

DEBT SECURITIES (FIN5DBS) – SEMESTER 1, 2012

TUTORIAL ASSESSMENT TASK 1 – ISSUE OF CORPORATE BONDS BY ORIGIN ENERGY LIMITED

On November 15th 2011, Origin Energy Limited announced an issue of Origin Energy Notes aimed at raising \$500 million to use to fund a joint venture liquefied natural gas (LNG) project with the ConocoPhillips and Sinopec corporations. The Notes were issued and listed for trading on the Australian Securities Exchange (ASX) on December 20th 2011. The following table provides information relating to the issue of Origin Energy Notes:

Issue type	Notes are dated, unsecured, subordinate cumulative notes
Issue size	\$500 million, based on an issue price of \$100 per Notes, with a minimum subscription of 50 Notes (or \$5,000)
Par value	\$100 per Origin Energy Note
Maturity date	December 20 th 2071, representing a 60-year issue period, unless redeemed earlier
Interest rate	Coupon interest rate = 90-day bank bill rate plus a 4.00% per annum margin, which will be reset quarterly in advance. Coupon interest payments will be made quarterly in arrears on March 20 th , June 20 th , September 20 th and December 20 th
Deferrable interest payments	Origin Energy Limited may elect to defer any interest payment. All optionally-deferred interest payments are cumulative and must be paid within five years of the deferral date. While any optionally-deferred interest payments are outstanding, Origin Energy Limited cannot make dividend or other distribution payments on ordinary shares or equally-ranked debt
	Origin Energy Limited is required to mandatorily defer interest payments if its credit rating falls below investment grade level
Redemption rights	Origin Energy Limited can redeem the Notes on the fifth anniversary of the issue on December 20 th 2016 (the First Call Date), or on any Interest Payment Date after this First Call Date
Step-up provision	If the Notes have not been redeemed by December 20 th 2036 (25 years after the issue date), the margin payable will increase by 1.00% per annum
Change of control provision	The margin will increase by 5.00% if a Change of Control Event occurs and Origin Energy Limited does not elect to redeem the Notes following that event
Security	Origin Energy Notes are unsecured obligations of Origin Energy Limited and will rank ahead of ordinary shares, equal with any equal-ranking obligations and behind all creditors and all other classes of shares

Solution to Tutorial Assessment Task 1

1) Outline whether the following two embedded options associated with the issue, i) the deferrable interest payment provision and ii) the step-up provision increasing the margin payable, are of potential benefit to Origin Energy Limited or investors in the Notes. (3 marks)

For these two embedded options:

- The deferrable interest payment provision is of potential benefit to Origin Energy Limited rather than Note investors as it provides the company with increased flexibility regarding management of their interest payment obligations.
- The step-up provision is of potential benefit to Note investors rather than Origin Energy Limited as, if activated, it will increase the magnitude of the quarterly coupon interest payment received by investors as the margin component of the coupon interest rate will increase to 5.00% as opposed to the 4.00% margin payable prior to the step-up provision date.

2) Suggest reasons why Origin Energy Limited would have issued these Notes with a very long maturity period of 60 years. What benefits or disadvantages, if any, might this long maturity period have for investors in the Notes? (4 marks)

The only really obvious reasons why Origin Energy Limited would have specified the 60-year maturity date is to ensure potential access to the funding for this time period if it is required for the current project, or potentially to be rolled-over into other activities, or to provide maximum financial flexibility if project cash flows are uncertain or the company expects to experience a difficult operating period during the near future. They may also think that there is a captive market of investors looking for a debt-like investment that has an equity-like maturity structure, although 60 years would be greater than any feasible investment horizon.

This 60-year maturity period is potentially attractive to investors looking for an investment providing a long-term cash flow stream, although this is not guaranteed due to the redemption and deferment options available to Origin Energy Limited. Although the Notes provide interest rate risk protection, a lot can happen both to the company and in wider markets over such a time period which could have credit risk and reinvestment risk implications. Payments received over such a long period will also experience substantial purchasing power loss (inflation risk), and the ability to sell the Notes before the potential 60-year maturity date depends on their attractiveness to other investors and the resulting liquidity on the ASX.

3) Outline whether investors who purchase the Origin Energy Notes are exposed to interest rate risk and reinvestment risk, and explain the nature of any exposure to these risk elements. (3 marks)

Investors in the Origin Energy Notes are protected from interest rate risk due to the reset floating coupon interest rate, which should minimise note price movements in response to underlying interest rate changes. Due to the quarterly interest rate reset process, however, there will be some exposure to interest rate risk effects if interest rates change in between reset dates.

Investors are fully exposed to reinvestment risk due to the expected payment of quarterly coupon interest, which may not be able to be reinvested at the Note's promised yield to maturity if market interest rates decline, for instance. The very long-dated maturity period increases this potential exposure, although the deferrable interest payment provision and, particularly, the redemption provision available to Origin Energy Limited will lower reinvestment risk exposure if it is likely that redemption of the Notes will occur around the first call date in five years time.