

## SOLVENCY ANALYSIS IN LEVERAGED TRANSACTIONS

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*Solvency analysis and solvency opinions are typically provided by financial advisers in leveraged acquisition transactions. The solvency opinions are typically provided to (1) the transaction lenders and/or (2) the board of directors of the corporate buyer or the corporate seller. The purpose of these solvency opinions is to assure the directors and/or the lenders that the company will not be subject to undue financial distress as a result of the leveraged acquisition transaction. Solvency opinions may also be prepared for various bankruptcy-related reasons. For example, solvency opinions may be prepared in matters related to fraudulent conveyance allegations and preference payment claims. This discussion provides (1) an overview of solvency opinions and (2) a review of a recent bankruptcy-related judicial decision in which a solvency analysis provided by an experienced financial adviser provided substantial credibility.*

### INTRODUCTION

Financial advisers may be engaged in a leveraged transaction to perform a solvency analysis to determine whether the company that incurred the debt has:

1. positive equity,
2. the ability to repay its debts, and
3. adequate capital to continue to operate the business.

A solvency analysis can provide positive assurance that a proposed leveraged transaction—typically a leveraged acquisition transaction—will not render a company insolvent. A solvency opinion may be requested by the transaction lenders and/or the board of directors of the buyer or the seller in order to provide assurance that the company is solvent at the time that the debt is incurred. Accordingly, a solvency opinion provided by an independent financial adviser may reduce the risk associated with fraudulent conveyance claims in a leveraged acquisition transaction.

Solvency analyses and opinions are also performed for various purposes within a bankruptcy context. For example, the solvency opinion may have fraudulent conveyance implications with regard to transfers from the debtor cor-

poration. And, the solvency opinion may have preference payment implications related to pre-bankruptcy filing payments from the debtor corporation.

For corporate debt financing purposes, the three generally accepted solvency tests are as follows:

1. The balance sheet test—Does the value of the company assets exceed the amount of the company liabilities?
2. The cash flow test—Will the company generate adequate cash flow to service all of its liabilities as these liabilities come due?
3. The capital adequacy test—Does the company have sufficient capital to run its business operations?

This discussion presents (1) an overview of each of the generally accepted solvency tests and (2) provides a review of a recent court case, *In re American Classic Voyages Co.* (“*American Classic Voyages*”).

*American Classic Voyages* is a bankruptcy matter. And, one of the issues in that bankruptcy matter relates to alleged pre-filing preference payments. In that judicial decision, a financial adviser’s solvency analysis was relied on by the Bankruptcy Court to determine whether the debtor corporations in the case were solvent at the time that certain payments were made.

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## THE BALANCE SHEET TEST

The balance sheet test determines whether, at the time of the proposed leveraged transaction, and after consideration of the amount of the transaction debt financing, the total fair value of the company assets (both tangible and intangible) is greater than the company total liabilities.

For purposes of the balance sheet test, the company assets are valued based on the fair value standard of value. Fair value is typically defined as the price at which a property would change hands between a willing buyer and a willing seller, when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, with both parties having reasonable knowledge of relevant facts.

For the purpose of the balance sheet test, the financial adviser will typically analyze the highest and best use of the debtor corporation assets (both tangible and intangible), as of the date of the leveraged transaction. The premise of value that the financial adviser will typically conclude for a solvency analysis is value in continued use, as part of a going-concern business enterprise.

The balance sheet test is passed if the fair value of the company total assets is greater than the recorded balance of the company total liabilities.

## THE CASH FLOW TEST

The cash flow test analyzes the ability of the subject company to service its liabilities as they mature. The cash flow test includes an assessment of the company's historical and projected earnings and cash flow. This assessment is performed in order to determine the likelihood that the company will be able to pay its debts—including the debt service on the acquisition financing.

The cash flow test is passed if, in each projected future time period, the company can pay its projected debt obligations from the following sources of cash:

1. any excess company cash balance available on the solvency test date
2. the available cash flow expected to be generated by the company during the projection period
3. the availability of any unused credit commitments available to the company

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*“The capital adequacy test determines whether the company will have an adequate amount of capital to meet (1) operating expenses, (2) capital expenditure requirements, and (3) debt repayment obligations.”*

## THE CAPITAL ADEQUACY TEST

The capital adequacy test (sometimes called the reasonable capital test) determines whether the company will have sufficient capital to run its business operations at the time of the debt financing. The capital adequacy test determines whether the company will have an adequate amount of capital to meet (1) operating expenses, (2) capital expenditure requirements, and (3) debt repayment obligations.

