



MAY 2021

Negative interest rates – readiness survey results

This report is for FMA-licensed entities and their key stakeholders

It gives feedback on key findings of the FMA's September 2020 survey on industry readiness for negative interest rates

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Introduction

Last year the Reserve Bank of New Zealand (Reserve Bank) signalled that it was considering introducing a negative Official Cash Rate (OCR), no earlier than 31 March 2021. It sent a letter to banks in May 2020 to gauge whether they would be operationally ready by 1 December 2020. In August/September 2020, the Financial Markets Authority (FMA) sent a survey to all entities we license (as well as banks, non-bank deposit-takers (NBDTs) and insurers), enquiring about their operational readiness for a negative interest rate (NIR) environment by 1 December 2020.

We recognise that the likelihood of negative interest rates being imposed has declined since our survey. However, as the Monetary Policy Committee of the Reserve Bank noted in February 2021, the potential for negative interest rates still exists:

“With work to ensure that our financial system is ready to operate in a zero or negative interest rate environment complete, the toolkit now includes the option of a zero or negative OCR.”

- Reserve Bank of New Zealand, Monetary Policy Statement, February 2021

This is reiterated in the Reserve Bank webpage discussing the tools available to support monetary policy¹.

The FMA therefore believes this report is still appropriate, as are continued preparations throughout the financial services sector for NIR, as well as other emerging risks.

In general, we are looking for a more proactive approach from the financial services sector in addressing emerging challenges, rather than waiting for events to crystallise; to be asked by a regulator about their plans; or assuming, without much basis, they will not be affected.

A more proactive stance, as individual entities and collectively as an industry, will allow more time to properly consider whether emerging risks apply; how broadly they apply to entities' operations, systems and clients; and what preparation is therefore appropriate. This approach will reduce risks to the sector and to its customers.

Based on survey responses, **entities generally self-report as being operationally ready for an NIR environment, though some issues may require workarounds such as manual processes or limitations of affected product offerings.** Preparedness statistics generally improve after banks (which hold multiple licences) are excluded from a given sector. It is clear that the business models of NBDTs (and smaller banks to a lesser degree) may be substantially impacted by NIR. Impacts on other sectors range from limited to no impact.

Our review of responses to the survey is an amalgamation of self-assessment by financial services entities and does not include an independent assessment or demonstration of industry readiness. Dependence on

¹ <https://www.rbnz.govt.nz/monetary-policy/monetary-policy-tools>

self-assessment necessarily limits our ability to make confident conclusions. It is clear that most entities have made at least some preparation, but this ranged from deep thought and extensive effort to a few which appear to have simply assumed they would not be affected.

Assurance of vendor preparedness was the weakest area of response, with many not commenting at all on readiness of their vendors. It was somewhat surprising that only a few respondents noted issues with Excel functions, and no respondents mentioned the failure of many option pricing models. These lead to concern that many entities are primarily reactive, and some have not thoroughly considered the impact NIR would have on their business or their clients.

With cautious optimism, we conclude the industry is generally prepared for negative interest rates, though there is still work to be done, particularly regarding vendor preparedness and to a lesser degree contracts and client documentation.

Note that our survey did not ask about the impact that an NIR environment may have on conduct, clients or products, although some entities did volunteer this information. We include the more relevant comments in this report, and also note that we have provided economic, market, and sector impact comments on an anonymised basis to the Reserve Bank for its consideration.

Issue / observation summary

This section summarises survey respondents' reported issues that could arise in a NIR environment. As we did not specifically request this information, it is possible that more entities may be facing these issues than were noted in the responses. Similarly, as we did not ask about any specific issues, the issues noted in the responses were varied, so we have categorised them as well as possible. Issues are discussed in more detail in Section 2.

*The potential for undercounting issues is not necessarily a problem, but it does point to the risk that some issues may not have been considered. **Licensed entities should review all issues raised to ensure they are prepared for situations they might not have considered.***

Systems issues

- Some systems cannot handle negative coupons
- Some systems cannot handle negative all-in rates
- Key vendors have issues with negative interest rates
- Some Excel formulas cannot handle negative rates
- Some option pricing models cannot handle negative rates²

Contract issues

- Funding agreements with zero-rate floors

² This issue was not reported by any respondent, but we believe is an important consideration and so have included it.

