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6.3 Finance Behaviour of Banks Concerning Ship Financing before and “after” the Financial Crisis

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6.3.1 Introduction

The financial crisis has been lasting since 2007.¹ But without any doubt, the bankruptcy of the investment bank Lehman Brothers on September 15th, 2008 was the culminating point. In succession to this collapse the banking industry hit turbulent times. But the real economy is also starting to experience the increasing influence of the financial crisis. The crisis seems to have reached shipping completely already, which is reflected in the drastic drop in charter and cargo rates and the prices of ships already on the way. Especially bulk, but also container shipping seem to have been affected the most.



It seems to be worthwhile to follow the question how the financial crisis is affecting the finance behaviour of banks concerning ship financing. For this question an explorative approach has been chosen, in which banks, issuing houses and shipping companies have been asked in regard to the changes in finance behaviour using questionnaires. It seems to be obvious that we are still within the financial crisis so the paper is also a look into the future.

This paper is structured as following: At first, a short look is taken at the underlying theoretical background. Subsequently, the explorative study is presented by explaining the database and the methodology as well as presenting the results. The paper closes with a conclusion.

6.3.2 Basics of Financial Theory

There is no ship financing „per se“. In the following the financing shall be limited to the financing by banks, usually in the form of ship mortgage loans. In this context it can be distinguished between project financing, e.g. single purpose vehicles like ship funds and corporate financing. In the project

1 For an overview of the finance crisis see Rudolph (2008), p. 713 – 741.

financing the financing bank only has the ship as collateral. Hence, this is also called „non-recourse financing“. Ship financing within corporate financing, e.g. by shipping companies, also apply to one particular ship but the recoverable assets extend to other parts of the company.

In the end, it is essential from the financing bank's as well as the debtor's point of view, if the credit can be serviced without problems. Thus, it is primarily important to generate a sufficient cash flow from the ship to pay outstanding interest and amortization. Factors of influence are among others the type of ship (specialised or standard ship), the shipping market in which it operates (bulk, container, tanker...) or the technical and commercial management.²

The financial crisis has, without any doubt, lead to an increased risk that loans might not serviced in the future. How the financing behaviour of banks, but also of borrowers, e.g. shipping companies and, indirectly issuing houses will therefore change regarding future projects can be exemplified by using the borrowers perspective.

One classic capital structure theory is the so-called static-trade-off theory, which says that debtors choose lower debt to equity ratios if the expected costs of financial leverage, the so-called costs of financial distress increase.³ These are the costs connected to the bankruptcy of the debtor. Indirect costs, such as shortened terms of payment or customers that change to other suppliers in case of an impending bankruptcy, are also part of these costs. From this it can be derived that debtors also have an interest to choose a lower debt ratio in the case of increased risk of future projects.

From the bank's point of view it is first of all important that the credit is serviced without disruptions. Such disruptions, however, can never be ruled out, so that secondly a risk-appropriate interest should be agreed upon.⁴ Hence, from the bank's point of view the debt ratios should decrease and the interest rates should increase, as well. The fact that many banks are experiencing a shortage of equity due to other burdens resulting from the financial crisis certainly contributes to that, too. In addition to this a further burden can be identified here. At the moment banks are not able to borrow at the interbank interest rates LIBOR (or EURIBOR) due to the tense situation, but have to pay a premium from day one.

2 About the basics and influencing factors of shipping finance see Hennig (2007), p. 387 – 412; Simpson (2006), p. 73 – 82; Stopford (1997), p. 193 – 224.

3 About the static-trade-off theory see Myers (1977), p. 147–155.

4 This is also a result of the so-called Basel II Regulations. See Baseler Ausschuss für Bankenaufsicht (2004)

Overall the following thesis concerning the financing of future projects compared to earlier ones can be derived because of the seemingly increased risk in shipping finance:

- Less projects are being financed
- The debt to asset value ratios, the so-called advanced rates will decrease
- The refinancing costs of the banks will be, at least in the short run, above LIBOR
- The risk premium as additional component on the financing costs of the banks is increasing
- In the future covenants should have the tendency to become more restrictive, making loans, supposedly, safer

These obvious assumptions were tested in an explorative study. Because of the uniformity of the answers the derived conclusions can be seen as an indicator for a likely development, despite the small scale of the survey.

6.3.3 Explorative Study

Database and Methodology

A questionnaire was developed for the study, which primarily deals with the areas of credit terms. The core of the questionnaire consists of eight questions, which will be presented together with their answers in the following. The focus on these questions was on the market environment, the possibilities for borrowing, the development of the interest level, the development of covenants as well as the most important impact of the financial crisis in the eyes of the respondents.

There were two groups of respondents. On one side selected banks, especially the departments „ship financing“, as representatives of the capital providers. On the other side issuing houses, of ship funds, as well as shipping companies as representatives of the borrowers. Since the study was kept explorative a total of nine banks and seven issuing houses or shipping companies were asked to participate. Four banks and four issuing houses/shipping companies answered. This results in a return rate of 50%. In the following the results are presented briefly.

6.3.4 Results

When it came to answering the questions, the focus was on tendencies from which general conclusions about the impact of the financial crisis on ship financing could be derived.

Question 1: At the moment, will you start new projects in the area of shipping or are projects put on hold?

The following Tab. 1 shows the answers. The percentages always refer to the eight participants if not marked otherwise.