The capital adequacy test is passed if the subject corporation is expected to have sufficient cash on hand to pay:

1. operating expenses,
2. capital expenditures, and
3. the current portion of liabilities and long-term debt.

## AMERICAN CLASSIC VOYAGES Co.<sup>1</sup>

### Case Background

On October 16, 2003, American Classic Voyages Company (AMCV) and its affiliates (the Debtors or the Plaintiffs) filed a complaint against defendants JP Morgan Chase Bank (Chase), National City Bank of Michigan/Illinois (NCB), and Hibernia National Bank (Hibernia) (collectively, the Banks or the Defendants) to avoid an allegedly preferential transfer pursuant to Sections 547(b) and 550(a) of the U.S. Bankruptcy Code.

The transfer at issue in this case was a payment made by the Banks on August 14, 2001 in an amount exceeding \$29 million.

On October 19, 2001, AMCV filed a voluntary petition for relief under Chapter 11 of the Bankruptcy Code (Chapter 11). And, on October 22, 2001, various AMCV affiliates also filed voluntary petitions for relief under Chapter 11.

On November 30, 2005, the Bankruptcy Court issued an order directing that a consolidated trial would be limited to the common issues of:

1. whether some or all of the Debtors were solvent on the dates of the transfers and
2. whether the Debtors were solvent on the bankruptcy petition dates.

The solvency trial was held between July 20, 2006, and July 25, 2006.

## AMCV Operations

AMCV was incorporated in Delaware in 1985 and went public in 1992. AMCV was a holding company which, through its subsidiaries, operated four cruise lines under the brand names The Delta Queen Steamboat Company, American Hawaii Cruises, United States Lines, and Delta Queen Coastal Voyages.

The Delta Queen Steamboat Company (DQSC) operated three paddlewheel steamboats (the Delta Queen, the American Queen, and the Mississippi Queen) that provided overnight passenger cruises along the Mississippi River and other inland waterways of the United States.

The DQSC also operated a vessel (the Columbia Queen) that provided overnight passenger cruises in the Pacific Northwest. DQSC was the largest provider of overnight cruises in the domestic waterways and rivers cruise market.

On May 1, 1999, Delta Queen Coastal Voyages contracted with Atlantic Marine, Inc. (AMI) to manufacture two new vessels (the Coastal Vessels). These two new ships were intended to cruise along the Atlantic Coast of the United States and Canada, with winter destinations in South and Central America.

AMI delivered the Cape May Light on April 12, 2001, and it was entered into service on May 5, 2001. Delivery of the Cape Cod Light was expected in the second quarter of 2002.

American Hawaiian Cruises, acquired by AMCV in 1993, operated the Independence steamship, a vessel that provided overnight passenger cruises among the Hawaiian Islands. United States Lines also operated a vessel (the Patriot) that provided overnight passenger cruises among the Hawaiian Islands.

In October 1999, AMCV acquired the rights to the United States Lines name. And, AMCV purchased the Patriot from Holland American Lines (HAL).

## The Passenger Vessel Act

Under the Passenger Vessel Act of 1886 and related United States laws, only U.S. ships that are (1) U.S. built, (2) owned by U.S. citizens, (3) operated by U.S. crews and U.S. officers, and (4) U.S. flagged by the U.S. Coast Guard are permitted to operate exclusively among U.S. ports, including the Hawaiian islands.

AMCV was the only U.S.-flagged, large scale, overnight cruise line operator providing inter-island vacations among

the Hawaiian islands. Vessels not qualifying under the Passenger Vessel Act were required to include in their itineraries a call in at least one foreign port, adding a minimum of three sailing days on the Pacific Ocean, away from the Hawaiian Islands.

In 1997, the U.S. Flag Cruise Ship Pilot Project statute (the Pilot Project Statute) was enacted to develop the U.S. flagged cruise ship industry and stimulate commercial construction of cruise ships in the United States. This federal law provided a potentially enormous benefit to the U.S. domestic Hawaiian cruise business.

