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After the crunch

Credit terms for power projects

A survey report by
Ashurst LLP and CONSILIUM

July 2009

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Contact

John Inglis

Partner

T: +44 (0)20 7859 1092

E: john.inglis@ashurst.com

Ashurst LLP

Broadwalk House

5 Appold Street

London EC2A 2HA

United Kingdom

CONSILIUM

CONSILIUM provides independent commercial and financial advisory services to companies in the utilities sector including bid structuring, project financing, corporate financing, refinancings and acquisitions and disposals. CONSILIUM's founder partners Harold Fairfull and Staffan Wallin have an aggregate of over 40 years' experience in advising in the energy, utilities and infrastructure sectors. Their geographical experience covers most of Western and Central Europe, the FSU, the Middle East and Latin America.

Contact

Harold Fairfull

Managing Director

T: +44 (0)7768 256 532

E: Fairfull@Consilium-Advisory.com

CONSILIUM

21 Savernake Road

London NW3 2JT

United Kingdom

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INTRODUCTION AND EXECUTIVE SUMMARY

On Monday 15 September 2008, Lehman Brothers filed for Chapter 11 bankruptcy protection. The effect that this event had on the financial markets in general was immediate and very significant. Interbank liquidity immediately became almost non-existent and with banks not trusting other banks, new financings plummeted.

Just over 10 months after that fateful event, the power project finance market has begun to show signs of a return. Some 2008 legacy projects have progressed to financial close, including Ad Dur IWPP at the end of June 2009. But the shape of the financings for those projects has significantly changed from the deals that reached financial close in 2007 or early 2008.

Following a series of small group discussions with various banks active in the power project finance market, Ashurst and CONSILIUM undertook a wider-scale survey of the bank market. The aim of the survey was to understand the general bank appetite for power project finance and to identify any significant trends in the structural and commercial terms that are likely to dominate power project financings in the short to medium term.

This report sets out the results of the survey.

Parameters of the survey

Just over 30 banks were asked to participate in the survey. 30 responded and these banks largely made up the market for power project financing in 2007 and early 2008 in Europe and the Middle East.

The respondent banks comprise banks with headquarters in Europe, the Americas, the Middle East and Asia.

The banks were asked to assume that the project was fully contracted and the offtaker was rated AA by Standard & Poor's or Aa2 by Moody's.

Executive summary

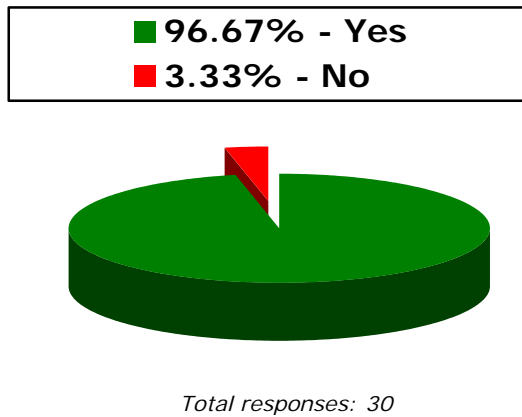
Some key messages from the responses of the banks are that:

- there is a market for non-recourse financing of power projects, it is just very different than it was in 2007 and early 2008;
- banks expect shorter tenors with significant cash sweeps before year 10, thereby encouraging early refinancing;
- pricing is significantly up, but financial ratio tests (with the possible exception of debt : equity) remain largely unaffected.

Open for business

OPEN FOR BUSINESS

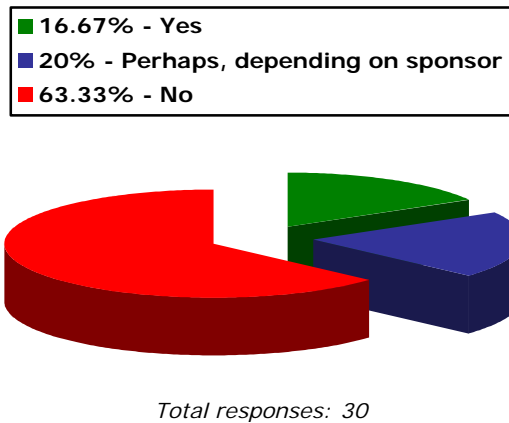
1. Are you open for project finance business in the power sector?



All but one of the 30 respondents indicated that they are open for business, demonstrating that lending appetite remains across the commercial banking sector. This should not come as a surprise given the significantly improved structural and commercial terms and conditions available to lenders and the historically low default rates for power project financings.

UNDERWRITING AND TAKE

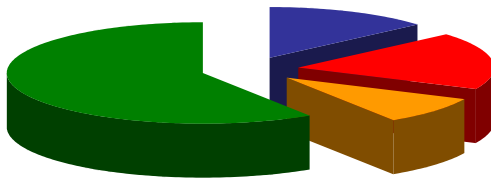
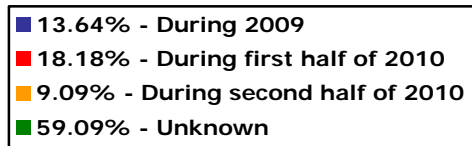
2. Does your institution have underwriting appetite?



