy in the US.

SIFMA's Operations & Technology Committee has formed a US Negative Interest Rates Readiness Working Group (Working Group) that has developed a US NIR readiness checklist. The checklist was developed through discussions between Working Group members. The objective of the checklist is to assist SIFMA member firms with planning for the potential of a negative interest rate policy in the US, accelerate readiness, and mitigate the risk of disruption to business activities and investors.

This paper first describes how certain capital markets products may be impacted in the event of a US NIR policy, followed by a checklist of considerations that can be used by firms seeking to mobilize negative interest readiness programs within their institutions. The checklist is structured across the following key themes: US NIR program governance and mobilization; financial exposure analysis; contract and counterparty customer analysis; portfolio strategies and profitability; technology and operations; finance, tax and accounting; and regulatory and policy considerations.

Negative interest rate policy product-specific considerations

This paper focuses on impacts of a US NIR policy to capital markets products such as USD bonds and securitizations, repo and reverse repo transactions, derivatives and money market fund brokerage sweep accounts. These were selected by Working Group members as being generally aligned to the product focus of SIFMA members. While a US NIR policy would also have significant implications for other more traditional banking products such as loans and deposits, a discussion of those impacts is outside of the scope of this paper.

Bonds and securitizations

Floating Rate Notes such as those indexed to LIBOR or federal funds with low spreads may result in situations where the investor would potentially owe the issuer negative coupon payments in instances where coupons payments are not floored. Even in cases where coupons are not explicitly floored, there is the potential that issuers may not seek payments from bondholders due to anticipated legal challenges or the risk of decreased demand from investors for future issuances. Additionally, there is uncertainty as to the ability of market participants and clearing and settling infrastructure providers to calculate, track and process negative rate payments, contributing to the lack of certainty on how negative interest payments will be handled under an NIR environment. For securitized products, there is the added challenge of the potential mismatch in cash flows between the securitization collateral and issued notes.

Fixed rate notes do not face the challenges of having potential negative coupons, and new issuances are also not anticipated to have significant challenges. It is not likely that there would be demand for non-Treasury issuances, and US Treasury auction rules for bonds, notes and Treasury Inflation Protected Securities (TIPS) floor interest rates at 0.125% for fixed coupons and 0% for floaters.

Specifically, the US Treasury Auction Circular released in April 2011 states:

> Determining the interest rate for new note and bond issues: We set the interest rate at a ⅛ of one percent increment. If a Treasury note or bond auction results in a yield lower than 0.125 percent, the interest rate will be set at ⅛ of 1 percent, and successful bidders' award prices will be calculated accordingly.[1]

However, the floor is a matter of policy that could be changed by an Executive Order, or a change in the Secretary of the Treasury's guidance, rather than by law.

Repurchase "repo" and reverse repo transactions

The impact of NIR for repo and reverse repo transactions needs to be considered from both the perspective of the impact on the repo financing rate (repo rate) as well as the coupon payment associated with the security collateralizing the repo transaction.

Given that the repo rate is typically set based on a market benchmark interest rate, there is potential that repo rates could go negative if the US were to adopt an NIR policy. There is precedence of repo rates falling into negative territory in the US, but the driver historically has been high market demand of certain collateral (i.e., repo special issue trading). So, while operations and technology systems may have been tested and workarounds created for such events, additional challenges may arise if those solutions are not scalable or cannot handle large volumes of negative rate repos, as would be expected in an NIR environment.

During the tenor of the repo, the buyer is generally the beneficial owner of the collateral and is thus entitled to receive the coupons that may be paid by the issuer of the collateral. As such, the buyer will have to be aware of any floors or issuer expectations for payments of negative coupons and any of the related challenges to operationally process and settle negative coupons. Additionally, security lenders may consider revising schedules to exclude collateral with negative coupons, while borrowers may consider collateral optimization strategies to offset the impact of negative coupons.

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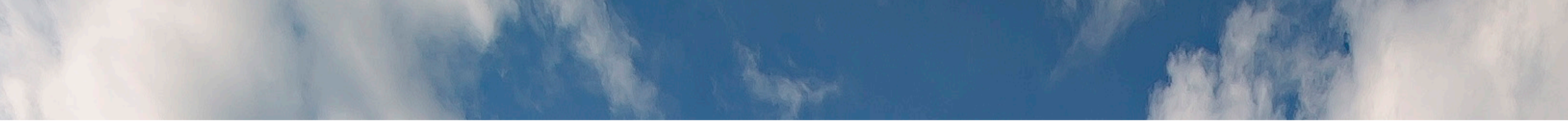
[1] **"Part 356–Sale and Issue of Marketable Book-Entry Treasury Bills, Notes, and Bonds (Department of the Treasury Circular, Fiscal Service Series No. 1-93)"**, *Fiscal Service, Treasury website*, https://www.treasurydirect.gov/instit/statreg/auctreg/31CFRPart356.pdf, accesssed October 26, 2020.