- Interest rate swaps with zero-rate floors
- Some client agreements and similar documentation need updating

Financial statement issues and observations

- Significant reliance on deposit funding
- Significant investment return impact
- Significant revenue impact
- Significant reserve impact – in some cases, as a result of investment return and revenue impacts

Other issues

- Management of arbitrage between retail and wholesale products
- Tax reporting issues

Assumptions

- Assumption of no retail NIR – a simplifying assumption

Potential responses entities may take

- Potential to raise fees in response to NIR
- Potential to raise investment risk profile in response to NIR

The specific issues raised varied by sector. Table 1 below indicates which issues or observations were noted by entities within each sector. As our questions were open-ended, it is possible that some of these issues may exist in sectors that did not comment on the issue. **Entities should consider if the various issues raised pertain to their businesses.**

	Response rate	Neg coupon	Neg all-in	Zero-floor (funding)	Zero-floor (Int rate swap)	>> ³ Deposit funding	>> Investment impact	>> Reserve impact	>> Revenue impact	>> Vendor issue	Excel issue	Assume no retail NIR	Arbitrage (retail vs w/s)	Tax calc/reporting	May raise fees	May increase risk profile
All sectors	250/263 (95%)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Banks	19/20 (95%)	x	x	x	x	x	x	x	x	x		x	x	x		
DIs ex-banks	18/19 (95%)														x	x
DIMS ex-banks	46/49 (94%)	x	x				x		x	x		x		x	x	x
Insurers ex-banks	73/74 (99%)	x	x	x	x	x	x	x	x	x	x	x			x	x
MIS managers ex-banks	63/65 (97%)	x	x	x	x		x	x	x	x				x	x	x
MIS administrators	5/5 (100%)											x		x		
MIS custodians	8/9 (89%)						x							x		x
Non-bank deposit-takers	16/19 (84%)	x	x			x	x	x	x	x		x				
Peer-to-peer lenders	7/8 (88%)	x										x			x	
Personalised DIMS providers	7/7 (100%)	x												x		x
QFEs ex-banks ex-NBDTs ex-insurers	19/19 (100%)	x	x	x			x			x				x		
Supervisors	5/5 (100%)						x					x		x		x
Wrap providers	3/3 (100%)	x												x		

Table 1: Sectors with at least one respondent reporting an issue – by issue type

Our recommendations

While specific responses to the possibility of NIR are to be determined by each licenced entity, we note that both licensing requirements and our conduct guide note the importance of having sufficient capability to provide the licensed service with a professional standard of care.

Our recommendations (and any references to “should” or similar language) are not exhaustive, but we believe are important items for each licensed entity or service provider to consider.

- We recommend that entities in the financial services sector use any delays in implementation of negative interest rates as an opportunity to improve their preparedness, and not as a reason to delay any changes that may be needed.
 - Continue preparations rather than assuming NIR will not be introduced – though completion need not be immediate.
 - Ensure systems are compatible with negative interest rates, coupons, yields, etc, including testing of system inputs, calculations, outputs, and reporting. This should include formally supported systems, as well as off-line Excel models and option-pricing models.
 - Ensure that any derivative pricing models, including hedge pricing models, are able to function adequately when interest rates are negative.
 - Determine methods of working around any issues that cannot be resolved in a timely manner, e.g. manual overrides or limiting offering of the product.

³ Note: “>>” in these table headers means “significant” or “significant reliance on”

- Consider thoroughly whether vendors and service providers are prepared. As with any outsourced service, the ultimate responsibility for operations under an FMA licence remains with the licensee.
- Many entities noted the need to update contracts and documentation, including websites, marketing collateral, client agreements, etc. While none noted this as a particularly difficult issue to resolve, these efforts should continue – entities need to ensure their clients understand the risks and implications of NIR.
- Development of, or amendments to, funding agreements should consider client needs, particularly in instances where the client is materially impacted by negative interest rates in various interactions with the bank, such as in attempting to hedge interest rate risk.
- Financial services entities should stay informed about the potential for negative rates, impacts on financial products and models^{4,5}, and developments in impacted areas such as risk management and treasury^{6,7}.