While almost two thirds of respondents said that their institution had no underwriting appetite, what is more significant is that over one third indicated that they either had appetite in general or could have appetite depending on the sponsor. This marks a sea change from the end of 2008 when almost all banks were indicating no underwriting appetite.

Underwriting and take

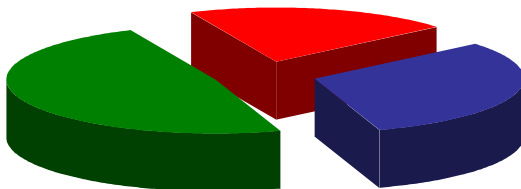
3. If your institution does not have present underwriting appetite, when might you expect that your institution would be able to provide underwriting capability?



Total responses: 22

Over 40% of respondents indicated that their institutions would have underwriting appetite by the end of 2010. While this appears positive, it should be borne in mind that eight of the respondents did not provide an answer. If these are taken as "unknown" then 70% of respondents are still not clear when and if underwriting appetite will return.

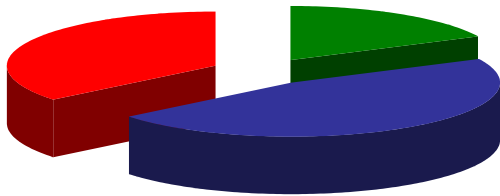
4. What is your institution's likely maximum final take and hold?



Total responses: 29

Half of respondents indicated maximum final take and holds of between US\$51m and US\$75m, suggesting that club deals remain manageable for amounts in excess of US\$1bn, particularly given that a further 20% indicated holds in excess of US\$75m.

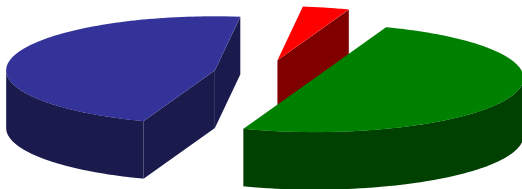
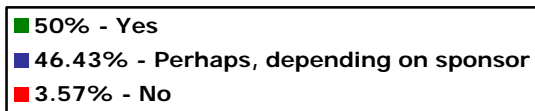
5. Would you agree to between 18-year and 20-year tenor financing with no cash sweep and where debt is fully paid out on base case?



Total responses: 28

With less than 20% of respondents saying "yes", it is clear that tenor remains an issue for banks in the power project finance market. While almost half of respondents said they would agree subject to the identity of the sponsor, this is unlikely to be of much comfort to any but the largest developers with extensive banking relationships.

6. Would you agree to a hard mini-perm structure?

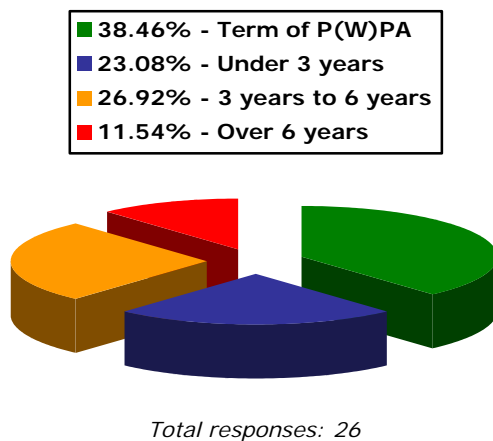


Total responses: 28

With the exception of one respondent, all banks were either willing to accept a hard mini-perm structure or would consider one depending on the sponsor. Evidence obtained independently from outside of the survey suggests that banks are evenly split between those which prefer a hard mini-perm structure and those which would prefer a soft mini-perm structure.

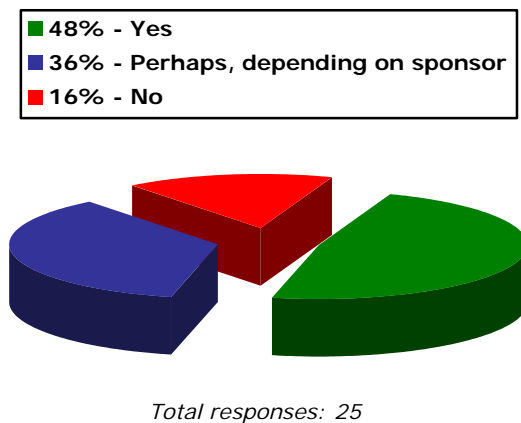
TENOR

7. What would be the period from the tenor of the P(W)PA that you would allow the tenor of the debt to extend to?



This question avoided any mention of whether any cash sweeps were applicable and was therefore designed to determine the basis upon which base principal repayments would be calculated. Over one third of banks responded that they did not require a tail, indicating that they see no credit reason to move back from pre-credit crunch structures. However, almost half of the respondents indicated a requirement for a tail of up to six years so it is likely that large-scale transactions will require a tail for the medium term.

