

# Funding Public Private Partnerships

November 2014

BUILDING TEAM SPIRIT TOGETHER

 **SOCIETE GENERALE**  
Corporate & Investment Banking



# OVERVIEW

## CURRENT INFRASTRUCTURE DEBT MARKETS

- **UK and EUROPE**
- **AMERICA**
- **AUSTRALIA**
- **INDIA**
- **SOUTH AFRICA**

## CRITICAL RISKS AND MAIN CHALLENGES

## RAISING THE CAPACITY OF LOCAL FUNDING MARKETS



# CURRENT MARKET DEVELOPMENTS

# THE UK AND EUROPEAN PPP MARKET

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## ■ Project structure

- Project company retains limited risk.
- Not much flexibility once structure has been finalised
- Very limited recourse to project sponsors

## ■ Typical financing structure

- Long dated debt covering the whole concession term, typically up to 29 years.
- Floating rate debt fully hedged as fixed interest rate or inflation linked
- High leverage of around 90%
- Tight cover ratios of c. 1.18 to 1.20x
- Credit margins of c.1.5%
- Margin step down after construction completion.
- French PPP projects usually include a substantial tranche of government guaranteed debt – ‘Cession Dailly’

## ■ Sources of funds

- Major European and international banks
- Non bank financial institutions starting to enter the market
- Specialist infrastructure debt funds being established
- European Investment Bank supports strategic projects
- Limited use of project bonds.

# THE AMERICAN PPP MARKET

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## ■ Project structure

- Project company retains limited risk.
- Not much flexibility once structure has been finalised
- Very limited recourse to project sponsors
- Additional support or structuring around the construction risk to achieve an investment grade credit rating

## ■ Typical financing structure

- Long dated debt covering the whole concession term, typically up to or even in excess of 30 years.
- Fixed interest rate tax exempt bonds, mainly Private Activity Bonds (PABs)
- Also have the TIFIA, US government loan program, which provides low cost long term loans to some transactions.
- High leverage of around 90%
- Tight cover ratios of c. 1.20x
- Credit margins of c.1.5%

## ■ Sources of funds

- Liquid and deep bond markets
- Financial institutions and sophisticated bond investors
- Limited use of bank debt, usually shorter dated repaid by milestone payments.

# THE AUSTRALIAN PPP MARKET

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## ■ Project structure

- Project company retains limited risk.
- Not much flexibility once structure has been finalised
- Very limited recourse to project sponsors

## ■ Typical financing structure

- Short to medium dated debt requiring a number of refinancings over the project life.
- Debt tenors usually in the 3 to 7 year range, occasionally 10 years
- Floating interest rate loans hedged into fixed interest rate for the term of the debt
- Public sector shares refinancing risk by adjusting payments for movements in underlying reference rate, but not credit margin
- High leverage of around 90%
- Tight cover ratios of c. 1.20x
- Credit margins of c.1.8%

## ■ Sources of funds

- Australian banks and international banks active in that market
- Refinancings starting to access the US Private Placement market to access long dated funding in conjunction with cross currency swaps.

# THE INDIAN PPP MARKET

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## ■ Project structure

- Project company retains a significant level risk.
- Structures generally very lose with some ongoing flexibility once structure has been finalised
- Generally strong support from sponsors to cover key elements of risk

## ■ Typical financing structure

- Medium dated debt with a small bullet repayment at maturity.
- Debt tenors usually in the 10 to 15 year range
- Floating interest rate loans linked to each individual banks reference rate
- Limited interest rate swap market and no common reference rate
- Public sector shares refinancing risk by adjusting payments for movements in underlying reference rate, but not credit margin
- Relatively low leverage of around 80%
- Usually an extended tail of c.5 years after loan maturity
- Cover ratios of c. 1.30x
- Credit margins in the 1.75% to 3% range

## ■ Sources of funds

- Indian banks and particularly the main State owned banks
- Major banks starting to be concerned about sector concentration risk, particularly in the power and roads sectors
- Sponsors starting to explore the use of international bank financing, but managing the currency risk is an issue

# THE SOUTH AFRICAN PPP MARKET

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## ■ Project structure

- Largely follows the European approach
- Project company retains limited risk.
- Not much flexibility once structure has been finalised
- Very limited recourse to project sponsors

## ■ Typical financing structure

- Long dated debt covering the whole concession term, typically 22 to 25 years.
- Floating rate debt fully hedged as fixed interest rate or inflation linked bonds
- High leverage of around 90% for availability projects and 80% for patronage risk projects
- Tight cover ratios of c.1.20 to 1.22x for availability based projects and c.1.40x for patronage risk projects
- Credit margins of c.1.5 to 2.0%
- Margin step down after construction completion.

