NEW ZEALAND DEBT MANAGEMENT

New Zealand Debt Management Insights

TE TAI ŌHANGA THE TREASURY

Supporting the New Zealand Inflation Indexed Bond Market

Background

Inflation-indexed bonds (IIBs) have been part of the issuance landscape for some time in New Zealand and they continue to be an important funding instrument for the Crown. The New Zealand IIB market was reinvigorated in October 2012, when the September 2025 IIB was syndicated. Subsequently, a further three IIBs were issued, extending the IIB curve out to 2040.

The recent increase in inflation to multi-decade highs, both in New Zealand and globally, has focused attention on instruments which are indexed to inflation.

Turnover and liquidity in inflation-linked markets globally is generally lower relative to nominal products. We paused IIB issuance in 2020, due to increased market volatility resulting from the COVID-19 pandemic. More recently, we sought feedback from market participants, with consultation aimed at improving liquidity and increasing investor participation in the IIB market.

NZDM's key objective for IIBs over the 2022/23 fiscal year is to support market function and build greater vibrancy in the market. This paper outlines the strategy.

IIBs in the funding portfolio

As at end-April 2022, there were NZ$19 billion of IIBs outstanding, representing circa. 13% of the term funding portfolio. In recent years, the proportion has been declining as nominal bond issuance was used to meet the large COVID-19-related increase in the borrowing programme. However, the volume of IIBs on issue has continued to increase.

When the issuance programme was restarted in 2012, critical mass was required to show commitment and generate investor interest in the market, which led to a relatively high proportion of IIBs outstanding. At their peak, IIBs accounted for 24% of the term funding portfolio.

Alongside providing inflation protection for investors, IIBs have some attractive properties from an issuer standpoint.

NZDM modelling indicates diversification of issuance instruments can lower both costs and risks for the Crown, over the long-term, relative to issuance of only nominal bonds. Theoretically, investors are also willing to pay a premium for inflation protection, reducing the cost of issuance. However, it can be difficult to disaggregate this premium and it may be less than the 'liquidity premium', as IIBs in New Zealand (and other countries) exhibit lower liquidity than nominal bonds.

Table: Key statistics of IIB Market

Volume outstanding	NZ$19 billion
Proportion term funding portfolio	13%
Bond lines	2025, 2030, 2035, 2040
2021 turnover[1]	NZ$7.0 billion

From a Crown perspective, inflation adjusted coupon and principal repayments better align with the variability in tax revenues. As tax revenues are correlated with the business cycle, the risk of the Crown's overall balance sheet is reduced. IIBs also contribute to increased diversity in the New Zealand Government Bond investor base.

[1] NZDM relies on secondary market turnover data provided by registered tender counterparties, which are a subset of all secondary market participants. Further information on how surveys are reported can be found here https://debtmanagement.treasury.govt.nz/resource/nz-govt-securities-monthly-turnover-survey-guidance-notes

A secondary objective for NZDM, alongside minimising funding costs and risk, is contributing to New Zealand's capital market development. A risk-free real interest rate curve can provide a benchmark for other issuers. New Zealand does not currently have the high demand for inflation protection from managers of inflation-sensitive liabilities, that is seen in some other countries. However, in future, the decumulation strategies associated with a growing pool of retirement savings could result in an increase in demand.

Changes to the issuance process

While sovereigns generally experience lower turnover and liquidity in inflation linked securities relative to nominal, 2021 was a particularly challenging time for IIB issuance. New Zealand Government IIB tenders exhibited low bid cover ratios and a wide range of successful yields. Market participants noted reduced liquidity and pockets of market saturation during this period, which led to lower turnover and reduced transparency around secondary market prices.

Consequently, we paused issuance for the final four months of 2021 while we consulted with intermediaries and investors on ways to improve market functioning in the IIB market.

At the *Half Year Economic and Fiscal Update* (HYEFU) 2021, NZDM announced three changes to our IIB issuance processes to help achieve this aim. They result in a more flexible approach to IIB issuance. These are:

- A range of expected IIB issuance for the current fiscal year, rather than a specific expected volume, is announced alongside Economic and Fiscal Updates.
- Issuance is also more flexible and responsive to changes in demand. Specific details of upcoming IIB tenders are no longer published in the monthly bond tender schedules. Instead, market participants are surveyed ahead of the upcoming tender to gauge demand for IIBs.
- The tender mechanism for IIBs has also changed from a 'multi-price' to 'single-price' auction. This decision was based on analysis of auction theory and peer practices for tendering securities. As successful bidders are allocated the same yield, thereby avoiding the "winners' curse", it may offer benefits for less liquid markets.