8. Would your agreement to a 10+ year tenor be subject to there being a soft mini-perm structure with a cash sweep?

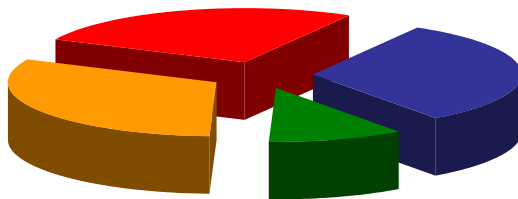
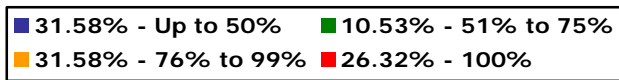


Almost half of all respondents answered "yes", indicating that regardless of confidence in underlying credit structures, the market is looking for mechanisms to ensure shorter tenors through encouraging refinancing.

Cash sweep

CASH SWEEP

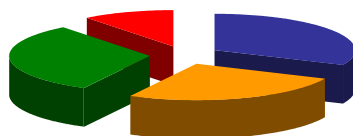
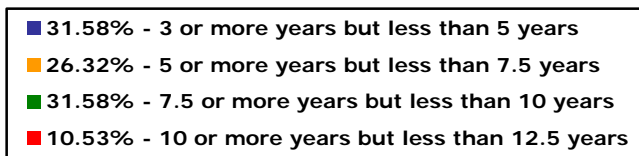
9. If your agreement to a 10+ year tenor is subject to there being a soft mini-perm structure with a cash sweep, what is the minimum percentage of available cashflow that you would require to be utilised in prepayment?



Total responses: 19

While a cash sweep should ensure full payment of outstanding principal, the mere presence of a cash sweep structure is principally designed to encourage a sponsor to refinance. The percentage level of the sweep thereby reflects banks' view of how much pressure is required to encourage a refinancing by minimising sponsor distributions. More than half of respondents felt the percentage needed to be 76% or more. Sponsors should therefore be prepared for high percentage sweeps in the medium term.

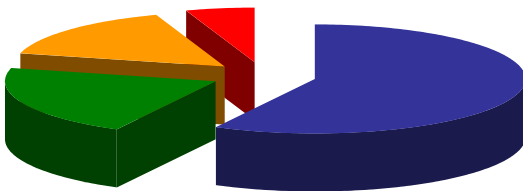
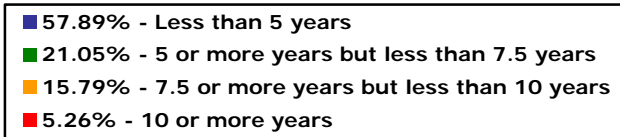
10. When would you require the cash sweep to start?



Total responses: 19

The majority of respondents indicated a range of five to ten years with only 10% willing to consider the sweep starting later, thus reinforcing the view that banks are looking for an early refinancing of new deals.

11. How many years prior to the term of the P(W)PA would you require the debt to be fully repaid under the banks' base case?

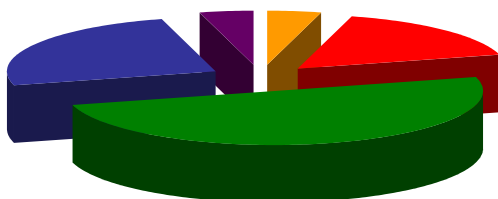
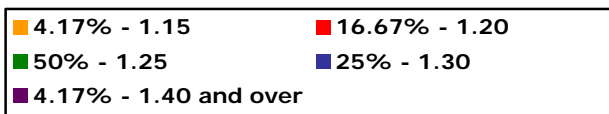


Total responses: 19

This question is similar to question 7 but specifically linked to a cash sweep under a mini-perm structure. It is instructive to note that when posed in this manner, almost 60% of respondents indicated a tail of less than five years, a less conservative position than under question 7.

COVER RATIOS

12. In respect of cover ratios, what would be the minimum projected ADSCR base case ratio?



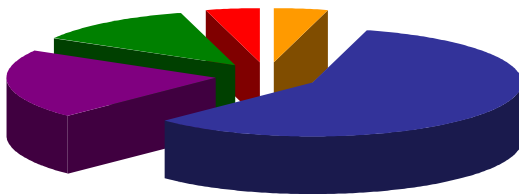
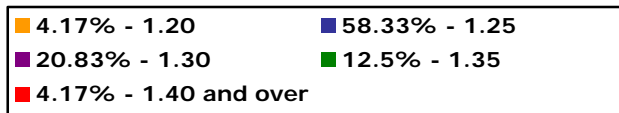
Total responses: 24

- Mean = 1.256x
- Standard Deviation = 4.96 bps

Whereas pre-credit crunch deals were being done with a base case ADSCR of 1.20x, exactly half of all respondents indicated they would require 1.25x in the current market. However, with a standard deviation of 5 bps it is clear that there is pressure from banks who remain unchanged at 1.20x and those wanting to see a further increase to 1.30x.

