

Treasury Report: Reintroducing an Inflation-Indexed Bond

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| Date: | 16 April 2010 | Report No: | T2010/620 |
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Action Sought

| | Action Sought | Deadline |
|---|---|-----------------|
| Minister of Finance (Hon Bill English) | Agree that the 2010/11 bond programme will include provision for issuance of a new inflation-indexed bond. | 23/04/2010 |

Contact for Telephone Discussion (if required)

| Name | Position | Telephone | | 1st Contact |
|---------------|---|----------------------------|----------------------------|--------------------|
| Philip Combes | Deputy Secretary - Financial Operations & Head of NZDMO | <i>[Deleted – privacy]</i> | <i>[Deleted – privacy]</i> | ✓ |
| Andrew Turner | Head of Portfolio Management Group | <i>[Deleted – privacy]</i> | <i>[Deleted – privacy]</i> | |

Minister of Finance's Office Actions (if required)

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|-------|
| None. |
|-------|

Enclosure: No

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Executive Summary

We seek your approval to include provision for issuance of a new Inflation-Indexed Bond (IIB) in the 2010/11 bond programme.

The New Zealand Debt Management Office (NZDMO) has recently consulted with market participants on the possibility of reintroducing an IIB. Feedback from these meetings suggested demand for a new longer maturity IIB. There was uncertainty on where it would price due to a lack of an inflation-linked securities market in New Zealand. Foreign investors are likely to be attracted if the bond is sufficiently liquid and if it compares favourably with alternative investments such as inflation-indexed bonds issued by other sovereigns.

A new IIB is cost-effective if it provides funding for the Crown at a level comparable to or better than the cost of servicing nominal debt. A longer-maturity IIB could also provide a pricing benchmark for private sector companies assessing the cost of funding infrastructure investments. In addition, it would provide relatively low-risk inflation protection for retail investors.

Should a cost-effective opportunity arise, we would look to issue a relatively small volume via “private placement”. Depending on the maturity of the deal, it could help guide pricing for a larger transaction in the wider market.

Our preferred method to launch a new IIB to the market would be via syndication. For us, this method has the following benefits:

- reduced uncertainty on issuance price and volume;
- banks have more incentive to market the bond to a wider range of investors; and
- it provides a vehicle for retail investor access over time.

We favour a September 2025 maturity to match an Australian Government IIB. **[Deleted – to avoid prejudice or disadvantage in negotiations and commercial activities**

]. The NZDMO is considering some market support measures to promote liquidity in the new bond, including participating in the secondary market.

Presentations to potential domestic and offshore investors would need to be made prior to a syndicated launch. A deal-specific investor road-show will be required. This would be undertaken by syndicate members and NZDMO staff. **[**

Deleted – under active consideration.

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Recommended Action

We recommend that you:

- a **Agree** that provision for issuance of a new inflation-indexed bond will be included in the 2010/11 bond programme.

Agree/disagree.

- b **Note** that it is likely that a combination of syndication and “private placement” will be used to launch the IIB programme.
- c **Note** that this would implement Recommendation 24 of the Capital Market Development Taskforce report, specifically that the NZDMO expand the range of government debt securities on offer, including longer-term and inflation-indexed bonds.
- d **Note** that a syndicated IIB also partially implements Recommendation 13 of the Capital Market Development Taskforce report, to increase debt issues available to retail investors.

Philip Combes
**Deputy Secretary - Financial Operations & Head of NZDMO
for Secretary to the Treasury**

Hon Bill English
Minister of Finance

Treasury Report: Reintroducing an Inflation-Indexed Bond

Purpose of Report

1. The primary purpose of this report is to seek your approval to include provision for issuance of a new Inflation-Indexed Bond (IIB)¹ in the 2010/11 bond programme.
2. Our analysis covers previous issuance, market consultation, the potential benefits of issuing an IIB, and a summary of the intended issuance strategy.

Previous Issuance

3. Currently \$1.171 billion (face-value), or \$1.618 billion (including the inflation-indexed component), of the February 2016 inflation-indexed bond is outstanding in the market. Between November 1995 and May 1999, the bond was offered in 22 tenders, with the real issuance yield ranging from 4.59% to 6.05%. Issuance was suspended in May 1999 as it was no longer cost-effective relative to nominal bonds. In addition, smaller bond programmes required issuance to be concentrated into nominal bond lines.