⁴ https://qfinatwork.com/public/qfin/files/marcello_terraneo.pdf

⁵ <https://www.riskquest.com/the-challenges-of-modelling-negative-interest-rates/#:~:text=First%2C%20a%20negative%20interest%20rate,to%20an%20economic%20growth%20stimulus>

⁶ <https://www.iod.org.nz/resources-and-insights/news-and-articles/negative-interest-rates/#>

⁷ <https://www.corporatecomplianceinsights.com/negative-interest-risk-manager/>

Section 1: Background

FMA survey

While the Reserve Bank previously noted the possibility of introducing negative interest rates on the OCR no earlier than 31 March 2021, it required all banks and NBDTs to prepare for NIR no later than 1 December 2020.

In late August / early September 2020, we sent letters to all licensed entities and key service providers, as well as banks, NBDTs, and insurers, requesting they reply regarding their operational readiness for the 1 December deadline, with specific focus on impacts to their licensed services.

Our request was high level and focused only on significant operational or business impacts that were at risk of not being resolved by 1 December 2020. The request noted our interest in conduct, product and client impacts, but that these would not be considered until after we were confident of overall operational readiness.

Specifically, we asked

“...we would like to know you have considered the impact to your 1) systems, 2) contracts / documentation, and 3) stakeholders/service providers (including data exchange) and are requesting you reply to the FMA, by 25 September 2020, with:

- Confirmation you have considered these impacts; and
- A high-level overview of
 - Key issues that are at risk of not being resolved by 1 December and how you propose to address these; and
 - (if applicable) any substantial risks to your business model in the event of negative interest rates”

Assessment approach

Our assessment did not challenge responses received, but noted and categorised them for comparison. If an entity reported no issues, we assumed that is an accurate and complete response. When a response was unclear, we attempted to interpret it based on the context of the overall response.

As we did not prompt with any specific issues, it is likely that the percentage of the sector reporting any given issue is a floor number – the actual percentage exposed to any issue is likely higher as:

- 1) some may have not reported an issue they know of (especially if they expected resolution before 1 December); or
- 2) some may have not considered an issue raised by others, but may be impacted nonetheless.

We encourage all entities to consider if any issues raised in this report might be relevant to their business.

Response summary

As noted in Table 2, our survey had a very high response rate of 95% by mid-October (increasing, in the wake of our follow-up, from 77% at 25 September), although the quality of responses varied widely. Some provided substantial responses – which were very helpful and appreciated – while others provided little detail beyond that requested.

	Bank	DI	DIMS	Insurer	MIS manager	MIS admin	MIS custody	NBDT	P2P	PDIMS	QFE	Supervisor	Wraps	Total
Responded	19	22	50	76	67	5	8	16	7	7	51	5	3	250
Contacted	20	23	53	77	69	5	9	19	8	7	51	5	3	263
Response rate	95%	96%	94%	99%	97%	100%	89%	84%	88%	100%	100%	100%	100%	95%

Table 2: Survey response rate – by issue type

In response to the question on operational preparedness for NIR by 1 December 2020, sectors either:

- are (or expected to be) prepared;
- are (or expected to be) prepared but require workarounds; or
- had one or more issues that would not be resolved by 1 December 2020 – some were expected to be resolved in subsequent months (e.g. tax calculations), and notably before it would impact their clients

Table 3 below summarises the preparedness of each sector, where (generally) a green cell indicates that 90% or more of entities in the sector will be prepared without a workaround, and a yellow cell indicates that 10% or more will require a workaround.

Bank	DI (ex-banks)	DIMS (ex-banks)	Insurers (ex-banks)	MIS manager (ex-banks)	MIS admin	MIS custody	NBDTs	P2P	PDIMS	QFE (ex-banks and NBDTs)	Supervisors	Wraps
Significant work-arounds	Well prepared	Well prepared with few work-arounds or unresolved issues	Well prepared with few work-arounds or unresolved issues	Most prepared but several require work-arounds or have unresolved issues	Most prepared but several require work-arounds	Most prepared but several require work-arounds	Many require work-arounds and have risks to their business model	Well prepared	Most prepared but several require work-arounds	Most prepared but several require work-arounds	Well prepared	Most prepared but 1 has unresolved issue

Table 3: Sector preparedness summary – by licence type

All sectors expect operational readiness and/or have workarounds for most issues with no cause for concern. However, as discussed below, NBDTs (as well as smaller banks and some QFEs – both to a much lesser degree) are faced with a substantial negative impact to their business models. NBDTs and retirement villages are seeking to have their deposits deemed to be retail deposits, as they are for the benefit of individual customers (or residents, in the case of retirement villages).