Since these changes, tenders have generally performed better – higher bid-cover ratios and issuance yields closer to the mid-market yield. These suggest price transparency has improved. In addition, anecdotal feedback suggests secondary market turnover, while lower than nominal bonds, has improved. This approach has also enabled IIBs to be offered for tender only when there are clear indications of demand.

2035 Tap - Why tap an existing line?

Whilst recent changes have improved market functioning, overall participation in the market remains subdued. At BEFU 2022, we announced further steps to increase investor participation and to improve turnover of the IIB market:

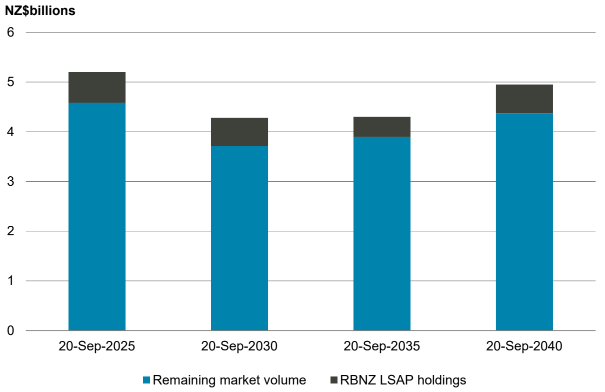
- Individual IIB tranche size caps have been increased from NZ$6 billion to NZ$10 billion.
- A tap syndication of the 2035 IIB will be undertaken alongside a repurchase of the 2025 IIB.

This is a change to past practice of syndicating new long-dated IIBs. However, to build greater market activity, a new strategy may be required. The motivations for the change are:

- Demand and supply of IIBs being in balance is important, therefore, a new IIB line may have spread IIB issuance across too many lines. Consequently, issuing into existing IIB lines is preferred.
- Increased tranche sizes will allow higher volumes in each bond line, with the aim of assisting liquidity.
- A syndicated transaction is a focal event and may lead to additional interest in the market.

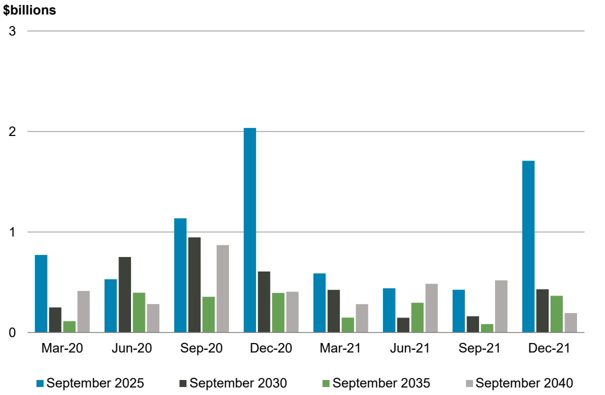
- Some market participants have highlighted the importance of a '10-year benchmark' IIB. The 2035 IIB will soon become the '10-year benchmark'. Currently, the 2035 IIB has the lowest trading volumes and one of the lower volumes outstanding. A syndicated tap of this line will enable a material increase in the volume, which should facilitate higher trading activity.

