NEW ZEALAND DEBT MANAGEMENT

New Zealand Debt Management Insights

TE TAI ŌHANGA THE TREASURY

Building resilience in the Crown's liquidity management

Introduction

New Zealand Debt Management's (NZDM) core function is financing the Crown's borrowing requirements in a way that minimises costs while keeping risks at an acceptable level. One of the key risks that the Crown faces is liquidity risk which refers to the ability to meet all payment obligations in a timely and economic manner.

The economic and fiscal outlook will always be subject to uncertainty, and the Crown's funding programme is well-placed to adjust to the changing landscape. However, the economy will, from time to time, be buffeted by impactful, unanticipated events – one such recent example is the global pandemic – and the funding programme requires inbuilt resilience to function effectively in all plausible market and economic conditions.

This note outlines our rationale for holding a larger Crown liquidity buffer relative to history. In addition, we describe the methodology for determining the size that we intend to hold on an enduring basis, and the implications for the funding strategy.

Background

NZDM undertake liquidity management on behalf of the Crown and can adjust bonds and T-Bills on issue, as well as holdings of financial assets, to adapt to changing cashflow requirements. One example is increasing liquidity ahead of a bond maturity by issuing T-Bills and selling down financial assets. In addition to managing regular cash flow requirements, NZDM holds a 'liquidity buffer'.

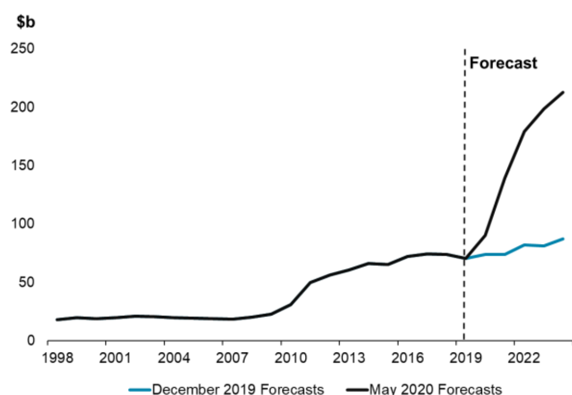
The purpose of the buffer – a portfolio of cash and liquid, high-quality financial assets – is to ensure that the Crown can respond to unexpected fiscal shocks or disruptions in funding markets. From a debt management perspective, the buffer helps avoid short-term adjustments to the borrowing programme, underpins investor confidence and reduces the need to fund in stressed market conditions when financing costs are elevated.

The COVID-19 experience

In the past, NZDM has held a liquidity buffer of at least NZ$2 billion. However, with the onset of the COVID-19 crisis, NZDM undertook a range of issuance activities to meet the elevated cash flow demands. From May-June 2020, NZGB issuance exceeded NZ$15 billion and T-Bill issuance also increased. This compares to a two-month run-rate of NZGB issuance of around NZ$1.2-1.5 billion in the preceding year. Figure 1 below shows the extent of change to the forecast bond programme at that time.

The extra funding enabled the Government to support the economy through the peak of the crisis and was critical. However, this required NZDM to undertake substantial bond issuance during a time of significant market uncertainty.

Figure 1: NZGBs on issue



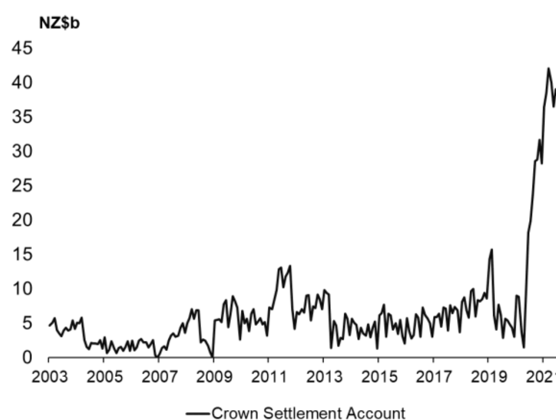
Source: The Treasury

One of NZDM's principles is to be a regular and predictable market participant. We anticipate that holding a larger liquidity buffer, in future will help absorb some of the immediate pressure on the borrowing programme in similar circumstances, and provide greater scope to signal changes to the market. This may result in lower borrowing costs than observed during the peak COVID-19 period. It will also provide greater certainty regarding the availability of funding.