Summary of Consultation

4. We have recently consulted with a range of market participants on the possible reintroduction of IIBs, after observing improving demand for the product and following the recommendations of the Capital Market Development (CMD) Taskforce. The following summarises the key themes coming out of these meetings with fund managers and Australian and New Zealand-based banks:
 - i. There was significant uncertainty around where an IIB would price, due to a lack of an inflation-linked securities market in New Zealand and the fact that New Zealand would be regarded as a new issuer in the international IIB market.
 - ii. ***[Deleted – to avoid prejudice to a commercial position]***
 - iii. Foreign investors are likely to be attracted if the bond compares favourably with alternative investments such as inflation-indexed bonds issued by other sovereigns.
 - iv. There could be interest from retail investors seeking a relatively low-risk way to protect against inflation. As KiwiSaver funds grow over time, this should enhance demand.
 - v. Liquidity was seen as a key requirement to attract investors, particularly offshore investors who prefer a larger initial issuance volume and ongoing market support.
 - vi. Potential investors spoken to preferred a new longer maturity IIB as the relatively short time remaining to the maturity of the existing February 2016 issue makes it undesirable as a hedge.

¹ The Annex summarises the differences between nominal and inflation-indexed bonds.

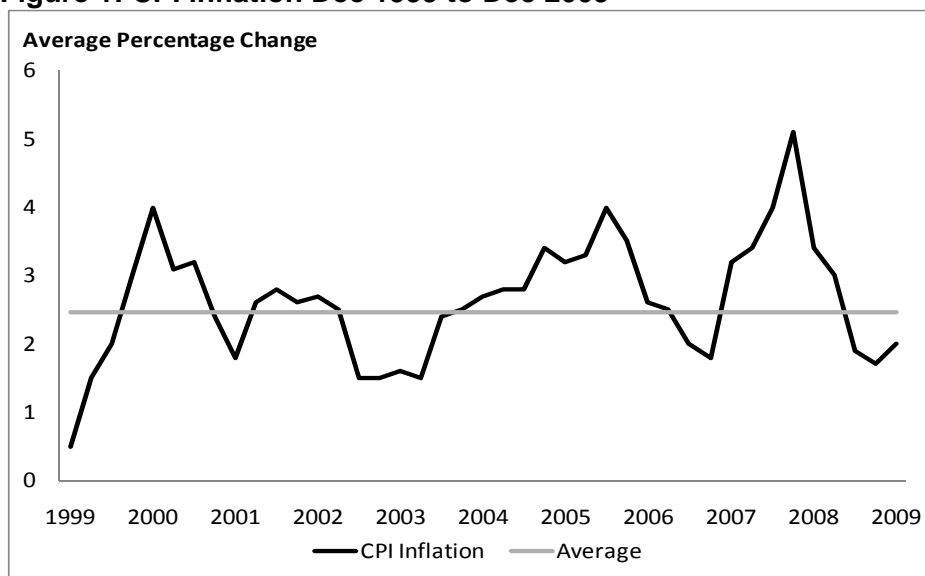
Potential for cost-effective long-term funding for the Crown

- Relative to nominal bond issuance, issuing an IIB is cost effective *ex-post* if its real yield plus actual inflation is less than the yield on a similar maturity nominal bond. *Ex-ante* the cost of issuing IIBs is uncertain, and the following provides a brief overview of how we judge whether IIB issuance represents cost-effective funding for the Government.