Section 2: Issues noted

This section describes in broad terms the issues noted across the financial services sector.

Note that industry responses were free-form and described issues in various ways. Our assessment placed the responses into categories for comparison, so it is possible that some responses refer to similar but not identical issues.

Systems issues

Some systems cannot handle negative coupons

Some systems in use by entities are unable to handle securities with negative coupons. In some cases, this could be due to an inability to enter a negative number in the coupon field, a calculation error (e.g. #Value or #N/A output), or an incorrect figure being output. This tends to be the case where there are legacy or proprietary systems in use. Many vendor systems provided by global service providers have dealt with negative interest rates in other countries for several years, but that is not always the case. In other cases, the capability exists but requires system reconfiguration and testing.

Our recommendation

While most entities have not raised this as an issue, we encourage systems testing where this has not already occurred. This applies to integrated systems as well as those that are not fully integrated and depend on manual processes.

Some systems cannot handle negative all-in rates

Some systems are able to handle a negative base rate (e.g. OCR, BKBM), as long as the all-in rate (base rate + spread) is positive. However, similar to the negative coupon issue above, they are unable to handle an all-in rate that is negative.

Our recommendation

Where the spread makes the all-in rate positive, there may be no negative interest rate issue in the short term. However, it is important that remediation efforts ensure no issues arise should base rates fall further.

Key vendor has an issue with negative interest rates

This is closely aligned with the issues noted above except it was specifically noted as a service provider or vendor issue. In some cases, vendor systems are used globally and so have dealt with negative interest rates for several years. Resolution of some of the issues noted requires changes to software coding of the

product, while other issues require a change to the product's configuration. In either case, however, entities noted substantial testing is underway to ensure the problem and knock-on effects are resolved, or at least understood and controlled.

Our recommendation

All entities should work with their vendors to ensure their systems are compatible with negative interest rates, and to provide appropriate oversight of the vendor's remediation and testing efforts. As with any outsourced service, the ultimate responsibility for operations under an FMA licence remains with the licensee.

Some Excel formulas cannot handle negative rates

While this was raised only by a few entities, it may be an issue that has widespread impact without being well understood. While no entities mentioned the specific functions of concern, we have seen evidence that the Duration()⁸ and Price()⁹ functions in Excel do not work with negative rates (and perhaps not with negative yields). Related formulas are likely to be similarly affected.

There are two types of errors that could occur:

- Calculations fail, e.g. Excel returns #NUM!
- Calculations return an incorrect figure

The second type of error is subtle but could be more problematic, as the error could easily be overlooked, so that investment decisions are made on incorrect information or client reporting is incorrect.

Our recommendation

All entities should ensure any critical Excel models (and presumably any functions built on a Microsoft platform, e.g. VBA) operate as expected with negative coupons or negative yields. This will be particularly important for entities whose systems are not fully integrated, e.g. one system may rely on manual input from another system or model.

Some option pricing models cannot handle negative rates

While not raised by respondents, we have seen reports elsewhere noting that several standard option pricing models do not work properly when yields are negative. Some models, such as Black-76, assume interest rates are log-normally distributed, similar to the Black-Scholes models assumption that stock prices are log-normally distributed¹⁰. However, the logarithm of a negative number is not defined, so the log-normal assumption no longer holds.

Similarly, the Constant elasticity of variance (CEV) and Stochastic alpha, beta, rho (SABR) models fail when interest rates are negative, unless a shift is added to the forward rate to make it positive in the calculation with the result displaced to account for that shift¹¹.

⁸ <https://www.bogleheads.org/forum/viewtopic.php?t=313305>

⁹ <https://support.microsoft.com/en-us/office/price-function-3ea9deac-8dfa-436f-a7c8-17ea02c21b0a>

¹⁰ <https://fincad.com/blog/interest-rate-models-and-negative-rates>

¹¹ <https://core.ac.uk/download/pdf/85145501.pdf>

Some option pricing models, such as Cox-Ingersoll-Ross (CIR), require the square root of the risk-free rate as part of the calculation. Negative interest rates cause that model to fail, since the square root of a negative number is not a real number.