## The Transfer

In March 1999, AMCV and certain of its subsidiaries executed agreements with Ingalls Shipbuilding (Ingalls) to construct two new vessels (the Project America Ships). The ships were intended to sail in the Hawaiian cruise market under the United States Lines banner.

The original contract with Ingalls called for delivery of Project America Ship 1 in January 2003 and Project America Ship 2 in January 2004. The delivery dates were later extended to January 2004 and February 2005, respectively.

The Debtors anticipated funding a significant portion of the ongoing construction of the Project America Ships and Coastal Vessels through the issuance of debt instruments guaranteed by the United States Maritime Administration's (MARAD) Title XI ship financing guarantee program. Under that program, MARAD provided commitments to guarantee the payment of private debt issued by the Debtors up to 87.5 percent of construction costs.

The MARAD guarantee was secured by a lien on the vessels. On April 8, 1999, the Debtors received a commitment from MARAD for up to \$1.1 billion in financing guarantees.

On September 8, 2000, the Debtors announced their intention to relocate their corporate and operational headquarters from Chicago and New Orleans to a new leased facility in Sunrise, Florida.

On February 25, 1999, DQSC, and certain of its subsidiaries and affiliates, entered into a syndicated loan agreement with JPMorgan Chase Bank, Hibernia Bank, Bank One Louisiana, NA, Credit Agricole Indosuez and The Bank of New York. The loan agreement provided a \$70,000,000 revolving line of credit facility to DQSC (the Chase Facility).

On September 14, 2000, the Chase Facility was amended and restated, reducing the amount of the facility to \$30 million (the Amended and Restated Chase Facility). The lenders under the Amended and Restated Chase Facility documents were the Bank Defendants.

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On January 10, 2001, DQSC drew down \$500,000 on the Amended and Restated Chase Facility. On May 22, 2001, DQSC, as borrower, drew on the Amended and Restated facility, faxing its Notice of Borrowing to the agent, Chase, requesting \$29,500,000.

On the same date, each of the Banks transferred \$9,833,333.33 to the DQSC Master Clearing Account (the Funds). From the DQSC Master Clearing Account, the Funds were transferred directly to an interest-bearing Merrill Lynch investment account.

The Funds identifiable as proceeds from the borrowing on the \$30 million Amended and Restated Chase Facility remained in the Merrill Lynch Account and were untouched from the time of the initial borrowing until August 14, 2001, the date on which the borrowing was repaid (the Transfer).

On August 14, 2001, the parties amended the Amended and Restated Chase Facility, reducing it to a \$10 million line of credit (Amendment No. 1 to the Amended and Restated Chase Facility). DQSC never drew on the restructured \$10 million line of credit.

## Bankruptcy Proceedings

On October 19, 2001, about one month after the September 11, 2001, terrorist attacks, AMCV sought bankruptcy relief. Upon filing for bankruptcy, nearly all of the AMCV cruise operations were cancelled.

Starting in late 2001 and into 2002, in connection with the bankruptcy cases, the Debtors disposed of all of their vessels through auction sale to third parties, abandonment, or transfer to MARAD.

To recover a preferential transfer, the Plaintiffs must show that the transfer satisfies all five elements of Section 547(b) of the Bankruptcy Code. Specifically, the Plaintiffs must show that the transfer:

1. was to or for the benefit of a creditor,
2. was for or on account of an antecedent debt owed by the debtor before such transfer was made,
3. was made while the debtor was insolvent,
4. was made on or within 90 days before the date of the filing of the petition (unless the payee was an insider), and
5. enabled such creditor to receive more than such creditor would have received if the case had been a chapter 7

liquidation and the creditor had not received the transfers.

By agreement of the parties, the only element addressed at trial was the third element.

## Premise of Value—Going Concern or Liquidation

According to the court proceedings, a corporation is insolvent when the sum of the entity's debts is greater than all of such entity's assets, at fair value. In determining the fair value of the entity's assets, an initial decision to be made is whether to value the assets on a going-concern basis or on a liquidation basis.

According to the court proceedings, if liquidation in bankruptcy was not clearly imminent on the transfer date, then the entity should be valued as a going concern. A business does not have to be thriving in order to justify a going-concern valuation. In other words, the going-concern threshold is very low.

A debtor may be financially unstable. However, it is still a going concern as long as the amount it could realize from converting its assets to cash in the ordinary course of business exceeds the expenses of conducting business.