Relative cost of the February 2016 IIB

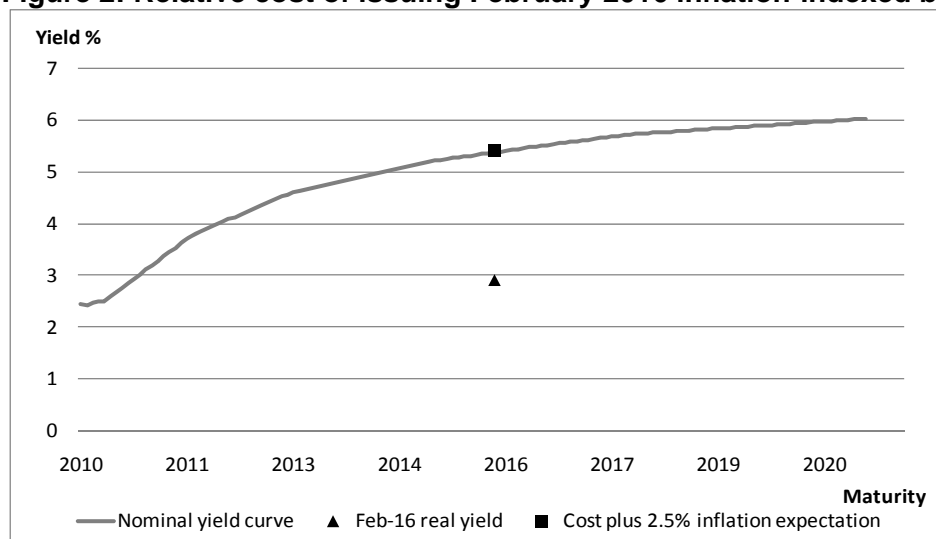
- Current market prices indicate the February 2016 bond has a (real) yield of around 2.9%. Our long-run inflation expectation is 2.5%. This figure is based on 2.5% being the average annual inflation rate over the last 10 years (Figure 1 below).

Figure 1: CPI inflation Dec 1999 to Dec 2009



- Based on current yields and our inflation expectation, if we were to re-issue the February 2016 maturity, the total interest cost would be around 5.4%. This is approximately the same rate as the estimated yield on the equivalent maturity nominal bond.

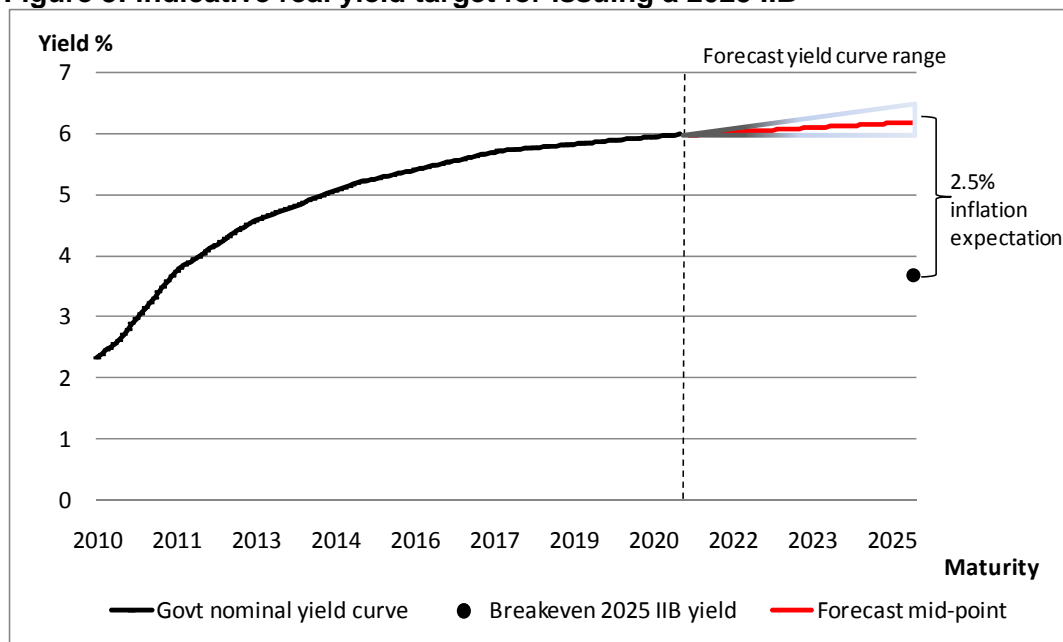
Figure 2: Relative cost of issuing February 2016 inflation-indexed bond



Relative cost of issuing a longer maturity IIB

8. As outlined in paragraph 22, our current view is that we should issue a longer maturity IIB to match the Australian Government's September 2025 maturity. Figure 3 below provides a range of possible yields for hypothetical nominal bonds beyond the current longest point on the nominal bond curve, the May 2021 maturity.² Subtracting the 2.5% inflation expectation from the mid-point of this forecast gives the breakeven yield, that is, the highest real yield that would still make issuance of an IIB cost-effective relative to an equivalent maturity nominal bond.