Derivatives

NIR could result in derivative product floating rate payments (inclusive of any spread) becoming negative. For products such as swaps, this could result in one party having to pay (or receive) on both legs (i.e., the fixed leg and the absolute value of the floating leg). In some cases, firms may have to, or prospectively will, add floors to governing documentation, in consultation with legal and counterparties. Additionally, for cash collateral, parties can consider the appropriateness of adhering to the International Swaps and Derivatives Association (ISDA) 2014 Collateral Agreement Negative Interest Protocol, which enables parties to amend the terms of certain ISDA-published collateral agreements to account for negative interest amounts on cash collateral such that if an interest amount for an interest period is negative, the party pledging cash collateral pays the absolute value of that interest amount to the other party for that interest period. Further, derivative trade capture and pricing models may need significant enhancements to account for negative payments, forward curves and negative strikes, and other models such as prepayment models and market risk, counterparty risk and margin models may need enhancements to handle negative rates. The impacts to third parties such as central clearing parties and exchanges will also need to be understood and addressed.

Money market fund and brokerage sweep accounts

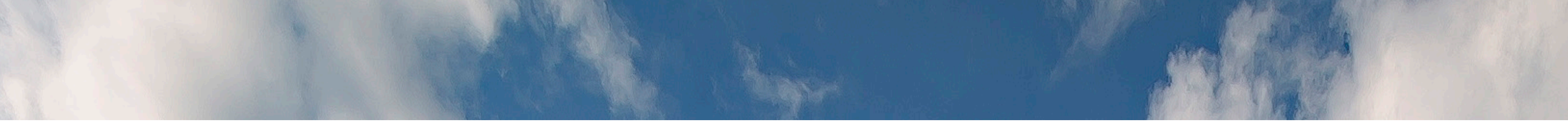
In a negative rate environment, clients could experience a negative yield on sweep balances, while additional management fees or expenses would further reduce incentives for investors to hold excess cash in such sweep products. Customers may chase yield and avoid sweep products with negative interest rates by moving funds to free credit balances, other sweep vehicles or products with a higher risk profile. To lessen the aggregate impacts to customers, some firms providing sweep products may consider strategies such as reducing or waiving fees. Operationally, sweep platform providers may have to develop processes to pass through negative interest rates, such as daily principal reduction, reverse distribution mechanisms (in which canceled shares are split among the remaining ones to keep the value per share constant under negative rates) or deposit service fees, to process the payments associated with negative yields.

US negative interest rates policy checklist

The SIFMA Operations & Technology Committee has formed a US Negative Interest Rates Readiness Working Group and documented the checklist below to provide key implementation considerations for member firms. This checklist represents preliminary considerations of the Working Group and is not an exhaustive inventory of impacts and considerations.

The checklist comprises seven functional program priorities:

1. Program governance and mobilization
2. Financial exposure analysis
3. Contract and counterparty customer analysis
4. Portfolio strategies and profitability
5. Technology and operations
6. Finance, tax and accounting
7. Regulatory and policy considerations



1 Program governance and mobilization

Determine key stakeholders in lines of business and support functions that will be accountable to oversee the execution of impact assessments and delivery of programs to address the implications of a US NIR policy

1.1 Identify and appoint executive sponsors to oversee the NIR assessment and program delivery

1.2 Establish program structure and work streams with aligned functional stakeholders that are accountable for the assessment and applicable implementation to account for NIR

1.3 Establish a regular cadence of program committee meetings with representation from executive sponsors, work stream leads and other program stakeholders, as well as communication strategy and reporting to the board of directors and executive committees as appropriate

1.4 Define a program road map and milestones for both the impact assessment and any required implementation or remediation to support NIR going forward

1.5 Ensure the program has supporting budget and engagement from functional stakeholders to execute the road map

1.6 Coordinate with industry participants to proactively monitor and adjust the implementation plan based on evolving and/or shifting external industry solutioning and/or regulatory developments