The financial adviser testifying on behalf of the defendants opined that both AMCV and DQSC were operating as going concerns on August 14, 2001 (the Transfer Date). The financial adviser noted that capital markets were:

1. providing financing to the Debtors and
2. predicting robust prospects for the cruise industry.

Moreover, financial projections and public documents prepared by the Debtors just prior to the Transfer Date were forward-looking and gave no indication of any going-concern issues.

The AMCV June 30, 2001 Form 10-Q stated that the company believed it would have adequate access to capital resources, both internally and externally, to meet both (1) current short-term and long-term capital commitments and (2) working capital needs.

On the Transfer Date, the Chase Facility was amended and reduced to a \$10 million revolving credit facility that the Debtors did not draw upon.

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The Bankruptcy Court found that the evidence in the case supported the conclusion that the Debtors were operating as a going concern on the Transfer Date. Therefore, the Court concluded that AMCV and DQSC should be valued on a going-concern basis.

### Financial Adviser Expert Opinions

To rebut the presumption of insolvency, the Banks presented expert testimony (the Defendant's expert). The Defendant's expert opined that both DQSC and AMCV were solvent as of the Transfer Date.

The Defendant's expert employed the discounted cash flow valuation method (DCF), using projections prepared as of July 2001 (the July 2001 Projections) to estimate the enterprise value of DQSC and AMCV.

Based on the Defendant's expert's analysis, the business enterprise value for both entities was greater than the value of the debt and preferred stock. Therefore, the expert's conclusion was that DQSC and AMCV were solvent as of the Transfer Date.

The Plaintiffs argued that the Defendant's expert analysis was flawed. First, the Plaintiffs argued that the Defendant's expert's reliance on projections prepared by the Debtors management for determining the future cash flows was inappropriate. This was because those projections were speculative and inconsistent with the Debtors' past performance and financial situation as of the Transfer Date.

The Plaintiffs argued that, beginning in 1999, the Debtors embarked on a plan to expand their fleet of ships. That plan (1) increased the Debtors' debt substantially and (2) caused the Debtors' financial condition to deteriorate into insolvency.

The Plaintiffs' expert testified that, as a result of this expansion, the Debtors' indebtedness increased from approximately \$84.6 million as of December 31, 1999 to over \$577 million as of June 30, 2001.

In the same period, the Debtors operations were generating declining EBITDA, decreasing from an EBITDA of \$18.1 million as of December 31, 1999, to a negative EBITDA of \$3.3 million as of December 31, 2000, to a negative EBITDA of \$22.2 million for the six-month period ending June 30, 2001.

In addition, in the first six months of 2001, both the vessel capacity utilization rates and the revenue per passenger per night were not meeting budgeted expectations.

The Plaintiffs also argued that the July 2001 Projections were unreliable. The Plaintiffs claimed that, despite the Debtors negative performance in early 2001 and other documents indicating the company would have a negative

EBITDA for 2002, the July 2001 Projections inaccurately portrayed a recovering business.

The Plaintiffs further stated that the Defendant's expert should not have relied upon the July 2001 Projections without additional due diligence.

The Banks agreed that the Debtors experienced financial difficulties in the first half of 2001, but argued that these difficulties did not prove that the Debtors were insolvent on the Transfer Date. The Banks pointed to other evidence demonstrating that the Debtors had started to redress some of the difficulties as of the Transfer Date.

For example, documents created in June and July 2001 showed that bookings in the Hawaii market were increasing. Those increased bookings suggested the Debtors would exceed their previous forecasts for the third and fourth quarters of 2001.

The Defendant's expert testified that he found the July 2001 Projections to be reliable because they were:

1. very detailed (e.g., growth, capacity and other figures were prepared separately for each ship),
2. consistent with the companies' plans for expansion and strategy that focused on the Hawaiian market, and
3. consistent with the cruise industry's positive outlook at that time.

The expert stated that any post hoc adjustment made to the Projections would be arbitrary.

Both parties agreed that the Debtors experienced serious financial issues in early 2001. The Plaintiffs argued that the evidence reflected the Debtors downward spiral beginning in early 2001, and ending with the bankruptcy filings in October 2001.