Figure 1: LSAP holdings of IIBs



Source: The Treasury, Reserve Bank of New Zealand

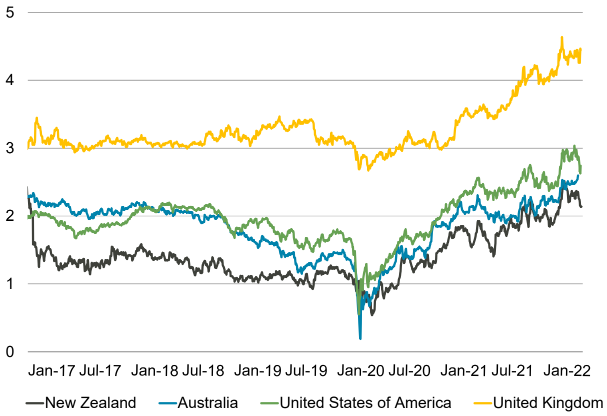
Figure 2: Turnover activity across IIBs



Source: The Treasury

- Many sovereigns take the approach of maintaining and regularly issuing into their 10-year benchmark, whilst also retaining a long-dated point on the curve. Relative to long-dated IIBs, a 10-year benchmark bond typically exhibits higher trading volumes, so would assist with improving market functioning. Global data shows greater turnover in short- and mid-curve bonds, rather than at the very long-end, with more active accounts trading cyclical inflation views. Consequently, we intend to maintain and continue issuing into, subject to demand, a bond that can proxy as a '10-year' point on the IIB curve.

Figure 3: Comparison of '10-year' break-even inflation across sovereign inflation-linked issues



Source: Bloomberg, Treasury calculations

- The purpose of the 2035 IIB transaction is to help improve vibrancy in the market for the long-term, rather than explicitly being to raise funds. Consequently, alongside the syndication, we will undertake a buyback of the 2025 IIB. The 2025 IIB will be circa. 3 years to maturity and the buyback will help investors recycle capital into longer-dated IIBs. We believe this will assist with participation in the syndicated transaction.

What does this mean for future curve extension?

Our existing IIB investors generally state a preference for longer-dated IIBs, due to the inherent demand for IIBs coming from those looking to offset long-dated liabilities. We accept that longer-dated issues may exhibit lower liquidity and market turnover as they are typically held in greater proportion by buy and hold investors. However, to satisfy this investor demand, **we still intend to issue longer-dated IIBs in the future**.

We are taking a bifurcated strategy to both satisfy demand of our existing investor set and improve liquidity and investor interest in the market. We believe that greater activity in short- to mid-dated IIBs can benefit longer-dated issues by allowing those investors with longer-dated liabilities greater ease to move further out the curve.

2022/23 IIB issuance

Over 2022/23, IIB issuance is expected to be between NZ$1.5 billion and NZ$3 billion. However, as the near-term strategy is aimed at improving market functioning, we have flexibility of IIB issuance volumes. We are also cognisant of ensuring demand and supply of IIBs are in balance, as not doing so may be detrimental to the long-term functioning of the IIB market and likely outweigh any benefits of having IIBs in the portfolio. Therefore, ultimate issuance of IIBs in 2022/23 is dependent on market demand.

The process of the Reserve Bank of New Zealand actively managing down their New Zealand Government Bond Large Scale Asset Purchase (LSAP) portfolio does not have any direct implications for our IIB strategy.

Conclusion

For IIBs our current primary strategic objective is to build greater vibrancy in the market, as IIBs are an important product for investors and the issuers alike. We have already taken steps to improve market activity and turnover by making changes to our tender process, as announced at HYEFU, which has seen some improvements.

Going forward, our strategy is to maintain an approximate 10-year line, aligned with both nominal and cross market bond lines to facilitate comparison. An increase to the individual IIB line capacity limit also enables us to increase volumes in each line, which may facilitate increased turnover. To satisfy investor demand, we also intend to issue longer-dated IIBs the future. That said, we remain cognisant of ensuring demand and supply are in balance and will respond to changing market conditions as required.

Appendix

Key features of IIB issuance strategy

- We target 5% to 10% of bond issuance into IIBs, subject to demand.
- We take a flexible tendering approach, across different lines and variable volumes.
- Maintain a 10-year IIB benchmark bond.
- Provide bond lines that can be compared, both across markets and against nominal lines.
- Regular engagement with market participants.
- Provide IIB instruments for long term liability management, conditional on demand.

Main Characteristics of IIBs

- IIBs are wholesale fixed-term debt instruments where the coupon payment and principal are indexed to the New Zealand Consumer Price Index (CPI).
- The quarterly indexation is half the semi-annual change in the CPI ending in the quarter which is six months prior.
- Unlike some other markets, there is no inflation floor on New Zealand IIBs.

Providing Feedback on tender demand to NZDM

As previously announced, IIB demand from market participants will be assessed on the Monday prior to a scheduled IIB tender. The information received will contribute to the decision to hold that tender, and the volume and the IIB maturity date(s) to be offered. If your organisation would like to provide feedback or express demand, please email investor.relations@treasury.govt.nz or NZDM would be happy to facilitate a call if preferred.

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