Cover ratios

13. In respect of cover ratios, what would be the average projected ADSCR base case ratio?

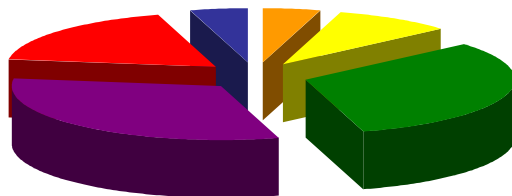
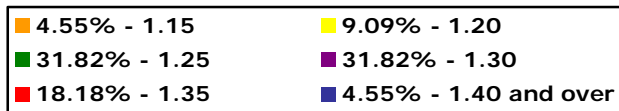


Total responses: 24

- Mean = 1.2771x
- Standard Deviation = 4.66 bps

Pre-credit crunch deals were principally structured on the basis of the average and minimum ADSCRs being equal largely due to sculpting of debt service over tenor. Respondents' average of 1.277x indicates that the current market generally accepts the same principle.

14. In respect of cover ratios, what would be the minimum LLCR base case ratio?

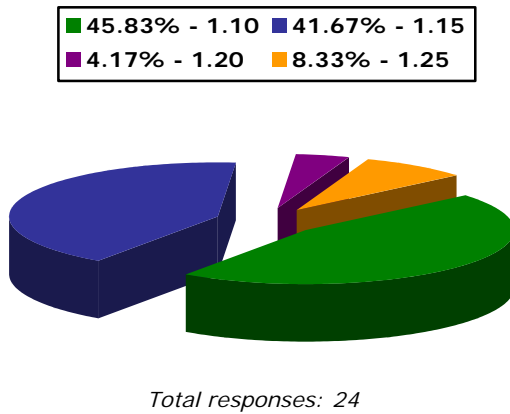


Total responses: 22

- Mean = 1.2818x
- Standard Deviation = 6.03 bps

Pre-credit crunch deals typically either had no base case LLCR or, where they did, based on them on 5 bps higher than the minimum ADSCR. Given the differences between the average (1.28x) and standard deviation (6 bps) compared to the responses for question 12 it appears broadly that the 5 bps differential still holds.

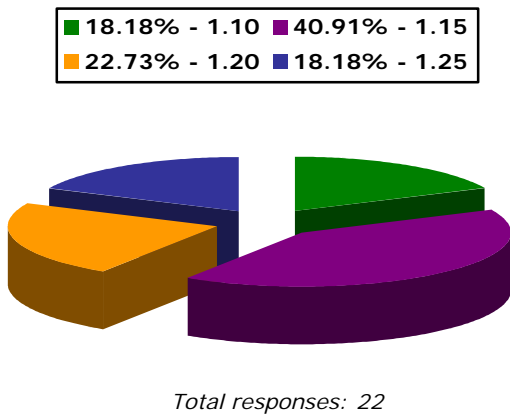
15. In respect of cover ratios, what would be the historical ADSCR distribution lock up ratio?



- Average = 1.1375x
- Standard Deviation = 4.48 bps

Pre-credit crunch deals typically had a lock up ratio of 1.10x. The largest block of respondents have stuck with this ratio although there is a clear split between this group of respondents and the second largest requiring 1.15x. It would appear, therefore, that with larger deals it will be down to individual sponsors to use their push to achieve the lower ratio.

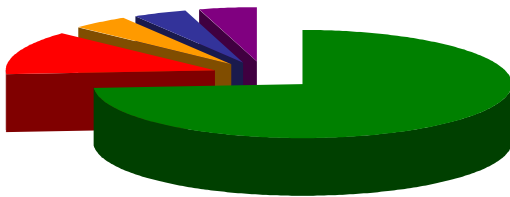
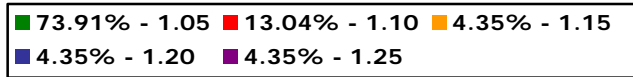
16. In respect of cover ratios, what would be the LLCR distribution lock up ratio?



Pre-credit crunch deals typically had a lock up ratio of 1.15x and the largest block of respondents (41%) have stayed with this ratio, although there is considerable push (23%) for a 5 bps increase. With an average of 1.17x and a standard deviation of 5 bps, it is possible that consensus within club deals may result in an agreed ratio of 1.20x.

Cover ratios

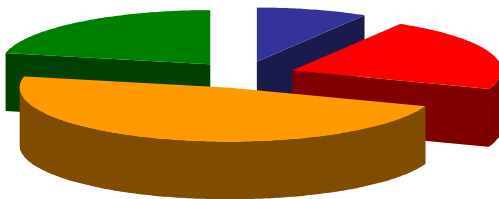
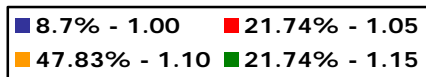
17. In respect of cover ratios, what would be the historical ADSCR Event of Default ratio?