Since options pricing models depend on r (the interest rate), negative rates could impact the valuation of virtually any derivative, including the pricing of hedges. Bloomberg, as well as the Chicago Mercantile Exchange (CME) and Intercontinental Exchange (ICE), have recommended that investors use the Bachelier option-pricing model¹². Note that we are not making a recommendation for or against any particular pricing model, but we do believe it is important for each entity to make an informed decision as to what pricing model they use, and to ensure its operation in a negative interest rate environment.

Our recommendation

Understanding what models are used within an entity will be particularly important for firms with non-integrated systems. Any testing of systems and processes should consider off-line processes and calculations that could introduce errors to downstream calculations. We will consider whether any additional review is needed amongst licensed entities, particularly Derivative Issuers.

Contract issues

Funding agreements with zero-rate floors

Floating rate loans set interest at a fixed spread over a floating benchmark rate, such as BKBM. The benchmark rate often moves closely with OCR, so if OCR was negative it is likely that funding agreement base rates would be negative as well. Several entities have funding agreements that include zero-rate floors, i.e. they include a provision that the base rate cannot go below zero. In that case, while BKBM might be negative, the loan's base rate could fall no lower than 0%. This prevents the borrower from benefitting from the negative BKBM.

This should not be a problem in and of itself, but would result in the costs of those loans increasing relative to the risk-free rate, and to the rate on cash deposits. This becomes a more acute issue when these borrowers hedge interest rate risk via interest rate swap agreements that do not have zero-rate floors¹³ – such that their intended hedge against interest rate movements results in them paying additional monies when the base rate is negative.

While the Reserve Bank has noted that the floors limit the transmission of monetary policy and create the potential for conduct risks^{14,15}, we recognise this may be one of the more difficult items to resolve. In many cases, these are club deals (made by a few banks in cooperation) or syndicated loans (a loan arranged by a lead bank and sold to multiple entities). Changing the terms of those loans would require cooperation from all lenders, so it is not a provision the banks can easily alter unilaterally for existing contracts. That said, client interests should be considered regarding existing contracts and especially future contracts that may impact retail clients, particularly when the client has attempted to hedge their interest rate risk.

¹² <https://www.bloomberg.com/news/articles/2019-09-30/how-negative-rates-broke-black-scholes-pillar-of-modern-finance>

¹³ See discussion on two pages following

¹⁴ <https://www.rbnz.govt.nz/-/media/ReserveBank/Files/Monetary%20policy/ump/May-2020-Letter-to-Banks-Negative-interest-rates.pdf>

¹⁵ <https://www.rbnz.govt.nz/monetary-policy/monetary-policy-tools/negative-official-cash-rate>

This was particularly an issue for banks (generally, as lenders), entities reliant on debt funding, and those whose products are dependent on debt funding, e.g. geared funds or property funds.

Our recommendation

While we recognise the difficulty banks may have in altering existing funding agreements, it is important that client needs are considered, particularly in cases where the client is materially impacted by negative interest rates in various interactions with the bank, e.g. the bank adds zero-rate floors to lending agreements, but does not allow the client to benefit from negative rates in their interest rate swap. We would be particularly concerned where the bank alters existing funding agreements to insert a zero-rate floor but will not alter swap agreements to allow for effective hedging.

Interest rate swaps without (or with) zero-rate floors

Several entities noted concerns about whether zero-rate floors would apply to interest rate swap agreements. Without a floor, if the base rate falls below the spread, rather than receiving a floating rate payment and paying a fixed rate, the entity could end up paying on both legs, rendering the hedge not only ineffective, but also counterproductive.

Without a zero-rate floor, the borrower ends up paying more for the swap as rates fall – but that is no different to the effect of interest rate reductions on any swap. With the zero-rate floor in place, the borrower benefits as its net payment falls. As with funding agreements, this is less of an issue in isolation, but becomes problematic in combination with a funding agreement that does not allow for an effective hedge¹⁶. The Reserve Bank notes this combination to be a potential conduct issue and we consider it to be to the extent it impacts retail clients.