Participation	Yes, starting new projects at the moment	No, projects are on hold	On hold until 2009	On hold until market recovers
100%	50%	50%	12,50%	37,50%

Tab. 1: Results for question 1

Looking at the plans for starting new projects a tense picture becomes visible. One half of the respondents do not start any new projects at the moment. The other half stated new projects would be started but also that the selection has become more thorough than before.

Question 2: Have the debt to asset ratios (advanced rates) changed for your projects?

Participation	Yes, the ratios have changed	No change	Bandwidth before crisis	Bandwidth after crisis
100%	100%	0%	60% - 80%	50% - 60%

Tab. 2: Results for question 2

The bandwidths show what percentage of the price of the ship can be financed through debt.

Question 3: Has the base rate, which is taken as a basis for a financing (refinancing costs of the bank), changed essentially for new projects (e.g. form LIBOR to cost of funds)?

Participation	Yes, base rate has changed	No change	Before crisis	After crisis
100%	100%	0%	87,5% Libor, 12,5% Libor or cost-of-funds at 0% percentage points liquidity costs	100% cost-of-funds: LIBOR plus 1% - 3% percentage points liquidity costs

Tab. 3: Results for question 3

Answering this question all respondents stated that the LIBOR is used as base rate. To be able to refinance oneself at LIBOR premiums (liquidity costs) have to be paid at the moment. From the combination of LIBOR and liquidity costs results the base rate for new projects as cost-of-funds.

Question 4: Has the interest rate risk margin as an additional financing costs of new projects changed essentially (“risk margin”)?

Participation	Yes, risk margin has increased	No, same risk margin as before the crisis	Costs of risk before the crisis (in percentage points)	Costs of risk after the crisis (in percentage points)
100%	100%	0%	1% - 1,15%	1,5% - 2,5%

Tab. 4: Results for question 4

The increase of the margin can be derived from the difference between the respective percentage points before and after the crisis. The increase of the risk margin therefore is between 0.5 and 1.5 percentage points.

Question 5: If there are covenants in your projects, how have these changed because of the financial crisis?

Participation	Yes, covenants have changed (% of answers)	No, covenants have not changed (% of answers)	More rigid handling due to financial crisis (% of answers)	Quantitative adjustment due to financial crisis (% of answers)
75%	100%	0%	100%	100%

Tab. 5: Results for question 5

Not all participants have answered the question about covenants. The answers show a tendency to a more rigid handling of the covenants by the banks as well as a quantitative adjustment. For example, an asset-coverage ratio (outstanding debt to asset value) that before has been 120% at 80% leverage is now 140% at 60% leverage.

Question 6: Do you experience problems with covenants of running projects or do you see problems in the near future? If yes, how do you handle them?

Participation	Yes, there have been problems with covenants (% of answers)	Yes, there will be problems in the future (% of answers)	No, no problems are to be expected (% of answers)	How do you handle these problems?
75%	0%	100%	0%	-

Tab. 6: Results for question 6

The question how the problems are being handled could not be answered (yet), since no experiences and no general course of action do exist.

Question 7: In your opinion, has the significance of an existing charter contract for financing a project increased because of the financial crisis?

Participation	Yes, the importance increased due to the financial crisis	No, the importance has not increased due to the financial crisis	Before the crisis: Yes, financing a ship is also possible for ships without existing charter contract	After the crisis: Yes, financing a ship is also possible for ships without existing charter contract
100%	100%	0%	100%	0%

Tab. 7: Results for question 7

The responses show that all respondents see an increased significance in having an existing charter contract. Financing of an unchartered ship is no longer possible at the moment. However even a good charter is no longer a guarantee, since sometimes a renegotiation is expected, if the charter contracts are high compared to the market.

Question 8: Which impact(s) of the financial crisis on shipping finance is (are) in your opinion the most important one(s)?

All respondents stated that one of the most important impacts is the negative development which the market is going through at the moment. This development mainly manifests itself in sharply decreased charter rates and the decreasing number of orders for new ships and increasing number of cancellation of current orders at the same time. A recovery of the market in the short run does not seem to be in sight for the market participants. Therefore the withdrawal of promised funds, provided the loan contract allows for it, is expected. At least, according to the answers, in the case of running projects it will only come to necessary renegotiations. Except for one participant, positive long-term effects of the financial crisis are expected. Especially the „self-purification of the markets“, which will result in decreasing prices for the construction of new ships and the anticipated liquidation of speculative projects, was named. Thus, a recovery of the market in the long run is expected.

Finally, it is very interesting that all participating shipping companies/issuing houses explicitly say no to have any projects in their portfolios for which increasing problems could be expected due to the financial crisis.

6.3.5 Conclusion

The survey to a large extent confirms the presumed results. At the moment only very few ship projects are being financed and hardly any new ones are initiated. All sides reckon that these projects are financed with less debt and more equity. This so-called deleverage seems to be a development which takes place in all asset-classes. Furthermore, the financing costs of the banks from the start are anticipated to have higher margins. Also the margins that the debtor will have to pay on top of the financing costs of the banks will increase. In addition to that there will be more side-agreements, esp. covenants in the future.

Altogether fewer projects than in the past should be financed. In addition, these projects will have to be less risky with the same expected return or have a higher expected return. This will lead to a decelerated growth of the fleet in many segments. This trend is supported by the fact that many existing projects will probably not be continued. The so-called orderbook will thin out. Economically the growth should slow down in the medium run. But it might also be welcomed that not „all projects“ are financed anymore, as it might happened in the past, which lead to misallocations. In the medium run capital, instead of the asset ship will become the bottle neck again. This might be interpreted as „healthy conditions“.

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