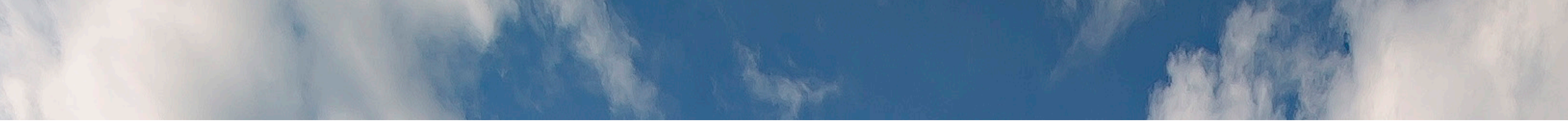
2 Financial exposure analysis

Identify products that would be impacted by NIR and develop an approach to quantify exposures to assess materiality and inform a prioritization

2.1 Conduct an analysis to classify reset risk for NIR legacy floating rate products without explicit floors; augment workflows to identify instances where legacy floating rate products could become a liability, and assess customer impact

2.2 Quantify exposures (e.g., notionals, market values, sensitivities, cash flow impacts) and assess materiality at different levels of granularity (e.g., line of business, product, rate benchmark)

2.3 Prioritize implementation planning and activities based on materiality and risks



3 Contract and counterparty customer analysis

Develop approach to assess the impact of transaction documentation and contracts to inform outreach and plans for executing updates

3.1 Determine whether existing enterprise programs to review and assess legal contracts may be leveraged for efficiency (e.g., collateralized loan obligations and/or other LIBOR transition fallback language) to review for rate floors or the existence or absence of other negative rate provisions

3.2 Identify transaction documentation (e.g., confirms, prospectus) and counterparty legal agreements (e.g., ISDA Master Agreement, IDSA credit support annex (CSA), ISDA Negative Interest Protocol, clearing agreements) to determine impacts to:

- Contract language (e.g., inserting floors)
- Collateral schedules (e.g., amending or restricting eligible collateral with negative coupon rates)
- Triggering events (e.g., termination or closeout)

3.3 Review industry association guidance related to negative interest rates, such as ICMA-recommended treatment of fails when repo rates are negative[2] or ISDA 2014 Collateral Agreement Negative Interest Protocol[3]

3.4 Develop outreach or communication strategy for issuers, investors, counterparties and/or clients where associated transaction or relationship documentation requires updates

3.5 Prioritize implementation of required updates to contracts based on materiality assessment

3.6 Establish mechanism to track the status of changes to documentation and contracts

4 Portfolio strategies and profitability

Assess profitability, including balance sheet, funding strategy and liquidity management impacts

4.1 Assess US negative rate projections and update financial statement net interest margin forecasts with appropriate explanation of drivers of results

4.2 Assess impact of NIR on funds transfer pricing, cash flows, and profit and loss across different business lines, products and financial instruments

4.3 Assess whether asset allocation and selection models suffer any weakness in calculating factor returns in an NIR environment

4.4 Determine required updates to the funding strategy, funding plan, liquidity and balance sheet growth scenarios to address negative rate environment projections

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[2] **"ICMA ERCC Guide to Best Practice in the European Repo Market: December 2017,"** *ICMA website*, https://www.icmagroup.org/assets/documents/Regulatory/Repo/ERCC-Guide-to-Best-Practice-December-17-181217.pdf#:~:text=ICMA%20ERCC%20Guide%20to%20Best%20Practice%20in%20the,monetary%2C%20financial%2C%20business%2C%20regulatory%2C%20legal%20and%20technological%20developments, accessed October 2, 2020.

[3] **"ISDA 2014 Collateral Agreement Negative Interest Protocol,"** *ISDA website*, https://www.isda.org/protocol/isda-2014-collateral-agreement-negative-interest-protocol/, accessed October 2, 2020.

5 Technology and operations

Develop a plan to address technology implications as a result of NIR across the following areas:

5.1 Internal system capabilities and processing impacts throughout trade life cycle: determine calculations, processes and associated systems in the trade life cycle that would require remediation or workaround

5.1.1 Assess system's abilities to capture and account for negative coupon rates and coupon floors. Analysis should consider product complexity and product-specific challenges, some of which are listed below:

- **Bonds and securitizations.** While setting zero-coupon floors can limit the impact of NIR on new issuances (e.g., fixed and floating rate securities, securitized products), firms should evaluate the infrastructure impact associated with negative coupon payments in legacy bonds and securitizations without coupon floors.
- **Repo and securities lending.** Firms should evaluate scalability of existing operations and technology systems to accommodate negative repo rates for repo special issue trading to handle large volumes of negative rate repos expected in an NIR environment.