Given the range of potential economic and fiscal outcomes in the earlier stages of the pandemic, NZDM increased debt issuance to allow a build-up of substantial cash holdings in the Crown Settlement Account (CSA)[1]. The CSA is the Crown's bank account held at the Reserve Bank of New Zealand (RBNZ). The increase in cash holdings aimed to provide operational flexibility during a period with significant forecast risks. The uncertain outlook facing NZDM was consistent with public debt managers globally as they grappled with large changes in borrowing programmes and market access concerns.

The subsequent stronger than expected rebound in the New Zealand economy boosted fiscal outcomes and resulted in higher cash levels than might have been anticipated during the early stages of the COVID-19 outbreak. The evolution of the Crown's cash holdings in the CSA account is shown in Figure 2. With COVID-19 related fiscal risks receding, NZDM has undertaken analysis on the size of liquidity buffer that might now be required to build resilience for future crises and take account of the increased volume of debt on issue.

Figure 2: CSA Balance



Source: RBNZ (as of 31 October 2021)

International comparison

Surveys of sovereign debt managers by the OECD reveal that liquidity buffers are common across member countries[2]. Buffers are typically held as a mitigant against refinancing and liquidity risk that could result from mismatched cashflows or a temporary loss of market access. Sovereign funding plans cannot be adjusted easily in response to changes in conditions, and a liquidity buffer contributes to enhanced market confidence and improved financial flexibility without damaging predictability. Furthermore, IMF data[3] shows that many advanced economies held average cash balances in their Central Bank accounts at levels around 3% of GDP at the end of 2018 (figure 3).

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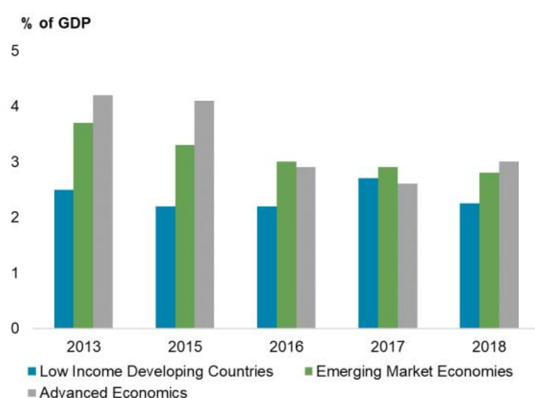
[1] The CSA level is influenced by payments and receipts by Government Departments alongside NZDM's issuance of bonds and T-Bills. The cash component of the liquidity buffer will be held in the CSA account.

[2] Cruz, P. and Koc, F. (2018), "The liquidity buffer practices of public debt managers in OECD countries", *OECD Working Papers on Sovereign Borrowing and Public Debt Management*, No. 9, OECD Publishing, Paris.

[3] Hurcan, Y., Balibek, E. and Koc, F. (2020), "How to Set Up A Cash Buffer: A Practical Guide to Developing and Implementing a Cash Buffer Policy", *IMF How-To Notes* 2020/004.

Figure 3: Central Government Cash Balances at the Central Bank, year-end



Source: IMF Monetary and Finance Statistics

There is a large variation among countries in the timeframe the liquidity buffer would be required to cover – from one week to one year – depending on country conditions and motives for adopting a buffer. The most common practice is to keep a sufficient level to cover budget expenditures (including debt redemptions) for one month.

Assessing the size of the buffer

NZDM has reviewed the level of the liquidity buffer to hold on an ongoing basis. Scenario analysis was undertaken to assess the cash requirements and contingent liabilities that would require financing in the six to eight weeks following a stress event. This reflects an assumption about the length of time that issuance conditions for government bonds could be adversely impacted by a large economic shock or natural disaster.

The analysis suggests that NZ$15 billion is an appropriate level to hold to through time to meet core objectives. The buffer would comprise of cash and liquid, high-quality financial assets and is complemented by the Crown's overdraft facility at the RBNZ. The revised NZ$15 billion level is based on the experience through 2020, scenario analysis of potential shocks the Crown may face and practices of sovereign debt managers in OECD countries. Quantifying the liquidity buffer is a judgement that depends on the trade-off between tolerance for liquidity risk and the potential financial cost of holding the buffer.