Total responses: 23

Prior to the credit crunch, deals were generally with a default ratio of 1.05x, although latterly some deals were done at 1.00x. Almost 75% of respondents have stayed with the 1.05x ratio, indicating that they do not view the fundamental credit of projects to have changed.

18. In respect of cover ratios, what would be the LLCR Event of Default ratio?

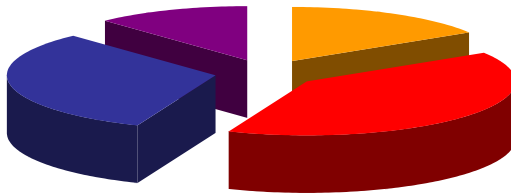
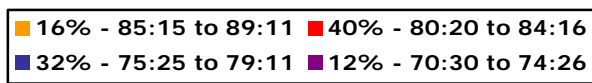


Total responses: 23

Prior to the credit crunch, deals were generally with a default ratio of 1.10x. Almost 80% of respondents have stayed with the 1.10x ratio or lower. Just 22% of respondents wanted to see a 5 bps increase in the ratio.

DEBT : EQUITY RATIO

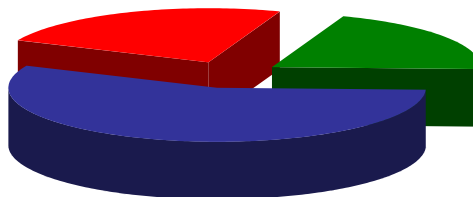
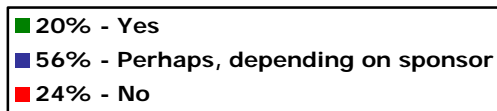
19. What would be the maximum debt : equity ratio?



Total responses: 25

Over the last few years of the bull market, debt : equity ratios were subservient to base case cover ratio and principally used in equity true-up tests so that base case debt : equity ratios dropped to 80:20 or lower. The largest group of respondents (40%) have indicated a need for between 20% and 25% equity with a significant majority of respondents accepting a structure with less than 25% equity. With an average of 78.4% equity and a standard deviation of 4.4%, there will remain pressure on sponsors to accept up to 30% equity but it is likely that most deals in the medium term will be done on 25% equity or less.

20. Would you agree to an equity true-up at the end of construction?

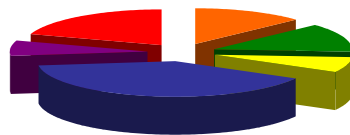
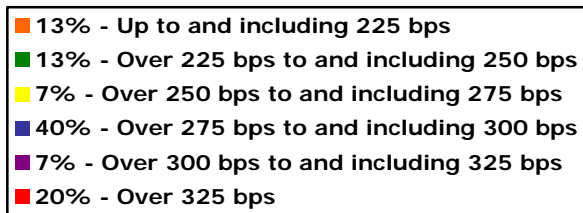


Total responses: 25

76% of respondents would either accept an equity true-up or consider one depending on the sponsor, with only 24% of banks firmly rejecting the concept. While sponsors should therefore be hopeful of continuing to secure equity true-ups, additional discussions with banks indicate that the acceptance of a true-up is subject to the rest of the terms and conditions of a facility being reasonably "vanilla".

DEBT PRICING

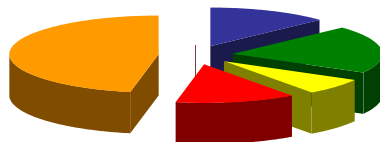
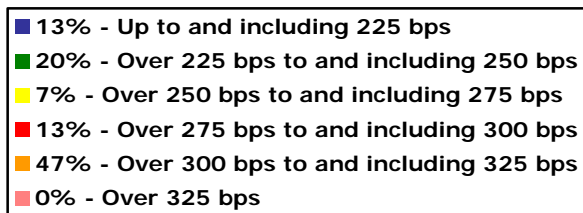
21. What would be your indicative margin pricing for the construction period?



Total responses: 15

Modified average and standard deviation (calculated by removing the two lowest and two highest numbers) are 287 bps and 25 bps, respectively. The standard deviation indicates that sponsors should expect to pay in the range of 260 bps to 310 bps.

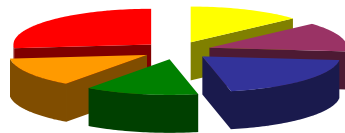
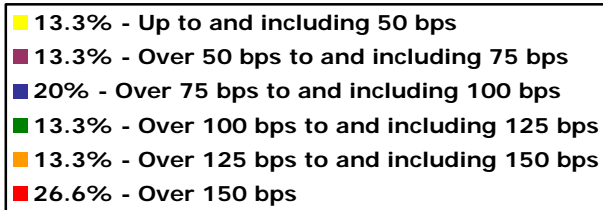
22. What would be your indicative margin pricing for the first operating period?



