



Sovereign Debt Management Newsletter

Storkey & Co Limited
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What's New

It was very sad to see the devastation across the Asian region from the earthquake and tsunami and the widespread impact across so many countries. As many of these countries are heavily indebted, we hope that the international agencies are able to provide debt relief, particularly for loans which have funded infrastructure projects that have been completely destroyed.

Our sympathy is with the families, including those from the debt management units across the region, that have lost family and friends. Fortunately, all the debt management units were located in cities that were not significantly affected by the earthquake and tsunami.

Storkey & Co Update

Over the past 3 months, we have:

- completed the SAGRIC International PNG Advisory Support Facility debt management project for the Department of Treasury and Finance.
- continued to assist with the Debt Management and SOE Fiscal Risk component of the Public Financial Management

In this Newsletter, there are articles covering:

- Loan Valuations using either a zero coupon curve or CIRR rates.
- New Developments at the NZ Debt Management Office.
- Debt Management Training—Program for Vietnam.

It is now four years since the company was established, with 25 consulting assignments worldwide across 14 countries. We look forward to another year where we can continue to build capacity in sovereign debt management and to further develop and enhance the capability of DMUs.

Reform Project for the Ministry of Finance in Vietnam.

- provided training to 20 officials from the Government of Vietnam in debt management policies and middle office operations.

In addition, we have been contracted to assist PwC with an ADB TA project in India, commencing in February 2005.

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Special points of interest:

- *In November / December 2004, the company used Capiche Design to design a new banner with a digital logo. The new banner and logo have been incorporated into the website, company documents, and the Newsletter. Capiche also designed templates for training certificates and PowerPoint presentations.*

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Loan Valuation—Using a Zero Coupon Curve

We are often required to undertake loan valuations to determine the cost saving from pre-payment of high cost external debt. Most of the cost analyses are done on an accounting basis and overstate the savings due to the failure to discount or correctly value each loan.

We have developed a methodology utilising the market data provided daily by the World Bank Treasury. This methodology has five steps as follows:

1. Use the World Bank Treasury market data plus the lending spread for either ADB or IBRD

loans to generate a yield curve for USD, EUR and JPY.


2. Generate a similar yield curve for other currencies based on money market, swap, and/or government yield curves where available.
3. Derive a zero coupon curve for each currency using the standard bootstrap methodology.
4. For each loan, determine all the remaining cashflows including future disbursements.
5. Using the zero coupon curves, discount remaining cashflows

for each loan to determine the loan valuation.

The major difficulties are with respect to step 2—determining the yield curves for the “minor” currencies. However, we have found that these currencies are normally a small component of external debt. Also, we decompose SDR loans and ensure that pool-based loans are valued using the appropriate currencies.

The methodology can be applied to domestic debt and can be the basis for providing a market-to-market valuation for all government debt.

	MATURITY	MID RATES		
		USD	EUR	JPY
	3M	2.56	2.15	0.05
	6M	2.78	2.21	0.07
	12M	3.10	2.35	0.09
	2Y	3.45	2.62	0.18
	3Y	3.67	2.83	0.33
	4Y	3.85	3.01	0.50
	5Y	4.04	3.17	0.69
	6Y	4.18	3.31	0.87
	7Y	4.32	3.44	1.06
	8Y	4.43	3.56	1.22
	9Y	4.54	3.66	1.37
	10Y	4.65	3.75	1.50
	12Y	4.81	3.89	1.70
	15Y	4.99	4.05	
	20Y	5.15		
	25Y	5.16	4.32	
	30Y	5.24	4.35	


International Bank for Reconstruction and Development
 Treasury Asset Liability Risk System (TALRS)
MARKET DATA
 Money Mkt and Swap Rates as of 12/31/2004

“We have developed a five step methodology utilising the market data provided daily by the World Bank Treasury to value loans.”

Loan Valuation—Using Discount Rates

An alternative to the zero coupon method for determining the PV of a loan has been set out by Nihal Kappagoda in “Best Practices and Key Analytical Functions for Public Debt Management” Series No 6, available from UNITAR—refer to the DFM/UNITAR website: www.unitar.org/dfm

Two sets of PV calculations are used for a DSA. One is the PV on

external debt outstanding which excludes all future disbursements on existing or future loans and the reductions from likely debt relief in the future and consequently the debt service payments that will fall due on these. The second is the PV on external debt outstanding plus new disbursements and the reductions from likely debt relief in the future.

In the case of loans from IBRD, IDA and IMF, the discount rate used is the SDR rate.

In the case of loans from other multilateral institutions, the interest rate charged on non-concessional loans is used. Loans from bilateral and commercial sources are discounted by the CIRR rates agreed by the OECD for officially supported export credits.



