## Making the right call on Term Deposits

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Are Term Deposits the most boring subject in finance? Actually, they're anything but. The Term Deposit (TD) market is something that is ripe for finding opportunities to add value for clients, and therefore something all financial planners should study closely. Unlike most markets, it is far from efficient, analysis is relatively straightforward, and free lunches abound. This is an area where it is easy to add demonstrable value for clients. Just making decisions on whether to buy TDs or government bonds is a major source of value add. Add in the ability to find the best TD rate and pick the optimal maturity, and adding $1 \%$ to $2 \%$ per annum on this part of the portfolio is more than feasible. Equity fund managers would kill for that kind of alpha.

## SHOULD I BUY TDs OR GOVERNMENT BONDS?

When TDs are government guaranteed, this is an easy decision to make. Simply go with the highest rate as both TDs and government bonds are exactly the same risk - the government backs both. Right now, Australian TD rates are higher than bond rates but that may not always be the case. Figure 1 shows the average spread between Australian TDs and Australian government bonds over the past 20 years, highlighting the dramatic change since the Global Financial Crisis (GFC). For many years, Australian banks got away with offering terrible rates on TDs, instead relying on cheap wholesale funding from overseas lenders. As a result, investors were definitely better off buying government bonds, either directly or via a managed fund.

Figure 1: Premium paid on three-year Australian TDs vs Government Bonds


Source: RBA

Since the GFC, that has all changed. Under the terms of the Basle III arrangements, banks get more credit from regulators for stable retail term deposits than for wholesale deposits - hence, they are prepared to pay up for retail deposits. This situation may not last forever.

The most important thing to note is that it is a real value-add for investors to get this first decision right - bonds or TDs? While Figure 1 showed how the average spread has looked over time, Figure 2 shows the huge difference that can be made by picking the best Australian TD rate available today instead of buying government bonds.

Figure 2: Best Australian TD and Goverment Bond rates for different maturities

|  | Years to maturity |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |
| Best rate (\%pa - see Figure 4) | 3.90 | 4.10 | 4.10 | 4.40 | 4.60 |
| Government Bond rate (\%pa) | 2.56 | 2.66 | 2.87 | 2.93 | 3.15 |
| Difference (\%pa) | 1.34 | 1.44 | 1.23 | 1.47 | 1.45 |

Sources: Infochoice 23 May 2014, Investing.com

## WHAT IF TDs AREN'T GUARANTEED?

farrelly's recommends sticking to the major Australian banks and their subsidiaries. In our view, the chance of one of them being required to be rescued over the next decade is small. The chance of one then being actually allowed to fail is tiny. In the event that a bank is rescued, even non-guaranteed deposits would be made good.

On the other hand, the chance that one of the smaller Australian institutions gets into difficulty is much higher. As shown in Figure 3, the profitability of regional banks is much lower than that of the major banks and, therefore, the probability of failure would appear to be a good deal higher. In the event that a regional Australian bank got into trouble, it would probably be bailed out - but probably is just not good enough for the secure part of a portfolio. A government trying to balance its budget may well take the view that the broader impact of a non-systemically important institution being allowed to fail is not so high.

Figure 3: Profitability of major and regional Australian Banks


Source: RBA

## WHICH INSTITUTIONS' TDs SHOULD I BUY?

The choice of institution is pretty straight forward if the deposits are government guaranteed. Simply find the best rate for any particular maturity. Credit risk is the same for all of them, so why not go for the highest rates? (Assuming, of course, that there is no
administrative nightmare.) Figure 4 outlines a selection of rates on offer and how big a difference this makes.

Figure 3: TD rates for various providers and maturities

|  | Years to maturity |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Commonwealth Bank | 1 | 2 | 3 | 4 | 5 |
| Me Bank | 3.20 | 3.10 | 3.95 | 3.80 | 4.20 |
| NAB | 3.90 | 4.10 | - | - | - |
| Rabo Direct | 3.35 | 3.55 | 4.00 | 4.10 | 4.50 |
| St George | 3.65 | 4.00 | 4.10 | 4.40 | 4.60 |
| Westpac | 3.35 | 3.90 | 4.05 | 4.15 | 4.55 |
| Best rate | 3.90 | 4.10 | 4.10 | 4.40 | 4.60 |
| Difference between best \& CBA | 0.70 | 1.00 | 0.15 | 0.60 | 0.40 |

Sources: Infochoice 23 May 2014

A few obvious conclusions jump out.
Firstly - the blindingly obvious - it is worthwhile looking around. Astonishingly, while blindingly obvious in theory, it does not seem to happen in practice. At the time of writing, CBA had not only the lowest TD rates of the major Australian banks, it had the biggest market share with over $28 \%$ of all TD monies in Australia. That was almost double the market shares of NAB and ANZ. Between them, the four majors shared about $80 \%$ of the TD market - with, generally, the lowest rates! There is a lot of lazy money out there.