Total responses: 15

Modified average and standard deviation are 286 bps and 37 bps, respectively. It is interesting to note the 1 bp differential between the construction period and first operating period averages. Sponsors should probably still expect to see a small drop in margin post-construction.

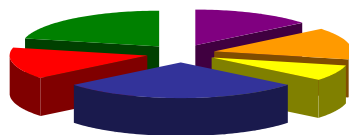
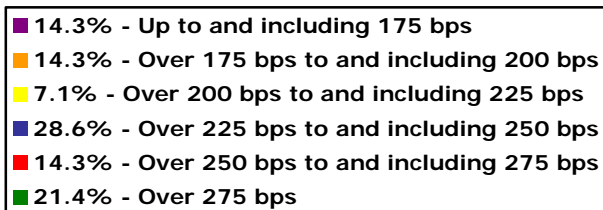
23. What would be your indicative structuring fees if you were an MLA?



Total responses: 15

The modified average is 108 bps with a standard deviation of 33 bps. The removal of the two highest figures probably does not account for the fact that some respondents answered the question as an all-in up-front fee question. The mode response was 100 bps which is probably a good guide to expectations.

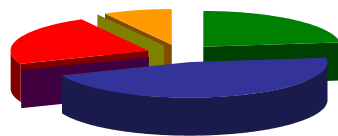
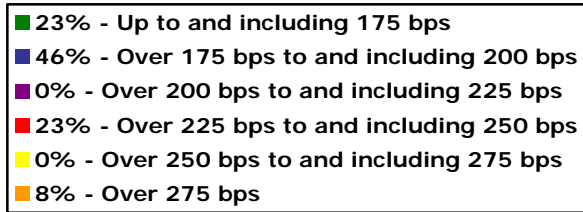
24. What would be your upfront fees if you were an MLA?



Total responses: 14

The modified average is 243 bps with a standard deviation of 26 bps. The mode response was 250 bps which is probably a good guide to expectations.

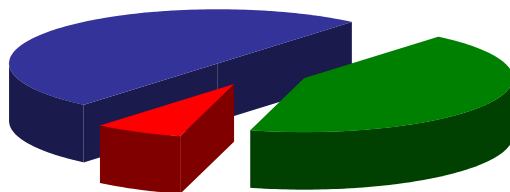
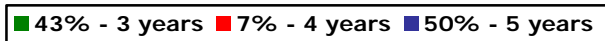
25. What would be your upfront fees if you were a participant bank but not an MLA?



Total responses: 13

The modified average is 208 bps with a standard deviation of 25 bps. The small differential of only 35 bps between this average and that in question 24 indicates that most banks draw no distinction between participating as an MLA or otherwise.

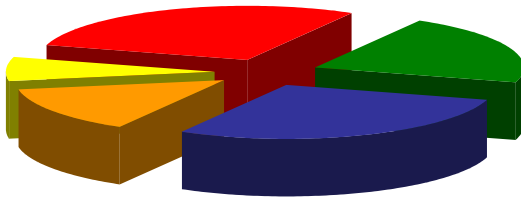
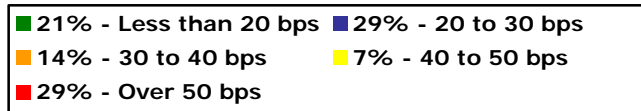
26. What would be the length of the first operating period?



Total responses: 14

The modified average is 4.2 years with a standard deviation of 0.9 years. However, as the mode remains 5 years for both all and modified data it is likely that 5 years will be the norm in the medium term.

27. What would be the margin ratchet?

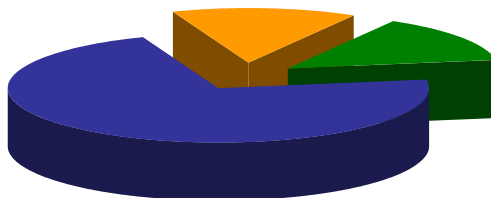
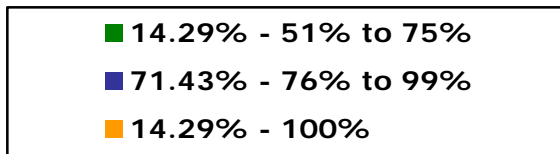


Total responses: 14

The modified average is 30.5 bps with a standard deviation of 9.8 bps. However, as the mode remains 25 bps for both all and modified data it is likely that 25 bps will be the norm in the medium term.