## ■ Sources of funds

- The largest five domestic banks all active in financing infrastructure projects.
- DBSA also active and can do longer tenors.
- Non bank financial institutions have strong appetite for inflation linked bonds.
- European Investment Bank can provide cheap ZAR funding but requires a project risk guarantee from the local banks.



## CONCLUSIONS AND CHALLENGES

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### ■ Sponsors in all markets are incentivised to access the cheapest most efficient funding source available

- Generally the most efficient source of funding is the local bank market with large savings deposits in the local currency.
- International banks only really get competitive when it comes to providing hard currency funding, usually USD.
- The USA has the most liquid and sophisticated bond market in the world and has tax advantaged products available to fund infrastructure.
- Domestic bond markets in other countries are not that developed and have little appetite for long dated illiquid project bonds.
- Emerging countries do not generally have liquid long dated swaps markets.

### ■ Funding markets were initially severely impacted by the GFC in 2008, but have now largely recovered

- Structures are getting back to where they were before the GFC in most markets.
- Risk margins on average are still higher, but so are bank's liquidity costs.
- European banks are again providing long dated maturities but the Australian banks are still sticking to mini perm structures.
- The monoline insurance market for wrapped project bonds has not been re-established and probably never return.
- Revenue risk projects, particularly greenfield toll roads, have become very challenging and un-bankable in certain markets.

### ■ The UK infrastructure market – value for money drive

- The UK PFI market was particularly reliant on the monoline wrapped bond funding prior to the GFC.
- Perceived shortage of competitively priced debt following the demise of the monoline insurers.
- Long term bank debt increased in cost and was generally less available.
- Government did not believe that short term bank debt (mini perms with the inherent refinancing) offered value for money.
- The UK and EIB guarantee schemes are aimed at reducing the cost of funding rather than addressing a lack of available funding.

## CONCLUSIONS AND CHALLENGES

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### ■ The American infrastructure market – an embarrassment of riches

- The sources of funding for infrastructure transactions in the US are expanding.
- In addition to bank and tax exempt bond markets that have already been tapped by infrastructure projects, the taxable bond market is also a viable source of funding.
- The optimum financing sources for any given project will be determined based on a variety of factors including: the relative supply/demand for infrastructure debt in the municipal, taxable private and bank debt markets, the nature of the required commitments at bid and the views of the rating agencies.
- In the US since 2010, of the 24 most recent projects, banks have provided capital to 6 projects, bonds to 17 projects and 2 project was hybrid bank/bond.
- The underlying index rates between the taxable and tax-exempt market is constantly in flux. The best market of execution changes over time.

### ■ The Australian infrastructure market – the best is yet to come

- Sponsors and government largely comfortable with re-financing risk inherent with short dated mini-perm structures.
- Public sector starting to share in the re-financing risk by allowing interest rate adjustments at re-financing dates.
- The biggest challenge is the unprecedented infrastructure privatisation and re-investment programme launched by their new government.

### ■ The Indian infrastructure market – concentration risk is looming

- Great market for sponsors because the Indian banks do not insist on thorough due diligence and tight structures with strict risk pass through.
- Sponsors are only going to try to source international debt when there is no chance of being able to fund in the domestic market.
- Main challenges for international banks
  - ▶ Lack of a common reference lending rate similar to LIBOR or EURIBOR
  - ▶ Limited market for interest rate swaps
  - ▶ Fixed annuity payments with no adjustment to allow for inflation increases in operating costs or movements in interest rates.