Developments Downunder at DMO

As the New Zealand Government continues to run fiscal surpluses and increase its net worth by around NZ\$5 billion per year, financial assets are expected to exceed gross debt over the next year or so. This is presenting the New Zealand Debt Management Office (NZDMO) with new challenges in asset-liability management.

Foreign currency assets and debt have been fully hedged since 1996. Domestic debt has been

traditionally based on the principles of transparency, predictability and even-handedness. According to the NZDMO, it is timely to consider matching domestic debt against the increasing assets on the wider government balance sheet.

This will involve:

- As a first step, the assets and liabilities managed by the NZDMO were reported on a stand-alone basis for the first time in the Annual Report of the Treasury for 2003-04.

- Parts of the domestic portfolio will progressively be managed as a quasi-tactical portfolio.
- NZDMO will consider how to integrate other financial assets of the government that are explicitly funded by domestic debt (such as Reserve Bank of New Zealand, Earthquake Commission, New Zealand Superannuation Fund, Student Loans, and other cross-holding portfolios).

This approach is similar to the Australian States and we think is the first for a Central Government.

Debt Management Training—Program for Vietnam

The 5-day training program and 2-day seminar provided to officials from the Government of Vietnam was structured as follows:

Establishment and Functions of a Middle-Office

- The evolution of middle office and debt management
- DMU organisation, especially the middle office
- The culture of a DMU
- Establishing the middle office and how it is perceived

- Risk identification
- Risk measurement
- Risk management
- DMU strategy and risk policy
- Other issues including legal & IT

Policy Issues in Debt Management

- Evolution of public debt management
- DMU policy issues and institutional arrangements

“Structure of the 5-day training program and 2-day seminar provided to 20 officials from the Government of Vietnam”

- New Zealand experience with debt management
- Application of debt management policies to Vietnam

The training was delivered by Company Director, Ian Storkey and Todd Robinson, with assistance from Murray Nash.

Recent Developments or Announcements

The UK DMO has been consulting the market about the possible introduction of additional gilt instruments, specifically:

- ultra-long (circa 50-year) conventional and index-linked gilts
- ultra-long (circa 50-year) conventional and index-linked annuity-type gilts

The DMO published a consultation document seeking views of market participants (with a deadline of 21 January 2005). The consultation document was posted on the DMO website at:

www.dmo.gov.uk/gilts/public/consdoc/cons021204.pdf

These instruments are being examined in the context of the gen-

eral debate on pensions and increased longevity in the UK.

Also, there have been changes in risk management practices of the UK pension industry with a closer matching of assets and liabilities, reflected in a shift from equities to bonds in pension portfolios together with an increased demand for annuities.

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Storkey & Co Limited is an international management consultancy providing independent specialist advice on debt and risk management to central, state/regional & local governments, government enterprises, & corporate treasuries.

The company employs or works in partnership with recognised experts who have considerable international experience in the finance markets and in public sector debt management. With their extensive project and change management expertise, they have developed an international reputation for delivering the highest quality practical solutions.

These experts have gained practical experience from working in a government debt office and on ADB, AusAID, DFID, IMF, UNDP and World Bank technical assistance projects internationally.

Since the company was established in early 2001, assignments have been undertaken in Australia, Canada, Fiji, India, Indonesia, Lithuania, Mauritius, New Zealand, Papua New Guinea, Philippines, Solomon Islands, Thailand, and Vietnam.

Debt Management Unit Publications & Websites

The list of government debt management office/unit websites has become too large to include in the newsletter. As a result, we will now provide details of any new DMOs/DMUs. The full list is on our website at:

www.storkeyandco.com/Library/Links/links.html

The new debt management office or agency websites are:

Slovakia: www.ardal.sk

The new debt management units within the Ministry of Finance or Central Bank are:

Albania: www.minfin.gov.al

Cyprus: www.centralbank.gov.cy

Estonia: www.fin.ee

Jordan: www.mof.gov.jo/english/inside.asp

Latvia: www.fm.gov.lv

Malta: www.treasury.gov.mt/dmo.asp

Norway: odin.dep.no/fin/engelsk

Panama: www.mef.gob.pa

Key publications released by DMUs over the past 3 months:

- **Belgium** Review 2004 & Outlook 2005
- **Belgium** Borrowing Plan 2005
- **Iceland** Government Debt Prospect 2005
- **Ireland** Press Release—Results 2004
- **New Zealand** Information Memorandum for Government Bonds and Treasury Bills

- **United Kingdom** Guide to the roles of the DMO and Primary Dealers in the UK Government bond market
- **United Kingdom** Investing in Gilts—The Private Investor's Guide to British Government Securities
- **United Kingdom** Information Memorandum—Issue, Stripping and Reconstitution of British Government Stock

Also released by DRI— Strategies for Financing Development #21.