SWAPS

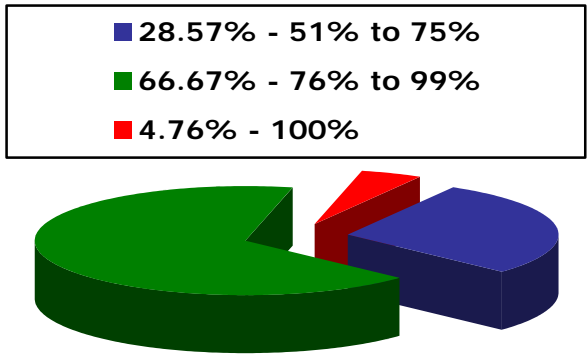
28. What level of debt would you require interest rate swaps to cover in relation to the construction period?



Total responses: 21

71% of respondents indicated 75% or more with an additional 14% requiring 100%, so the attitude of the market towards construction swaps does not appear to have moved at all following the credit crunch.

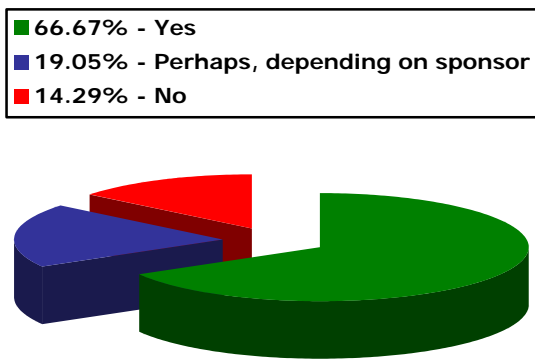
29. What level of debt would you require interest rate swaps to cover in relation to the operating period?



Total responses: 21

A similar proportion of banks as for the construction period indicated 75% or more as the required level. However the bulk of the remainder required a smaller proportion, probably recognising that cash sweeps could result in projects becoming over-hedged in construction if refinancing was not available.

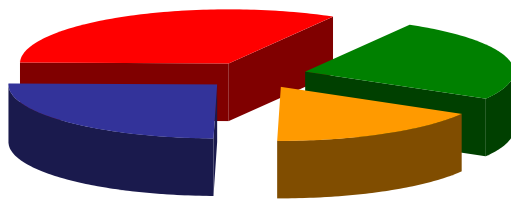
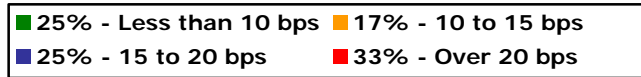
30. Would your institution's participation in the debt financing be conditional on your institution's participation in the interest rate swap business?



Total responses: 21

Exactly two thirds of respondents require swaps business as a condition to coming into a loan facility. Only a small number (14%) indicated that there was no conditionality and this is likely to have been banks which do not run swaps books. The opportunity for competitive tendering of swaps appears therefore to have disappeared for the foreseeable future.

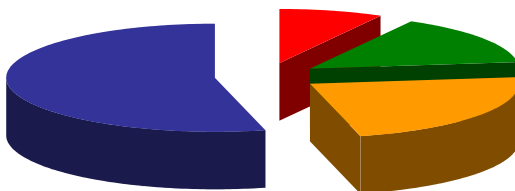
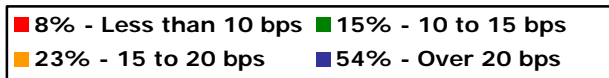
31. What would be your minimum credit spread for such interest rate swaps assuming a swap duration matching a hard mini perm tenor of 7 years?



Total responses: 12

The modified average is 15 bps with a standard deviation of 6 bps. This indicates that the days of single digit credit spreads have passed for some time but also that credit spreads are likely to be high if a clearing price mechanism is adopted.

32. What would be your minimum credit spread for such interest rate swaps assuming a swap duration matching a term loan tenor of 20 years?

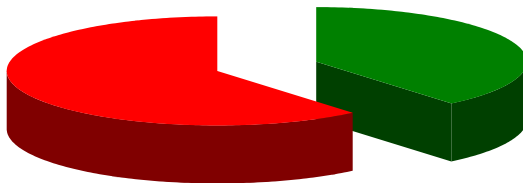
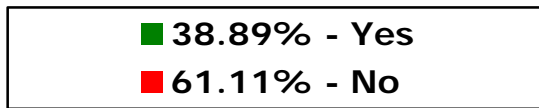


Total responses: 13

The modified average is 20 bps with a standard deviation of 6 bps indicating that the premium for the extended credit exposure is of the order of 5 bps.

MISCELLANEOUS

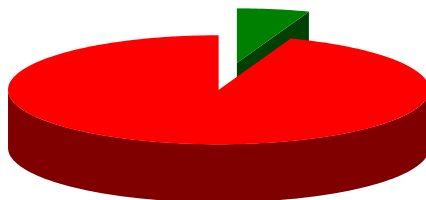
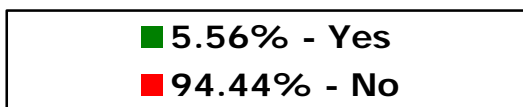
33. Is your institution prepared to accept a Chinese EPC contractor?