A key consideration is the financial cost of holding the buffer. This is the difference between the funding costs and the investment returns from cash and the financial assets that comprise the buffer.

Although variable, NZDM's analysis shows that financial assets would have typically generated a positive return over the cost of funding over the past 10 years. This is because the Crown's cost of funding is generally lower than the rate of return earned by investing these cash proceeds.

There is a risk that market conditions could change in the future resulting in the liquidity buffer being a net cost to the Crown. Therefore, any potential costs to holding a larger liquidity buffer, should they arise in the future, would need to be evaluated against the benefits described in this note. Accordingly, NZDM will undertake regular reviews of the buffer to evaluate the risk management benefits of holding additional Crown liquidity against any ongoing financial implications.

Implications for term funding

With the improved economic and fiscal outlook outlined in HYEFU, and some reduction in uncertainty, NZDM considers it an appropriate time to move to the new liquidity buffer level. In practice, everything else being equal, we will achieve this by gradually reducing borrowing programmes (Table 1) to smooth the transition.

Table 1: HYEFU 2021 Forecasts

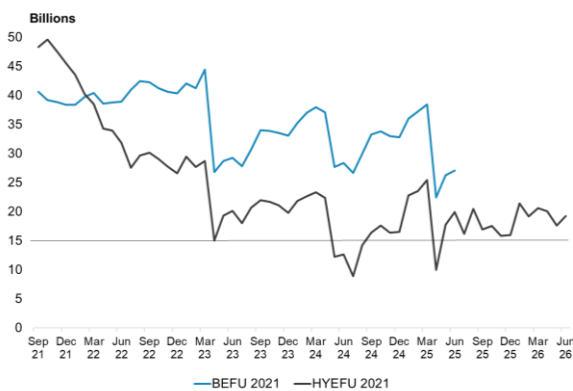
Year ending 30 June (face value)	2022	2023	2024	2025	2026	Total
Gross NZGB issuance (NZ$ billion)	20.0	18.0	18.0	18.0	10.0	84.0
NZGBs outstanding (NZ$ billion)	144.8	147.3	151.5	154.7	152.8	n/a
NZGBs outstanding (% of GDP)	40%	37%	37%	35%	33%	n/a
Forecast T-Bills on issue (NZ$ billion)	4.0	3.0	3.0	3.0	3.0	n/a

Source: The Treasury

Cash and marketable security holdings have recently been close to NZ$50 billion, and the borrowing programme has been set so that, after incorporating changes to fiscal forecasts, the liquidity buffer will reduce to the new level in the latter stages of 2022/23.

NZDM intends to issue short-term instruments (T-Bills, ECP) to ensure the liquidity buffer is maintained around the time of bond maturities, when there would otherwise be short-term dips below NZ$15 billion, as shown in Figure 4. The core assumption for T-Bills shown in the borrowing programme forecasts (and incorporated in Figure 4) is NZ$3 billion at fiscal year-end. However, we envisage issuance could be increased toward NZ$10 billion for short periods, where necessary, around bond maturities.

Figure 4: Indicative Cash and Marketable Securities[4]



Source: The Treasury

While an increased buffer size means that gross debt on issue will be greater than otherwise, the holding of cash and financial assets means net debt on issue will be unchanged. As net debt is unchanged, our understanding of credit rating agency methodologies suggests, changes to the liquidity buffer will not impact on NZ's sovereign credit ratings.

Conclusion

NZDM has analysed the size of the liquidity buffer required for a range of scenarios that could result in a temporary loss of market access or unfavourable financing costs. As a result, a larger NZ$15 billion buffer, relative to history, will be maintained to provide sufficient liquidity in adverse scenarios and avoid the need to fund in potentially dislocated markets.

The borrowing programme at HYEFU 2021 has been set so that after incorporating changes to the fiscal forecasts, the level of liquidity will reduce towards the new buffer in the latter stages of 2022/23. Although the cost of holding the buffer has typically been negative over the past decade, ie, held at a profit, it may not be in the future and NZDM will review costs associated with the buffer regularly. Higher liquidity levels, which are aligned with international peers, will result in greater resilience and flexibility for the infrequent, unforeseen and significant shocks to the economic and fiscal outlook.

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[4] Note 'cash and marketable securities' is a subset of Treasury Financial assets in the Crown accounts with the latter including loans to Crown entities and IMF assets.