Our recommendation

Client needs should be considered, particularly in cases where the client is materially impacted by negative interest rates in various interactions with the bank and is attempting to hedge interest rate risk.

Financial statement issues and observations

Significant reliance on deposit funding

This is particularly an issue for NBDTs, and to a lesser degree smaller banks. While deposit funding is an issue for the larger banks, they have more control over product pricing (as price-makers rather than price-takers), have a broader array of funding options, and have multiple revenue streams.

The general expectation is that negative interest rates will apply only at the wholesale level, with retail deposit rates falling to no lower than zero. This is as much a practical imperative as a Reserve Bank expectation¹⁷. With deposits a key source of funding for banks and NBDTs, a negative retail deposit rate could result in a reduction in deposits that would mean these entities need to find other funding sources.

¹⁶ See discussion on funding agreements with zero-rate floors on the prior page.

¹⁷ See related discussion under 'Assumption of no retail NIR' on p13.

Our recommendation

This is not an issue in itself but is an indicator of potential risk to revenues or even to the entity's business model.

Significant investment return impact

Any entity with an investment book will be impacted to some degree by negative interest rates. Of course, prices on fixed income securities are inversely related to yields. Assuming a parallel downward shift in the yield curve, in the short-term, any investor in fixed interest securities would benefit from a reduction in interest rates, roughly proportionate to the duration of their portfolio. If, however, the downward shift was only on the short end of the yield curve, then the benefit would go to those with short durations.

That said, any positive returns would be a one-off event – at the time of the reduction in rates. Afterwards, returns will tend to suffer from increased calls and refundings, and the subsequent reduction in coupon from new bond issues and lower yields on new investment. That impact is long-lasting, as is the increased risk of any later increase in yields, which would negatively impact bond prices.

Most respondents noting this issue focused on the reduction in yields, and not on any positive short-term benefits. Entities with significant portfolio exposure to cash or fixed interest securities will have lower returns on their investment. This will tend to have disproportionate impact on conservative portfolios, which tend to have older investors.

Some entities, particularly insurers, noted the secondary effect of reduction in reserves given the reduction in investment returns and revenues.

Our recommendation

Entities would be well advised to consider both the short-term and long-term portfolio impacts of an NIR environment.

Significant revenue impact

This is related to the deposit funding and investment return issues noted above but is broader in its impact. For the most part, this is a function of investment returns, though for lenders it also reflects the reduction in interest rates that can be charged to borrowers.

All else being equal, those entities investing either on their own behalf or in support of their claims-paying ability would have a reduction in revenue from reduced portfolio yield. Similarly, entities that invest client funds, such as MIS managers, will have some reduction in revenue growth as FUM grows more slowly due to reduced portfolio yield – though this is likely a minor effect.

Some entities, particularly some insurers, noted the secondary effect of reduction in reserves given the reduction in revenues and investment returns.

Our recommendation

Entities would be well advised to consider both the short-term and long-term revenue impacts of a NIR environment.

Other issues and observations

Management of arbitrage between retail and wholesale products

Several banks noted the potential for wholesale clients to attempt to access retail products to avoid negative interest rates. They each are developing reporting and controls to prevent this, usually by limiting position sizes in products that qualify for retail treatment. This may impact the plans of entities seeking to avoid negative interest rates by making deposits to retail accounts.

Our recommendation

Not a regulatory issue – noting for information.

Tax reporting issues

Several entities noted that there would be delays in resolving tax calculations and reporting until after 1 December. Generally, this was noted as an issue expected to be resolved by 31 March – the end of the tax year. This was partially due to the need for guidance from Inland Revenue, but was also a matter of prioritisation of remediation efforts.

Our recommendation

Entities should ensure that any required reporting is available as and when needed, whether that reporting is provided directly or through a third party. Entities should have contingency plans in place in case of delays in implementation.

Assumption of no retail NIR

The general consensus within the industry, and echoed by the Reserve Bank as well as most international experience, is that negative interest rates will not apply to retail products¹⁸. Several entities based their reply on this simplifying assumption – as long as it holds, their plans should be appropriate. Given current expectations, that is a reasonable assumption, but is worth watching should the situation change¹⁹. If negative interest rates are applied at the retail level for any reason, those plans may no longer be sufficient.

