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Predicting Financial Sources for the Lodging Industry

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Predicting Financial Sources for the Lodging Industry

Abstract
Given the various changes that have occurred in the financing of the lodging industry, investors and developers interested in the industry are concerned about future sources of capital and the terms at which they will be available. This article presents results of a Delphi study which illustrates the extent to which individual financial institutions are expected to provide capital to the lodging industry and looks at terms and criteria used to make loans.

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Predicting financial sources for the lodging industry

by A. J. Singh

Given the various changes that have occurred in the financing of the lodging industry, investors and developers interested in the industry are concerned about future sources of capital and the terms at which they will be available. This article presents results of a Delphi study which illustrate the extent to which individual financial institutions are expected to provide capital to the lodging industry, and looks at terms and criteria used to make loans.

The last quarter of the 20th century saw profound changes in the way the lodging industry was financed. During certain periods, capital has been readily available, while during other periods the industry has suffered from a dearth of capital. In the 1980s, for example, excess capital availability resulted in a period of overbuilding,[1] whereas the early 1990s were characterized by a financing drought. Similarly, in different periods, different types of hotel products were favored by funding sources. For example, highway motels were favored in the 1960s, while the present focus is on financing full-service hotels.[2]

Various financial institutions have played significant roles in financing the lodging industry during each of these periods. Until the mid 1960s, commercial banks, life insurance companies, and credit companies provided the majority of lodging industry mortgages. During the late 1960s and 1970s, much of the growth in the lodging industry was financed by Real Estate Investment Trusts (REITs). As a result of deregulation in the early 1980s, the savings and loan industry began making commercial loans to hotel companies.

As a result of losses they incurred in the 1980s, many of the traditional lenders such as commercial banks and life insurance companies withdrew from financing the hotel industry. To fill the void, investment banks sold "financially engineered" derivative products such as commercial

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mortgage-backed securities to raise capital for the industry. Although traditional lenders have resumed making loans to the lodging industry on a significant scale, the environment of financing has been revolutionized because of access to public capital markets through the use of securitization to finance the industry.

The financial services industry itself is currently undergoing various changes in its competitive and regulatory environment, which will have an impact on its future role as a supplier of capital to the lodging industry. The primary changes relate to their ability to sell financial products. Firewall regulations, which prevent different financial institutions from entering each other's businesses, such as the Glass-Steagall Act of 1933, are in the process of being dismantled. If different types of financial institutions are not restricted to selling certain specific financial products, the increased competition among them may ultimately increase the availability of capital for the lodging industry.

Predictions are problem

Given the various changes that have occurred in the financing of the lodging industry, investors and developers interested in the industry are concerned about future sources of capital and the terms at which it will be available. Research questions that are the focus of this investigation for 2000 and 2005 are as follows:

- What financial institutions will be sources of equity capital for lodging real estate?
- What financial institutions will be sources of capital for lodging stocks?
- What financial institutions will be sources of capital for direct loans for lodging construction or acquisition?
- What financial institutions will be purchasers of debt securities as a source of capital to the lodging industry?
- What will be the debt service coverage ratios for direct single hotel mortgages?
- What will be the loan-to-value ratios for direct, single hotel mortgages?
- What will be the loan terms for direct, single hotel mortgages?
- What will be the amortization period for direct, single hotel mortgages?
- What will be the interest rates for direct, single hotel mortgages?
- What will be the loan size for direct, single hotel mortgages?

Taken together, the answers to these questions will provide a better understanding of the future role of financial institutions as sources of financing to the lodging industry, the cost of capital, and the terms under which debt capital will be available to the industry in the future.

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The research method used to make these predictions on each of the research questions listed above was the Delphi Technique, "a method used to systematically combine expert knowledge and opinion to arrive at an informed group consensus about the likely occurrence of future events."[3] The expert panel consisted of 39 industry experts (see Table 1).

Future issues explored

The study subjected the panel to successive rounds of questions related to specific issues about the future, such as questions pertaining to financing of the lodging industry. At the end of each round the panelists were provided feedback from the other participants and had an opportunity to change their previous predictions. This continued until the panel reached a consensus.

The capital provided to the lodging industry can be categorized as "equity or debt." Equity capital includes either direct investment in lodging real estate or investment in the lodging industry by investment in lodging stocks. Debt capital includes direct mortgage loans, or the purchase of debt securities, such as commercial mortgage backed securities (CMBS). The panel's responses were summarized using two statistics: the median (MD) and the inter-quartile range (IQR). The median is the midpoint of the distribution of the panel's responses; the inter-quartile range is the middle 50 percent of their responses and is indicative

Table 1
Profile of institutions and organizations represented on Delphi panel

Category	Participants
Academic institution	3
Consulting company	5
Mortgage banker	1
Real estate broker	2
Acquisition fund	1
REIT	2
Conduit	2
Investment bank	5
Money center bank	2
Finance company	3
Life insurance company	2
Investment advisor	4
Lodging and financial research	2
Management company	2
Franchisor	1
Lodging chain	2
Total	**39**

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of the degree of consensus among the Delphi panelists.

The experts predicted that in 2000 and 2005, pension funds and life insurance companies are predicted to be the two top equity investors in lodging real estate. The median percentages reported were 40 percent and 20 percent, respectively, for both prediction periods. Investment companies (mutual funds), investment banks, and conduits rounded out the top five equity investors.