A second observation is that pricing across maturities is (from the outside) hard to fathom. CBA offered less for its two-year TDs than for its one-year TDs. It obviously had no need for funding at that sort of maturity. Similarly, Westpac was offering $0.4 \%$ per annum more to go from two to three years, but only another $0.1 \%$ per annum more to go from three to four years. If you move from four years to five years, it's back to a $0.4 \%$ per annum pickup. Westpac's four-year book seemed to be full. This clearly is not an efficient market.

## WHICH MATURITY DO I BUY?

So, how do we pick the best maturity? For the sake of this analysis, assume the investor has some funds that can be locked away for up to five years. If the investor had a shorter timeframe for some or all of these funds, the analysis could be adjusted accordingly.

The idea is that if we are choosing between a one-year and two-year maturity, we can work out the rate at which we would have to roll over a one-year TD in 12 months in order to get the same return as locking away a two-year TD today. We can then consider how likely this may be and make a decision on whether we prefer a one-year or two-year TD. The analysis can be used to compare the rates on any combination of TD strategies, as we shall see. In this example, we will work with the best rates on offer, as per Figure 4.

To beat the rate of $4.1 \%$ per annum available on a two-year TD, a one-year TD yielding $3.9 \%$ per annum would need to get $4.3 \%$ per annum when rolled over in a year. (That is, if we earn $3.9 \%$ and then $4.3 \%$, the average is $4.1 \%$ per annum) But how likely is it that we can roll over at $4.3 \%$ in one year? It implies a $0.4 \%$ upward shift in interest rates over the year - possible, but probably unlikely in Australia given the economy remains sluggish and the latest budget hardly seems set to fire up the economy. So, on balance, the twoyear term would seem to be a better choice than the one-year term.

Next, consider a two-year versus three-year term.
Again, the question to ask is what do one-year rates need to look like in two years for us to be better off locking in the two-year term at $4.1 \%$ per annum, rather than the threeyear term which is also at $4.1 \%$ ? In this case, we must roll at $4.1 \%$ per annum or better (obviously!). What is the chance that one-year Australian rates will rise by $0.2 \%$ over the next two years? Given that interest rates are very low at present, that would not seem to be much of a challenge. The two-year term is therefore probably preferable to the threeyear term.

We should also look at the two-year versus four-year terms.
The rate on a two-year TD would have to rise from $4.1 \%$ to $4.7 \%$ over the next two years for the investor to be better off locking in $4.1 \%$ per annum for the next two years, rather than $4.4 \%$ per annum for four years. How likely is that? A $0.6 \%$ lift in the rate structure is quite feasible over the next two years - but, on balance, it is probably better to lock in for four years at $4.4 \%$ per annum, as rates are unlikely to lift by much more than $0.6 \%$ over the coming two years, and they may well stay low or go lower.

Finally, let's look at a four-year versus five-year term. What one-year rate do we need to get in four years to beat the $4.6 \%$ per annum on offer for five years?

Five years at $4.6 \%$ per annum is a total of $23 \%$ ( $5 \times 4.6 \%$, ignoring compounding) whereas four years at $4.4 \%$ per annum is a total of $17.6 \%$. In the fifth year, we would need to earn
5.4\% ( $23 \%$ less $17.6 \%$ ), which is a lift in interest rates of $1.5 \%$ above the current one-year TD rate of $3.9 \%$. For this to occur would imply a Reserve Bank of Australia cash rate of around $4.0 \%$ in four years. This is distinctly possible - in fact, it is probable that rates will have returned to around that level. So, in this case, we are indifferent between the fouryear and five-year term. Perhaps some of each is a good strategy.

One last thing we should consider is that the banks may get more - or less - generous.
The average spread between bank TDs and government bonds at the time of writing (early June) was around $1.2 \%$ but has been as high as $2.5 \%$ and as low as $-2 \%$ pre-GFC (as shown in Figure 1). farrelly's expects that this spread will fall over coming years as banks meet their target TD volumes on their balance sheets. If that proves to be the case, the fouryear versus five-year comparison would imply that cash rates would have to rise by a further $0.7 \%$ (the difference between a $1.2 \%$ and $0.5 \%$ spread). This would imply that cash rates would have to rise to $4.7 \%$ for a four-year maturity to be preferable to a five-year maturity. This is unlikely in our view, so all that tips the decision towards the five-year maturity.

In all of this analysis, we are anticipating that cash rates and TD rates will rise - yet, we still want to lock in the long rates. How can this be?

The answer lies in the steepness of the yield curve. Effectively, a steep yield curve means that rates have to rise a lot before it is a bad idea to lock in a longer-dated maturity. If rates rise just a little bit then locking in long-dated fixed interest securities is the winning strategy. Crude rules of thumb such as "don't buy fixed interest if rates are expected to rise" are just that - crude - and, often, very wrong. A somewhat more sophisticated analysis, as laid out here, will give much better results.

