General considerations

If interest rates are near 0% or negative, companies need to consider:

- Which contracts are likely to result in negative interest?
- What areas of accounting are impacted by negative interest rates?
- When does a floor in a loan agreement come into play for hedge accounting to be discontinued?
- How to determine ineffectiveness when a hedge relationship remains effective?
- When providing new financing to customers, whether to add an interest rate floor in the contract?

A risk-free interest rate often forms the basis of the discount rate used in different areas of accounting. Accounting standards do not impose limits when determining a discount rate in the event the risk-free rate turns zero or negative. When discounting future cashflows to measure assets and liabilities, entities will need to consider the:

- risks associated with the asset or liability to be measured; or
- duration of discounting the future cash flows to be received from (paid to settle) an asset (a liability).

Low or negative interest rates in the short-term may only have a limited impact on the measurement of long-term asset and liabilities.

AASB 101/NZ IAS 1 Presentation of Financial Statements (“AASB 101/NZ IAS 1”) prohibits the offsetting of income and expenses unless it is required or permitted by a standard. If a negative effective interest rate results in an expense being recognised on a financial asset, this should not be presented as a reduction within interest income but instead presented in a separate expense classification\(^1\). Additional information about such an amount may be required if this is relevant to an understanding of the entity’s financial performance.

Provisions

A provision, being a liability of uncertain timing or amount, is measured by discounting the expected expenditure to settle the provision. The rate is to reflect the time value of money and the risks specific to the liability. In practice, a government bond rate is often the starting point for determining this discount rate. If overall the discount rate could become negative, the carrying value of the provision would become greater than the expected cash outflows expressed in future prices.

Example - Impact of negative rates on provisions

On 1 July 20X0, ABC Limited could settle a provision in two years’ time for $100, and if interest rates are negative 2% then the present value to settle the liability is $104. A greater amount is needed in today’s dollars due to the holding costs incurred until settlement.

In addition, the unwind of the time value of money on the provision will have a positive impact (that may offset the holding costs incurred) in the profit or loss.
Lease liabilities

When the incremental borrowing rate (“IBR”) is used to measure the present value of lease payments, the starting point in this estimation may be a risk-free rate. Care needs to be exercised, as starting with a negative risk-free rate will in practice usually not result in a negative IBR. The rate at which the lessee is able to borrow needs to also take account of the security provided by the asset and the credit worthiness of the lessee (i.e. by adding a credit risk margin).

Employee benefits

To measure the present value of a defined benefit obligation and long-term employee benefits (such as long service leave liabilities) the payments are discounted using the rates of high-quality corporate bonds, or government bonds in absence of a liquid market for high quality corporate bonds, in the currency of the liability.

In Australia, it is currently considered that a liquid market in high quality corporate bonds exists. At this point in time, most high-quality corporate bond rates in Australia would likely exceed the risk-free rate, resulting in a positive discount rate (albeit lower than historically). In New Zealand however, government bond rates are used, as it’s market for high quality corporate bonds is deemed illiquid.

AASB 119/NZ IAS 19 Employee benefits is explicit in that the observable yield from these sources is to be used. Therefore, if some rates on the yield curve are negative, then these need to be incorporated. They cannot be ignored even if calculating a weighted average interest rate to discount longer term liabilities.

Although AASB 2/NZ IFRS 2 Share-based payments does not refer to interest rates, the risk-free interest rate for the expected term of an option is an input into it’s fair value. This would impact the measurement of an equity settled share-based payment, and the on-going measurement of a cash-settled share-based payment.

Revenue

When a seller effectively provides financing to a customer (e.g. customer pays in arrears) or the seller receives financing (e.g. customer pays in advance), the consideration is adjusted for the effects of the time value of money. A negative interest impacts the time value of money and results in greater revenue recognised if customer payments are made in arrears or lesser revenue if payments are made in advance.

Impairment of non-financial assets

The weighted average cost of capital (“WACC”) is the most commonly used discount rate for measuring the recoverable amount in an impairment test. A negative risk-free rate may reduce the cost of debt, but due to the cost of equity including the equity premium, in practice the WACC is likely to remain positive overall.

Financial instruments

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Financial instruments

Embedded derivative

An interest rate floor in a borrowing is accounted for separately at fair value through profit or loss, when the floor is above the market rate of interest when the contract is issued. In a negative interest environment, this means a 0% interest floor written into a new contract creates a derivative to be carried at fair value through profit or loss. Alternatively, the entire liability can be measured at fair value through profit or loss. If the market rate of interest is above the floor for a new contract, then there is no embedded derivative.

On the other hand, a loan or other financial asset containing an interest floor is never assessed for an embedded derivative. The entire loan is classified by considering whether the contractual cash flows represent solely payments of principal and interest (SPPI) (see below).