Figure 3: indicative real yield target for issuing a 2025 IIB



9. As demonstrated in Figure 3, the breakeven real yield for a September 2025 maturity is around 3.75%, although this value will shift over time due to changes in both nominal and real yields.

Recommendations of the Capital Market Development Taskforce

10. The CMD Taskforce released its report in December 2009. The report included a recommendation for the NZDMO to look to expand the range of government debt securities on offer, including longer-term debt, inflation-indexed bonds and bonds available for retail investors.
11. The Government's response to the CMD Taskforce report proposed that the NZDMO would consult with market participants with a view to recommending issuance of inflation-indexed bonds. The NZDMO would also consider retail investor access and participation in government debt products.

Support for funding of infrastructure

12. The Government has signalled its intentions to promote infrastructure investment to increase productivity and support long-term economic growth. Some infrastructure assets generate revenues correlated to inflation. Financing these projects through IIBs is a more effective hedge of the overall net expected return from investing in these types of projects.

² The upper bound of the range represents a forecast based on the slope of the curve between the Dec-2017 and May-2021 maturities. The lower bound equals the current yield on the swap curve which has a 2025 point (although this is very illiquid).

13. A government inflation-indexed security could also provide a pricing benchmark for the private sector against which to assess the relative cost of funding long-term capital investments.

The sovereign Inflation-Indexed Bond market is growing

14. The worldwide market for sovereign-issued IIBs is expanding. Issuing an IIB provides an opportunity to draw in new investors who may not otherwise purchase New Zealand government securities.
15. Last September, the Australian Office of Financial Management (AOFM) issued their first Inflation-Indexed Bond since 2003. The launch of the 2025 maturity was seen as a success by most market commentators, with the initial offering raising AUD 4 billion.

Issuance Strategy

16. Traditional tenders are an efficient way to issue securities where there is more certainty on price. For this reason we issue our existing securities by tender. For new “non-vanilla” issues, such as IIBs, there is less price certainty and more risk to the issuer. Therefore we have considered other issuance methods to manage this risk.

“Private placement”

17. “Private placement” is a broad term we use to describe a deal where debt is sold to an individual investor, or a small group of investors. Such a deal could involve raising funds through the sale of a “traditional” IIB, or through another structure, such as a nominal bond coupled with a CPI swap.
18. Should a cost-effective opportunity arise, we would look to issue a relatively small volume via “private placement”. Depending on the maturity of the deal, it could help guide pricing for a larger transaction in the wider market.

Syndication

19. Our preferred method of launching IIB to the market would be via syndication. For us, this method has the following benefits:
 - reduced uncertainty on issuance price and volume;
 - banks have more incentive to market the bond to a wider range of investors, and
 - it provides a vehicle for retail investor access over time.
20. A feature of syndication is that fees will be paid to the banks in the syndicate. These fees will be included when determining the cost-effectiveness of issuance via syndication.

Maturity

21. Market feedback suggested investors would prefer a longer maturity bond. This would attract institutions seeking assets to hedge their long-term liabilities ***[Deleted – to avoid prejudice to a commercial position]***, and should assist market development by providing corporate borrowers with a pricing benchmark for their own longer-term inflation-indexed debt.

22. We favour a September 2025 maturity to match an Australian Government IIB. We received positive feedback on the introduction of the May 2021 bond, which matched the maturity date of the Australian Government bond. This assisted investors comparing our market with others.

Issuance Volume

- 23. Ultimately, the initial volume that is issued will be determined by the expected cost. Market feedback suggested that **[Deleted – to avoid prejudice or disadvantage in negotiations and commercial activities]** should be offered at the initial launch and that a larger initial volume would attract more foreign investors.
- 24. Over time, should total IIB outstandings reach the equivalent of USD 4 billion and should the bonds be deemed sufficiently liquid, then our IIBs are likely to qualify for the Barclay’s Capital Government Inflation-Linked Bond Index. This would generate further demand as fund managers who track this index but are not already holders of our IIBs would be expected to purchase them.