Total responses: 18

Over 60% of respondents were not willing to accept Chinese EPC contractors.

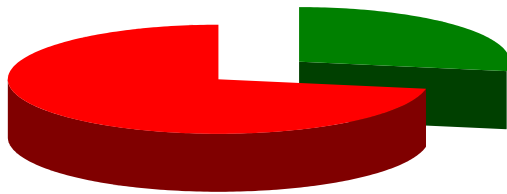
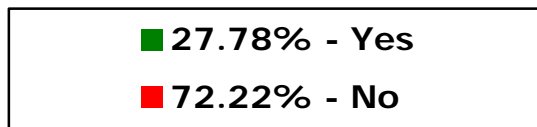
34. Is your institution prepared to accept Chinese manufacturers of gas turbines?



Total responses: 18

All respondents but one were not willing to accept gas turbines manufactured by Chinese companies so this is not likely to change in the foreseeable future.

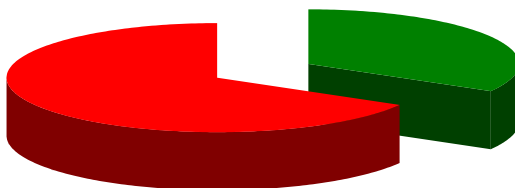
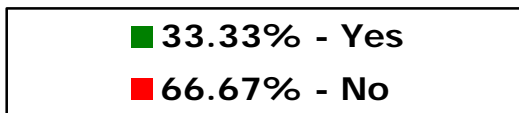
35. Is your institution prepared to accept Chinese manufacturers for steam turbines?



Total responses: 18

Over 70% of respondents were not willing to accept steam turbines manufactured by Chinese companies.

36. Is your institution prepared to accept Chinese manufacturers for boilers?

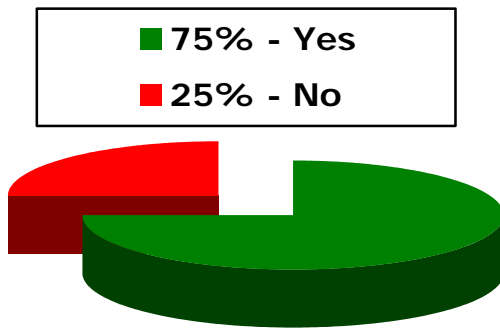


Total responses: 18

Two thirds of respondents were not willing to accept boilers manufactured by Chinese companies.

Overall, the high proportion of respondents which were not willing to consider any Chinese involvement in the construction of a plant indicates that more attention is being placed on the basic credit aspects of projects.

37. Does your institution have appetite to participate in ECA facilities?



Total responses: 20

Three quarters of respondents have appetite to participate in ECA facilities indicating that banks other than those which either do not have trade finance teams or are prohibited from participating retain their pre-credit crunch appetite.

CONCLUSIONS

Though not a question raised in the survey, banks in late 2007 were uniformly of the view that a correction in the commercial terms was overdue. Though the effects of Lehman Brothers' collapse have had unfortunate wider application, the power project finance market has seen a correction with contractual terms having hardened significantly since the heady days of late 2007 and early 2008. Tenors are down, margins are up; cash sweeps are in, underwriting is out.

Some key points of special note are:

- Responses do indicate that obtaining a fully underwritten financing will be challenging and, in the context of Middle East I(W)PPs, it is clear that for the time being there is insufficient depth in the debt market to enable multiple bidders to provide underwritten financings. This will mean that procurers will need to re-evaluate the financing terms that they will require from bidders.
- With banks looking to invoke cash sweeps prior to year 10, developers will face the unattractive prospect of distribution reduction (or lockup) and accepting refinancing risk to mitigate against that. However, with some 2008 legacy projects reaching financial close, there may be some signs of an expectation of improved terms in the coming months.
- Shorter tenors will have a significant effect on offtakers and developers, with risk allocation between offtakers and developers being the subject of some attention. Will offtakers accept higher availability tariff or will they, and developers, be forced to accept refinancing risk? We expect the latter to occur.
- Pricing has increased significantly with a large portion of the increase seeming to include liquidity cost. With some banks enjoying significantly lower costs of funds than others, the current pricing offers some excellent opportunity for revenue together with limited or no underwriting commitments and significantly enhanced structuring fees and front end fees.

Developers' view

A limited number of developers were asked to complete a survey. In this survey, developers were asked to comment on their view of banks' positions to these matters. Interestingly, the responses of developers largely mirrored those of the banks, which would indicate that developers are aware of the particular pressure points of banks. Given the relatively limited number of responses by developers, we have not provided a detailed analysis of their responses.

Way forward

The market does seem to be improving and so we expect that some of the key terms and conditions required or requested by banks will soften in the coming months, though we do not expect any movement to be swift. In order to gauge such movement, and to provide analysis of responses, we intend to undertake a survey of banks and a wider number of developers in approximately three to six months.