Our recommendation

¹⁸ Note that banks have some flexibility regarding the definition of “retail” in this context, though competitive pressures are likely to result in some level of consistency.

¹⁹ Note that EURIBOR has been negative since 2015. Initially, negative rates did not apply to retail bank deposits. However, some time ago (apparently 2019) some banks, e.g. ING, began charging negative interest rates to depositors with assets of more than EUR1m. In August 2020, ING announced that, commencing October 2020, they would lower the retail threshold for negative deposit rates to EUR250k per account, and would charge each of these depositors -0.5% annually. The point being that the longer negative interest rates persist, the more likely that they would be applied to retail products.

While assuming negative interest rates will not apply to retail products is a reasonable short-term assumption, entities should consider retail system readiness in case this assumption does not hold.

Potential to raise fees in response to NIR

Several entities noted that they would consider raising rates on their products to replace lost revenue. Some acknowledged that this would be a counterintuitive response that would require additional client communications to explain.

Note that we did not ask this question, but the information was volunteered. As such, it is likely that there are others who might consider this option as well.

Our recommendation

While fees charged to clients is largely a business decision, customer interests should be considered in any decision to raise fees in response to NIR, including careful consideration of the value proposition offered to clients²⁰. There should also be clear client documentation and communications noting this risk in advance of any changes to fees. We would look for this to include:

- ensuring clients are in an appropriate product for them
- assisting clients in making an informed decision as to whether to change to another product
- communicating to clients the benefits of diversification and how it helps to control risk
- communicating to clients that lower returns for cash and fixed interest are within expectations for the product.

Potential to raise investment risk profile in response to NIR

Several entities noted that they would consider raising the risk profile of their investment portfolios to offset the loss in yield. Depending on the type of entity, this might mean increasing the risk in their own investment book, in the funds they manage, or in portfolios they provide to DIMS clients.

Typically, this would be by some combination of 1) increasing fixed interest portfolio duration, 2) increasing fixed interest portfolio credit risk, 3) increasing liquidity risk, and 4) increasing exposure to growth assets vs income assets.

We found this response across various entity types totalling 20 entities (some have multiple licence types). Note that we did not ask this question, but the information was volunteered. As such, it is likely that there are others who might consider this approach but did not comment on it.

Our recommendation

It will be important for entities to ensure any changes in their risk profile are consistent with their mandate, e.g. SIPO or Investment Agreement, and any material increase in the expected risk profile is communicated to clients in advance of the change.

²⁰ Our recent guidance for MIS managers 'Managed fund fees and value for money' should be considered. While the guidance is for MIS managers, the concepts are relevant for all sectors when considering if they are acting in their clients' interests.

Appendix – Financial services sector

Our negative interest rate operational readiness survey was sent to all FMA-licensed entities (or to one of their affiliated bodies), as well as to entities prudentially regulated by the Reserve Bank (i.e. banks, insurers and NBDTs) that offer retail products and services, and to a few key industry service provider categories, such as wrap providers, custodians, and administrators. Given the sheer volume of financial advisers, and pending changes to their licence type under the new financial advice regime, we did not request information from Authorised Financial Advisers.

We received responses from the vast majority of entities, 250 (95%) of the 263 entities we contacted. Note that some entities hold multiple licence types, e.g. some banks are also DIs, QFEs, and MIS managers. Statistics below generally consider the entity separately under each licence type it holds.

For the sake of brevity, the entity descriptions below are not precise definitions.

Entity type	Description
Banks	Licensed banks in New Zealand. We received responses from 19 of 20 we contacted (95%).
Derivative issuers (DIs)	Licensed issuers of regulated derivative products. This does not include those that engage in spot FX, though it does include those offering forward FX contracts. It includes five DIs that are also banks. There are approximately 23,000 accounts with DIs operated by retail customers. We received responses from 22 of 23 we contacted (96%).
Discretionary investment management services (DIMS) providers	Licensed providers of DIMS – <i>entities</i> where an investor has given the provider the authority to make decisions about buying and selling financial products on their behalf. These entities often, but not in all cases, use the services of a wrap provider. These entities are regulated by the Financial Markets Conduct Act 2013 (unlike Personalised DIMS providers, below). We received responses from 50 of 53 we contacted (94%).
Insurers	Licensed insurers in New Zealand, including general, property and life insurers. Several are also QFEs. We contacted 77 entities based on details provided by the Reserve Bank and received responses from 76 (99%). Generally, we have only counted affiliated entities one time.
MIS administrators	These entities provide fund administration services, e.g. fund accounting, registry, for managed investment schemes (MIS), including KiwiSaver, superannuation, and non-KiwiSaver MIS. These services are often referred to as “back office” or “operations”, though they also include some “middle office” functions. Here we only refer to third-party administrators, as opposed to entities with in-house administration capability. We received responses from 5 of 5 we contacted (100%).