5.1.2 Assess trade confirmation and reporting systems (e.g., swap data record-keeping) to determine required modifications to accurately publish interest rate information in a negative interest rate environment

5.1.3 Coordinate with central clearing counterparties (CCPs), members and clients to determine operational and systems readiness for processing NIR

- CCPs and settlement systems currently may not be able to process negative coupon payments associated with bonds and securitizations and may advise issuers to set zero-coupon floors or, if deemed necessary, settle NIR bonds and securitizations outside of the CCP. Firms should confirm with CCPs specific instructions for new issuances in order to be eligible for CCP clearing and settlement.
- Similarly, CCPs and exchanges may require modifications in their systems and operations to process cleared and exchange-traded derivatives in an NIR environment. Firms should confirm with CCPs and exchanges their near- and long-term plans for NIR preparedness.

5.1.4 Evaluate custodian and vendor capabilities to process negative rates in consideration of market standard settlement timing for each product (e.g., bonds issued at negative coupon)

5.2 Inventory impacted models and capabilities to price, and risk measure negative rates

5.2.1 Assess yield curve construction and forward rate models; shifts from lognormal models to normal volatility with an interpolation model; prepayment models; risk models for market, counterparty credit, asset-liability management and liquidity management; margin models; and other similar models dependent on short-term interest rate inputs

5.2.2 Identify and engage with model developers and validation teams to communicate impacts, determine required model changes (e.g., development of new models, updates to existing models), prioritize identified model changes and establish implementation plans

5 Technology and operations

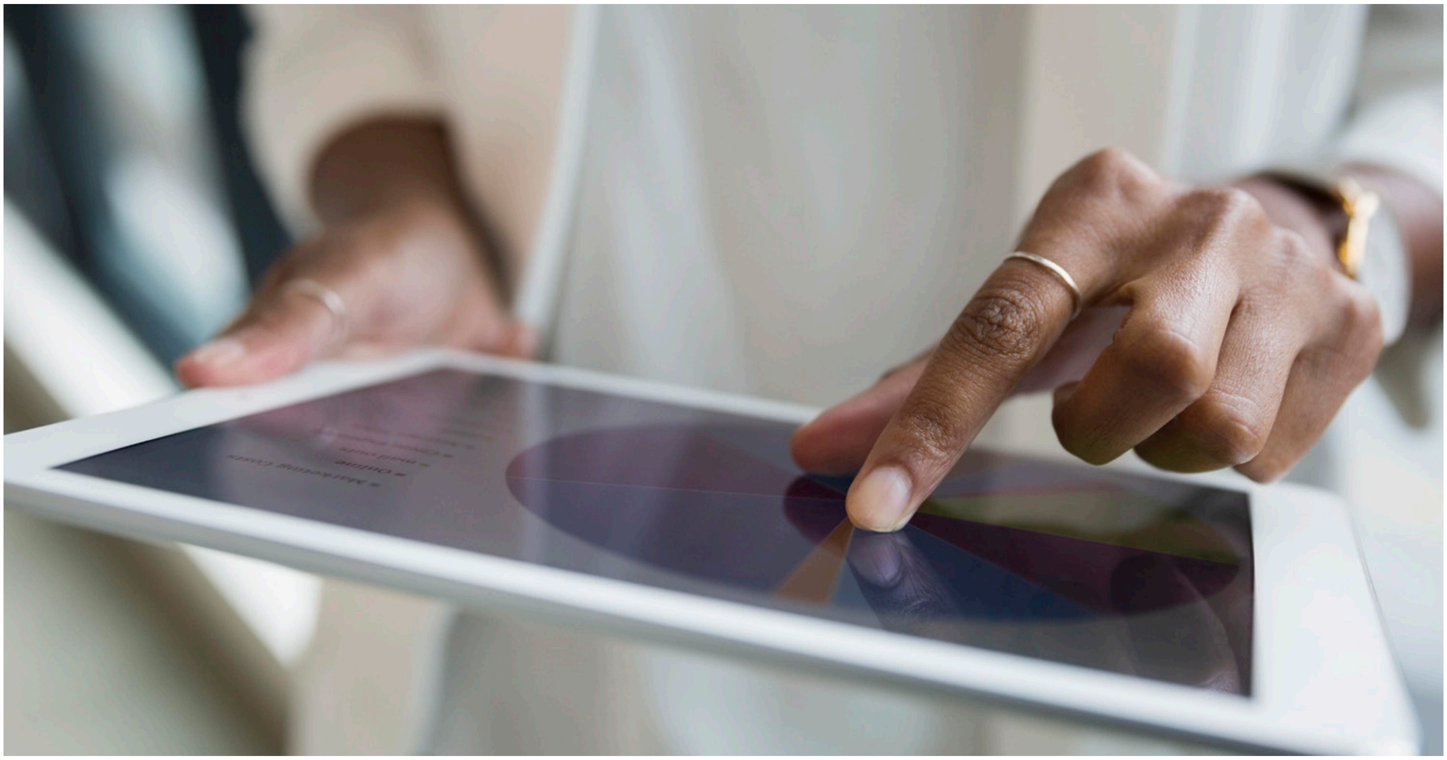
5.3 Identify applicable vendor platforms and third-party service providers to assess capabilities to process NIR and determine associated remediation or workarounds