## CONCLUSIONS AND CHALLENGES

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### ■ The African infrastructure market – still emerging

- South Africa has a developed sophisticated domestic banking industry that has the experience of banking complex projects, most notably the Gautrain Rapid Rail Link.
- The rest of Africa is still heavily reliant on DFIs and needs to build capacity in its domestic banks to mobilise local savings.
- Challenges facing the international banks:
  - ▶ Low sovereign ratings.
  - ▶ Increasing risk concerns with longer dated maturities and re-financing risk too great.
  - ▶ Lack of local currency funding.
  - ▶ Concern about corruption and lack of transparency.
- Africa has made huge progress in recent years and as its funding institutions develop they are likely to remain more competitive in their local markets than international banks for funding infrastructure.
- The best way for governments to develop the market is by establishing a credible pipeline of projects and a track record of running an efficient reliable process.



# APPENDICES

SG CIB Infrastructure Project Finance  
G Munro biography

# INFRASTRUCTURE FINANCE EXPERTISE

Société Générale has a longstanding and well established track record of providing financial advisory services, arranging debt and securing capital markets financing for the infrastructure sector

- The infrastructure team has remained at the forefront of the infrastructure market, globally, for the past 20 years
- Société Générale has a track record of developing unique / pathfinder and innovative financing solutions for clients
- Société Générale's market-leading position is consistently recognised by awards and league table ranking by leading trade publications



Global Financial Adviser of the Year

2010-2012 INFR JOURNAL



Transport Financial Adviser of the Year

2011 & 2012 INFR JOURNAL



Best Global Infrastructure House

2012 EUROMONEY



Best Arranger of Project Finance Loans

2010-2012 EUOWEEK



#1 Ratings Agency Advisory Worldwide

2012 EUROMONEY PDS

Transport	Utilities	PPP	Renewables
<ul style="list-style-type: none"> <li>■ Airports</li> <li>■ Ports</li> <li>■ Roads</li> <li>■ Rail</li> </ul>	<ul style="list-style-type: none"> <li>■ Gas distribution</li> <li>■ Water</li> <li>■ Electricity distribution</li> </ul>	<ul style="list-style-type: none"> <li>■ Hospitals</li> <li>■ Schools</li> <li>■ Defence</li> <li>■ Accommodation</li> </ul>	<ul style="list-style-type: none"> <li>■ Wind</li> <li>■ Solar</li> <li>■ Waste to energy</li> </ul>

## FY 2013 League Tables

#	European Project Finance MLA	USD 'm	Market share
1	UniCredit	2,938	5.3%
2	<b>Societe Generale</b>	2,664	4.8%
3	ING	2,641	4.8%
4	RBS	2,513	4.5%
5	BNP Paribas	2,197	4.0%

#	Global Project Finance Financial Advisers	USD 'm	Market share
1	State Bank of India	31,114	13.0%
2	RBS	17,949	7.5%
3	<b>Societe Generale</b>	16,193	6.8%
4	PriceWaterhouseCoopers	13,368	5.6%
5	Mitsubishi-UFJ	10,894	4.6%

#	EMEA Bookrunner	USD 'm	Market share
1	China Development Bank	7,700	20.9%
2	Cassa Depositi e Prestiti	1,898	5.2%
3	BNP Paribas	1,796	4.9%
4	<b>Societe Generale</b>	1,642	4.5%
5	UniCredit	1,372	3.7%

Sources: Dealogic and Thomson Reuters

## REGULAR AWARD WINNING DEALS

### Deals of the Year 2013

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• L2 Rocade Marseille</li> <li>• Castor</li> <li>• Nghi Son Refinery Complex</li> <li>• Sabine Pass Liquefaction Phase II</li> <li>• MIRA Acquisition of Stake in Smetana Holding</li> </ul> | <ul style="list-style-type: none"> <li>European Availability Deal of the Year</li> <li>European Refinancing Deal of the Year</li> <li>Asia Pacific Petrochemical Deal of the Year</li> <li>Americas Deal of the Year</li> <li>Energy &amp; Natural Resources Acquisition of the Year</li> </ul> |
|---|---|



### Deals of the Year 2012

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• HSL Nimes-Montpellier (HSL CNM)</li> <li>• APRR Refinancing</li> <li>• Aeroporti di Roma</li> <li>• TGI (Paris Courthouse)</li> <li>• Egyptian Refining Company (Mostorod)</li> <li>• Australia Pacific LNG</li> </ul> | <ul style="list-style-type: none"> <li>European High Speed Rail Deal of the Year</li> <li>European Refinancing Deal of the Year</li> <li>European Airport Deal of the Year</li> <li>European Social Infrastructure Deal of the Year</li> <li>Overall Deal of the Year – Oil &amp; Gas Deal of the Year</li> <li>Asia-Pacific Oil &amp; Gas Deal of the Year</li> </ul> |
|---|--|