MIS custodians	Under the FMC Act, MIS are required to have independent and unaffiliated entities to hold fund assets in custody. These are often, but not solely, services provided by the MIS Supervisor. We received responses from 8 of 9 we contacted (89%).
MIS managers	Licensed managed investment scheme managers, including all fund management entities that make regulated offers of funds to retail investors. Fund managers that distribute solely to wholesale investors are not within the FMA's remit and were not included in our survey. MIS includes both KiwiSaver and non-KiwiSaver schemes, as well as non-restricted superannuation schemes ²¹ . It includes funds offering liquidity (continuous offer and redemption) to investors, as well as schemes that do not allow for continuous redemption, e.g. property and forestry schemes. Current figures are not available but are estimated at about \$171b in funds under management. All MIS managers must have a MIS Supervisor and MIS custodian that are independent and unaffiliated with the MIS manager. Some MIS managers use the services of wrap providers in their distribution. We received responses from 67 of 69 we contacted (97%).
NBDTs (Non-bank deposit takers)	NBDTs include credit unions, building societies, and finance companies. Several are also QFEs. We received responses from 16 of 19 we contacted (84%).
Peer-to-peer lenders	Peer-to-peer lending matches people seeking loans with people who are potentially willing to fund those loans. The FMC Act enables borrowers to raise up to \$2m in any 12-month period, without having to issue a product disclosure statement (PDS). Some peer-to-peer lending services may restrict borrowers to smaller amounts than the full \$2m. We received responses from 7 of 8 we contacted (88%).
Personalised DIMS providers	Licensed providers of personalised DIMS – <i>individuals</i> where an investor has given them the authority to make decisions about buying and selling financial products on their behalf. These individuals often, but not in all cases, use the services of a wrap provider. These providers were regulated by the Financial Advisers Act (unlike DIMS providers, above), though they will have their licences transformed into FMC Act DIMS as above. We received responses from 7 of 7 we contacted (100%).
Qualifying financial entities (QFEs)	Organisations licensed to provide financial advice services where the entity is responsible for the compliance of its advisers and nominated representatives with the Financial Advisers Act. From 15 March 2021, this licence type was replaced by the Financial Advice Provider (FAP) licence type under transitional licensing. We received responses from 51 of 51 we contacted (100%).
Statutory supervisors of retirement villages	These entities provide oversight to retirement villages. This is a subset of Supervisors (with four of the five MIS Supervisors also acting as Statutory supervisors of retirement villages). We received responses from 4 of 4 we contacted (100%).

²¹ Our survey did not include restricted superannuation schemes or restricted KiwiSaver schemes.

Supervisors Licensed supervisors have the responsibilities of fund trustees combined with a regulatory oversight function of MIS and MIS managers. Most also include wholesale and structured product trustee services, as well as personal trust services (in a separate business unit). All retail MIS have a MIS Supervisor. This category also includes a Supervisor that is a Statutory Supervisor of retirement villages, but not a MIS supervisor. Four of the five entities here are MIS supervisors. We received responses from 5 of 5 Supervisors we contacted (100%).

Wrap providers These entities provide securities administration, reporting and custody on their platform for individuals, via their advisers, and DIMS providers. Their services are similar to those of MIS administrators and MIS custodians but provided to financial advisers rather than MIS managers. They typically offer a collection of equities and fixed interest securities, as well as certain retail and wholesale MIS, on their platforms. Several MIS managers distribute predominantly through wrap providers. While there are several wraps offered as a white label service from various entities, there are three underlying wrap providers in New Zealand. Those underlying wrap providers are the ones referred to in this report. We received responses from 3 of 3 we contacted (100%).