Financial assets and liabilities - initial recognition

At initial recognition, financial assets (except for trade receivables) and financial liabilities are recognised at fair value. In a negative interest rate environment, the present value of a future receipt or payment is higher today than those future cash flows, resulting in a higher balance on initial recognition. Where the transaction price reflects the current market interest rate, the impact of incorporating a negative interest rate should not create an immediate difference to fair value (i.e., no day one gain/loss).

Financial assets classified at amortised cost

A financial asset is classified at amortised cost if it meets the SPPI and business model test. The classification is made upon initial recognition and is not reassessed unless the contract is modified significantly to cause derecognition accounting. When a financial asset is contractually affected by a negative rate, a lender may be required to pay a borrower. If that is the case, then this needs to be factored into the assessment of whether the terms of the financial asset pass the SPPI test. The significant elements of interest (a component of SPPI) within a basic lending arrangement are typically time value and credit risk, but it may also include liquidity risk, administrative costs with holding the asset and a profit margin. The assessment of interest focuses on what the entity is being compensated for, not the amount. A negative rate effectively means the lender is paying a fee for the safekeeping of its money for a period (over and above what the lender receives for time value, credit risk, etc). If negative interest can be attributed to compensation in a basic lending arrangement, such as the lender’s credit risk or profit margin, this may meet the SPPI test.

2 AASB 16/NZ IFRS 16 paragraph BC162
3 AASB 9/NZ IFRS 9 paragraph B4.3.8(b)
4 AASB 9/NZ IFRS 9 paragraph 4.3.2
When measuring the expected credit loss (“ECL”), an entity compares all contractual cash flows that are due with all cash flows it expects to receive from the financial asset, and discounts this shortfall at the original effective interest rate. Although the overall credit risk adjusted rate is unlikely to be negative, if this were negative, then the present value of the future shortfall is higher today than those future shortfalls.

**Hedge accounting**

A negative risk-free rate could potentially impact hedge relationships where the hedged item (e.g., loan or borrowing) has a floor of 0% but the hedging derivative does not.

Firstly, a hedging relationship between a hedging instrument and a hedged item needs to have an economic relationship such that they have values that generally move in the opposite direction because of the hedged interest rate risk. This raises the question whether there is an economic relationship if the hedged item has a floor, but the hedging derivative does not. In some cases, a qualitative assessment may be sufficient to assess the relationship. This might be the case, for example, where a negative interest rate is expected to be temporary and the hedge relationship is for a significantly longer period.

In other cases, a quantitative assessment may be necessary, such as where a negative interest rate is expected to exist for a significant period of the hedging relationship. At each reporting date, a prospective effectiveness test is to be performed to ensure the hedge relationships remains effective, which may be a challenge when negative interest rates start to create ineffectiveness. J udgement will be required in determining when to cease hedge accounting due to extensive ineffectiveness.

**Example – Impact of negative rates on hedging**

On 1 July 20X0, ABC Limited enters an interest rate swap to fix its exposure to interest rate movements on variable debt that also has an interest rate floor of 0%. Under the interest rate swap, ABC Limited receives BBSW plus 2% and pays 3% fixed interest. There is no interest rate floor in the swap. The borrowing and swap are designated in a cash flow hedge.

As at 1 July 20X0, ABC Limited doesn’t anticipate interest rates to turn negative in the future. The borrowing and the swap – due to movements in interest – are expected to be effective in offsetting one another.

As at 1 January 20X1, ABC Limited anticipates interest rates could turn negative. Therefore, the relationship between the borrowing and the swap – due to movements in interest – is no longer expected to offset as effectively. ABC Limited would need to assess effectiveness by considering the expected duration and extent of negative rates in comparison to the term of the hedge.

**Scenario 1**

As at 1 July 20X1, the hedged BBSW/BKBM turns negative (expected to last for a short period compared to the hedge). It is determined that the hedging relationship continues to qualify for hedge accounting due to the short duration of expected negative rates. The presence of the interest floor in the debt creates some ineffectiveness impacting the profit or loss.

**Scenario 2** – As at 1 July 20X1, it is determined that negative interest rates will remain for a significantly longer period. Therefore, it is determined that ineffectiveness is too significant such that the hedge accounting needs to be discontinued. An assessment of whether the forecast interest payments from the debt is still expected to occur will determine whether the swap’s cumulative gain/loss deferred in other comprehensive income is reclassified to profit or loss either as those cash flows arise (if expected) or immediately (if not expected).

To discuss further, please contact your local EY adviser.

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1 BBSW refers to the Australian Bank Bill Swap rate and BKBM to the New Zealand Bank Bill Benchmark rate.