The Banks, however, argued that the evidence demonstrated that the Debtors were implementing measures to improve the companies' finances so that, as of the Transfer Date, the Debtors were a viable, solvent going concern. The Banks claimed that the unforeseeable events of 9/11, and their effect upon the travel industry as a whole, forced the Debtors into bankruptcy.

The Bankruptcy Court found that the Banks' position was consistent with the evidence. The events of 9/11 had a devastating effect on the tourism industry and, in particular, the Debtors business.

Prior to 9/11, the Debtors' vessels were fully booked through the end of 2001. Immediately after 9/11, the Debtors faced operational difficulties in transporting staff and customers home from the cruises, since over 90 percent traveled by air.

Then, within a week, the Debtors experienced an unprecedented number of cancellations (which, because of

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the circumstances, were accepted without economic penalties), as well as no new bookings.

The evidence presented in this case supported the Bankruptcy Court's conclusion that the projections were reasonable when prepared.

Second, the Plaintiffs attacked the Defendant expert's calculation of the discount rate used in the DCF method. This discount rate was determined by using a weighted average cost of capital calculation (WACC). The WACC analysis requires the estimation of the cost of debt, the cost of equity, and the debt and equity weightings in the capital structure.

The Plaintiffs argued that the companies used in the Defendant's expert's peer group analysis to estimate the beta in the cost of equity capital were not comparable to AMCV. The Plaintiffs also argued that the Defendant's expert's use of monthly beta observations, rather than weekly, could have inappropriately skewed his valuation analysis.

The Plaintiff's expert performed seven alternative DCF analyses using the Defendant's expert's figures, adjusting certain variables in each analysis to demonstrate that, with each adjustment, the DCF would result in a negative valuation for AMCV and DQSC.

The Bankruptcy Court was persuaded by the Defendant's expert's experience in performing valuations (i.e., 20 years of experience and over 200 valuation engagements). The Plaintiff's expert was a certified public accountant with far less experience in performing solvency analyses.

In addition, aside from AMCV, the Plaintiff's expert had performed only one other peer group beta analysis. The Bankruptcy Court found that the Defendant's expert's solvency analysis:

1. was more reliable than the adjustments made by the Plaintiff's expert to the DCF analysis and
2. presented sufficient evidence to rebut the presumption of insolvency.

To prevail in the case, the Plaintiffs then had to prove, by a preponderance of the evidence, that the Debtors were insolvent on the Transfer Date.

### The Plaintiff's Evidence of Insolvency

For this analysis, the Plaintiff's expert (1) used the asset-based valuation approach and (2) determined that the value

of the assets of AMCV and DQSC was less than the companies' liabilities as of June 30, 2001.

Therefore, the Plaintiff's expert concluded that both AMCV and DQSC were insolvent. In his asset-based approach, the Plaintiff's expert calculated the "fair saleable value" of AMCV's and DQSC's assets as of June 30, 2001.

Upon review, the Bankruptcy Court found that the Plaintiff's expert valued the assets of AMCV and DQSC on a liquidation basis. The Plaintiff's expert adjusted the assets' value by determining a sale price for each asset on a piece-by-piece basis, rather than by a sale of the Debtors as an operating entity.

In addition, the expert valued the main assets of the companies (the cruise ships) based upon transactions that occurred after the events of September 11, 2001, and after the October 2001 filing of the respective bankruptcy petitions.

The Bankruptcy Court found that the Debtors were operating as a going concern on the Transfer Date. Therefore, the Plaintiff's expert's valuation of the assets on a liquidation basis did not provide a true picture of the Debtors' worth on the Transfer Date.

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### The Bankruptcy Court Decision

The Bankruptcy Court concluded that the Plaintiffs did not prove by a preponderance of the evidence that the Debtors were insolvent on the date of the transfer. Accordingly, judgment was entered in favor of the Defendants and against the Plaintiffs.

*"The Bankruptcy Court found that the Debtors were operating as a going concern on the Transfer Date."*

### CONCLUSION

A properly conducted solvency analysis can provide positive assurance that, after giving consideration to the effects of the subject transaction, the subject company meets the primary criteria for solvency.

The *American Classic Voyages* decision shows the importance of hiring an experienced financial adviser to provide a solvency analysis—and to issue a solvency opinion—in a leveraged transaction.

#### Note:

1. *In re American Classic Voyages Co., et al.*, 367 B.R. 500 (Bkrtey. D. Del., 2007).

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