5.3.1 Perform vendor and third-party provider outreach to assess readiness. Indicative questions include:

- Can vendor platforms read, process and/or model negative yields, zero coupons or negative coupons?
- Are there specific versions of software that firms must leverage or upgrade?
- Has the vendor or service provider identified a manual workaround?
- Is training available to institutions to apply the manual workaround?
- Will institutions be required to make other upstream or downstream system or process changes to accommodate the vendor's proposed workaround?
- What is the vendor's timeline to update systems to accommodate negative rates?

5.4 After assessing internal and vendor capabilities, develop implementation road map and socialize with business and technology stakeholders. Key activities include:

5.4.1 Identify impacted system and technology owners or contacts to communicate potential impacts to NIR; establish milestones for IT development and testing and release to production; and assess resources, skill sets and budgets



6 Finance, tax and accounting

Obtain relevant guidance on IFRS, GAAP, IRS and other accounting and tax topics and impacts

6.1 Determine implications from finance and accounting perspective, including the following areas:

- 6.1.1 Fair value measurement and fair value hierarchy
- 6.1.2 Existing interest rate hedge relationships (e.g., fair value hedge and cash flow hedges) and related processes, hedging documentation, hedged risk, effectiveness testing methodology/results and hedge accounting continuity
- 6.1.3 For cash flow hedges, determine impact to hypo derivative and probability of cash flow assertions depending on how the hedged item is defined (e.g., if cash flows from instruments with in-the-money floors are excluded from the hedged item)
- 6.1.4 Additional economic volatility/mismatches that may be created for legacy hedges and managed through rebalancing for new hedges due to potential addition of floors in financial instrument contracts
- 6.1.5 Embedded derivatives bifurcation assessment and related valuation capability, processes and P&L if embedded derivatives need to be bifurcated
- 6.1.6 Interest expense and revenue calculation, classification, booking, and related processes and policies; for example, system tracking and interest accretion and amortization due to impacts on effective interest rate calculations
- 6.1.7 Lease accounting due to impacts in determining the incremental borrowing rate
- 6.1.8 Identify impact on other accounting processes, including impairment credit allowances
- 6.1.9 Existing banking relationships such as banking fee arrangements and related financial impacts
- 6.1.10 Identify risks associated with negative rate process workarounds and related control framework and/or workflow tools where applicable

6.2 Determine implications from tax regulation and accounting perspectives, including the following areas:

- 6.2.1 Inform impact on net cost basis, netting of coupon payments and the ability to treat coupon payments as an interest expense or consistent with fees
- 6.2.2 Tax on regulatory capital on risk weighted assets requires an impact assessment
- 6.2.3 Tax accounting implications, including, but not limited to, taxable gain and loss to debt holders and swap counterparties require assessment
- 6.2.4 Potential reporting of negative amounts on 1099 forms and files transmitted to the IRS
- 6.2.5 Sourcing of payments for purposes of withholding and reporting to non-US investors
- 6.2.6 Risks associated with negative rate process workarounds and related control framework and/or workflow tools

7 Regulatory and policy considerations

Define agenda of items that require further regulatory or industry guidance

7.1 Establish communication strategy to engage with the following groups as applicable:

- Regulatory agencies
- Self-regulating organizations
- Industry working groups

Acknowledgments

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Disclosures

- This document focused on the identification of challenges stemming from a potential US negative interest rate policy that may impact SIFMA member firms. SIFMA member firms include hundreds of broker-dealers, investment banks and asset managers. While the document may serve as a reference point for other readers, the intended audience is SIFMA member firms.
- This document is provided for informational purposes only. It is not an exhaustive inventory of impacts and considerations.
- It does not constitute legal, financial or accounting advice.
- It does not reflect regulatory or supervisory expectations.
- Each member should independently determine whether it will elect to leverage the document as well as the applicability of considerations to its business.

Key contacts

To learn more about how a potential US negative interest rates policy might affect your organization and how we can help, please contact one of our SIFMA or EY US subject-matter leads:

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