### Deals of the Year 2011

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Project Fenice</li> <li>• Balard</li> <li>• Project Sunshine (Nextera)</li> <li>• Acciona</li> <li>• Tours-Bordeaux/SEA HSL</li> <li>• London Gateway Port</li> <li>• Strada dei Parchi</li> <li>• Global Tech One</li> <li>• PR-22</li> <li>• Royal Adelaide Hospital</li> <li>• Gatwick</li> </ul> | <ul style="list-style-type: none"> <li>European Oil &amp; Gas portfolio Financing Deal of the Year</li> <li>European PPP Defence Deal of the Year</li> <li>European Solar CSP Deal of the Year</li> <li>European Renewable Portfolio Refinancing Deal of the Year</li> <li>Europe Rail Deal of the Year</li> <li>Europe Transport Deal of the Year</li> <li>European Road Real Toll Deal of the Year</li> <li>Wind Deal of the Year</li> <li>Americas Deal of the Year</li> <li>Asia PPP Deal of the Year</li> <li>European Airport Deal of the Year</li> </ul> |
|---|---|



### Deals of the Year 2010

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Rovigo 70MW PV Plant</li> <li>• Southmead Hospital</li> <li>• Castor UGS Gas Storage</li> <li>• Andromeda 51MW PV Plant</li> </ul> | <ul style="list-style-type: none"> <li>European Solar Deal of the Year</li> <li>European Hospital Deal of the Year</li> <li>Europe Oil &amp; Gas Deal of the Year</li> <li>Europe Bond Deal of the Year</li> </ul> |
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## GAVIN MUNRO



Gavin MUNRO

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### Managing Director, Head of Infrastructure Finance, Asia Pacific

- **Gavin heads up the Infrastructure Project Finance team at SG Hong Kong, specialising in the transportation sector. Prior to his transfer to Hong Kong, Gavin was Head of Project Finance at SG London, where he was involved in advising on a broad range of infrastructure projects and other limited recourse financings.**
- **Recent advisory assignments include:**
  - Advising the Hochtief Airport and Goldman Sachs Infrastructure Partners Consortium on their bid for Chicago Midway International Airport;
  - Advising the Hochtief Airport Consortium on their original bid for the privatisation of Budapest Airport as well as their subsequent purchase of the airport from BAA;
  - Advising the Alterra Consortium on their bid for the Lanarca and Pafos airports in Cyprus;
  - Advising GVK Hancock on the funding for the Alpha coal mine in Queensland Australia and the supporting rail and port transport infrastructure;
  - Advising Bouygues and Basil Read on their bid for the N1/N2 Winelands Toll Highway in South Africa;
  - Advising Cintra and Budimex on the financing for the A1Toll Motorway Project in Poland;
  - Advising Murray & Roberts and G4S on their bids for the PPP prison projects in South Africa;
  - Advising the Bouygues, Bombardier and M&R led Bombela Consortium on the Gauteng Rapid Rail Link project in South Africa;
  - Advising the Celtic Roads Group, formed by Dragados, Royal BAM and National Toll Roads, on the Irish toll road projects;
  - Advising the Dragados led consortium in their bid for the N4 West Platinum Toll Highway, in South Africa;
  - Advising Trans African Concessions on the re-financing of the Maputo Corridor Toll Road Project;
  - Advising the Hochtief and Bilfinger Berger led consortium on their bids for the Greek toll road projects;
  - Advising the Amey Lex Consortium on the C-Vehicles Project to provide the UK MoD with a fleet of construction vehicles and ancillary support services.
- **Qualified as both a Chartered Accountant and admitted as an Advocate, he had several year's merchant banking experience, mainly in the areas of project finance, corporate finance and corporate reconstruction prior to joining SG in 1997. Immediately preceding this he had been head of the project finance team at First National Corporate Bank, now part of Rand Merchant Bank, where he was engaged on industrial, mining and infrastructure projects.**

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3 activities  
quality selectivity integration  
**team spirit** clients  
distribution  
key pillar of the Group exemplary adapt  
efficiency transformation alignment  
financial engineering **expertise** environment  
risk management responsibility