## TECHNICAL NOTES

- How does the government guarantee work if an entity fails? All deposits with Australian Approved Deposit-taking Institutions, up to $\$ 250,000$, are covered. The guarantee covers pretty much all types of investors - individuals, charities, trusts and corporate entities. As soon as APRA declares an institution insolvent, the Financial Claims Scheme kicks into action and all deposits - regardless of term will be repaid as quickly as possible. APRA expects at call deposits to be repaid within a week, with other deposits taking a little longer, but the time will be measured in weeks rather than months. Thus, investors in five-year TDs would be repaid early and would not have to wait out the term of their investment.
- A note on bond funds - farrelly's uses the 10 -year bond rate to forecast returns from 10-year government bonds on the grounds that if we buy a 10 -year bond at $3.5 \%$ per annum and hold it for 10 years, the return will be $3.5 \%$ per annum. This works perfectly if 10 -year Commonwealth government bonds are bought and held
to maturity and no interest payments are reinvested - which obviously is not the case for most bond funds as their value is marked-to-market, corporate as well as government bonds are owned, duration is less than 10 years, the bonds are constantly being traded, nothing is held to maturity, and income is reinvested

In fact, all this doesn't matter too much in practice. Figure 5 shows the 10 -year government bond rate at the start of a period and the subsequent performance of the UBS Government Bond Index. Clearly, there is a very strong correlation between the two. And, contrary to popular opinion, long-term returns on bonds are aided by rising bond yields and hurt by falling bond yields. Yes, afraid so. This is because the return from the underlying bonds are pretty much locked in but returns on reinvested income are hurt by lower yields and helped by higher yields. It's another twist in the crazy world of bond maths. Secondly, we have to deal with the value added by subtracting all of the trading activity of the bond managers. Fortunately - or not - it doesn't tend to amount to much. Bond managers are a conservative bunch and don't generally like to ever be too far from their peers, and that means the index. So, if the 10 -year index return looks like the rate at the start of the period and the managers look like the index, then the funds' returns will closely resemble the yield at the start.

Figure 5: Bond yields predict bond returns


- Running the TD calculations - The easiest way to approach the calculations to compare two different TD terms is to simply work out the total interest paid over the life of each security and, from that, the difference than needs to be earned
when the shorter dated maturity matures. This difference is then averaged over the difference in years between the two maturities. Of course, this method ignores compounding - but returns very similar results with far less complexity. If you're interested in running the calculations, Figure 6 summarises how to do so.

Figure 6: Sample calculations of breakeven TD rates

| Maturity $=\mathrm{A}$ | $\begin{gathered} \text { Rate (\%pa) } \\ =\mathrm{B} \end{gathered}$ | $\begin{aligned} & \text { Total Earned (\%pa) } \\ & =\mathrm{C}=\mathrm{A} \times \mathrm{B} \end{aligned}$ |
| :---: | :---: | :---: |
| 1 year | 3.9 | 3.9 |
| 2 years | 4.1 | 8.2 |
| 3 years | 4.1 | 12.3 |
| 4 years | 4.4 | 17.6 |
| 5 years | 4.6 | 23.0 |
| Comparison | Difference in total return (\%) $=\mathrm{D}=\mathrm{Ci}-\mathrm{Cj}$ | Break-even rate (\%pa) $=(\mathrm{Cj}-\mathrm{Ci}) /(\mathrm{Aj}-\mathrm{Ai})$ |
| 1 year vs 2 years | $8.2-3.9=4.3$ | $4.3 / 1=4.3$ |
| 2 years vs 3 years | $12.3-8.2=4.1$ | $4.1 / 1=4.1$ |
| 3 years vs 4 years | $17.6-2.3=5.3$ | $5.3 / 1=5.3$ |
| 4 years vs 5 years | $23.0-17.6=5.4$ | $5.4 / 1=5.4$ |
| 1 year vs 3 years | $12.3-3.9=8.4$ | $8.4 / 2=4.2$ |
| 2 years vs 4 years | $17.6-8.2=9.4$ | $9.4 / 2=4.7$ |
| 3 years vs 5 years | $23.0-12.3=10.7$ | $10.7 / 2=5.3$ |
| 2 years vs 5 years | $23.0-12.3=10.7$ | $10.7 / 2=5.3$ |
| 2 years vs 5 years | $23.0-8.2=14.8$ | $14.8 / 3=4.9$ |

Sources: farrelly's

Tim Farrelly is principal of specialist asset allocation research house, farrelly's Investment Strategy, available exclusively through PortfolioConstruction Forum. Tim is a member of PortfolioConstruction Forum's core faculty of leading investment professionals.

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