Market Support

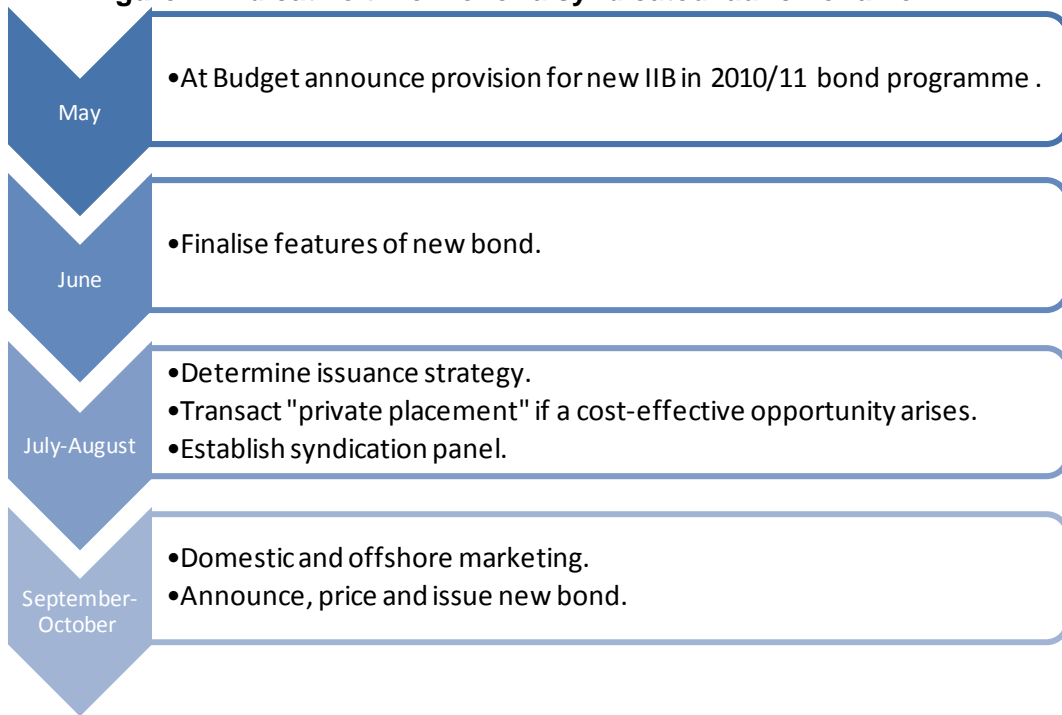
25. Below are some measures the NZDMO is considering to promote liquidity in the new bond.

| | Measure | Description |
|-------------------------|--|--|
| At launch | Provide investors a facility to switch from the Feb-2016 bond into the new bond. | Although this would generate no additional funding, it would help promote liquidity in the new line and possibly encourage these investors to purchase additional amounts. |
| | Signal commitment to ongoing issuance via regular tenders. | Provided pricing remains relatively cost effective, this helps provide investors with some certainty of future supply. |
| On-going support | Repurchase (repo) facility | Repo agreements allow traders to borrow the bond when required. This was seen as being highly desirable by investors and could be provided by the Reserve Bank or NZDMO. |
| | Direct secondary market participation | The NZDMO would buy and sell small amounts of the IIB (and our other nominal bonds) in order to help match demand and supply and enhance liquidity in the new issue. |

Indicative time frame for a new IIB

26. The forecast bond programme and our overall borrowing strategy will be updated in the lead up to the 2010 Budget. We see this as a natural opportunity to formally indicate to the market our intention to issue a new IIB.

Figure 4: Indicative timeline for a syndicated launch of a new IIB



27. Presentations to potential domestic and offshore investors would need to be made prior to a syndicated launch. A deal-specific investor road-show will be required. This would be undertaken by syndicate members and NZDMO staff. ***[Deleted – under active consideration]***.

Annex – the difference between inflation-indexed and nominal bonds

Nominal New Zealand government bonds pay a fixed-interest coupon twice a year. Inflation-indexed bonds differ in that the payments are fixed in real terms. Both the total dollar interest and the principal of an IIB are adjusted to keep pace with inflation. The inflation protection occurs through an adjustment in the value of the bond.

In general, the greater the uncertainty about changes in the future price level, the greater demand for inflation-indexed bonds. In other words, investors are more willing to accept a lower real yield in return for the “insurance” that indexed bonds provide.