Investors are varied

Investment companies and pension funds were predicted to be the top two investors in lodging stocks. In the year 2000, investment companies and pension funds were expected to each have 30 percent of these stocks. In 2005, pension funds are expected to reduce their investment percentage to 25 percent; however, the degree of consensus among panelists was weak (IQR 20–40 percent). Life insurance companies and investment banks follow, with 20 percent and 10 percent, respectively, in 2000. In 2005, they are both expected to increase their investments in lodging stocks, to 24 percent and 15 percent, respectively.

Commercial banks and life insurance companies will be the primary financial institutions providing such loans in the years 2000 and 2005. Commercial banks were predicted to have 40 percent of the total market in 2000 and 2005, and life insurance companies, 20 percent in 2000 and 16 percent in 2005. Conduits and investment banks were predicted to have a 10 percent share in 2000 and 2005. Thrifts, finance companies, and pension funds are expected to have 5 percent of the market in both years.

Financial institutions provide capital to the lodging industry indirectly by purchasing debt securities such as commercial mortgage-backed securities. The primary purchasers of debt securities in 2000 and 2005 will be life insurance companies and investment companies, each at 20 per-

Table 2
Relative share of equity capital investment in lodging stocks by financial institutions

Institution	Median Year 2000	IQR Year 2000	Median Year 2005	IQR Year 2005
Investment company (mutual fund)	30.0%	25.0-30.0%	30.0%	30.0-35.0%
Pension fund	30.0	28.0-35.0	25.0	20.0-40.0
Life insurance company	20.0	18.0-20.0	24.0	20.0-30.0
Investment bank	10.0	10.0-15.0	15.0	10.0-15.0
Commercial bank	5.0	4.0-5.0	4.0	2.0-4.0
Conduit	2.0	1.0-2.7	2.0	1.5-2.5
Finance company	2.0	2.0-2.0	2.0	2.0-2.0
Thrift institution	1.0	1.0-1.0	1.0	1.0-1.0

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Table 3
Relative share of direct mortgage loans provided by financial institutions for lodging acquisition

Institution	Median Year 2000	IQR Year 2000	Median Year 2005	IQR Year 2005
Commercial bank	40.0%	35.0-40.0%	40.0%	30.0-40.0%
Life insurance company	20.0	15.0-20.0	16.0	15.0-20.0
Conduit	10.0	10.0-15.0	10.0	10.0-15.0
Investment bank	10.0	10.0-13.0	10.0	8.0-15.0
Thrift institution	5.0	5.0-5.0	5.0	4.0-5.0
Finance company	5.0	5.0-6.0	5.0	5.0-6.0
Pension fund	5.0	5.0-5.0	5.0	5.0-5.0
Investment company (mutual fund)	1.5	1.0-2.0	2.0	2.0-2.0

cent for both years. Pension funds and commercial banks follow in third and fourth place, at 16 and 15 percent of the total share in 2000, 14 and 15 percent in 2005. The panel thought that investment banks and conduits will each command about 10 percent of the market for both prediction periods. Finance companies and thrifts are not considered to be major providers of capital via debt securities.

Mutual funds increase role

From the predictions made by the panelists it is clear that pension funds and life insurance companies are expected to be the major sources of direct-equity capital for lodging real estate in the future. On the other hand, investment companies, pension funds, and life insurance companies are predicted to be the largest purchasers of lodging company stock. A surprising prediction was the increased role of mutual funds in direct-equity lodging real estate investment. While investment companies have been purchasers of lodging industry stock in the past, their involvement in direct-equity investment has been limited.

On the debt side, commercial banks were expected to remain the dominant source of mortgage capital for both prediction periods, followed by life insurance companies. Life insurance companies were expected to reduce their share of mortgage debt in 2005; apparently, this loss was offset by an increase in their role as equity providers in 2005. The role of conduits and investment banks is predicted to remain constant at 10 percent in both 2000 and 2005.

The panel was very positive about the role of life insurance companies, investment companies, commercial banks, and pension funds as purchasers of debt securities in the future. These four institutions are expected to control approximately 70 percent of

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the debt securities in both of the prediction periods. While in the past commercial banks participated in the debt market mainly through the provision of mortgage capital, they are expected to play an increasing role as purchasers of debt securities.

Coverage ratios vary little

Table 4 presents the predictions of the panel on the debt-service coverage ratios for direct, single-hotel loans by financial institutions. The Delphi experts were asked to predict debt-service coverage ratios for direct, single-hotel mortgages. Their median responses do not exhibit much variation across the financial institutions. In the year 2000, the highest coverage ratios were for life insurance companies, money-center banks, and community banks (at 1.40); the lowest coverage ratios were for thrift institutions, finance companies, and investment banks (at 1.30). Median responses for regional banks and pension funds in the year 2000 were at 1.35. For 2005, the median responses for all financial institutions were 1.40.

The experts' predictions on LTV ratios for direct, single-hotel mortgages were very consistent across all financial institutions. In 2000, all lenders were predicted to have LTV ratios of 75 percent; in 2005, with the exception of thrift institutions, pension funds, and investment banks (whose LTV ratios remained at 75), the LTV ratios of all lenders were predicted to fall to 70 percent.

The median response of the experts was that pension funds and life insurance companies will have loan terms of 20 years and 15 years, respectively, in the year 2000. In 2005, terms will be 15 years for both institutions. Regional banks are ranked third, with 12-year loan terms in both years. Community banks, money-center banks, thrifts, conduits, and investment banks all will have loan terms of 10 years in both

Table 4
Debt-service coverage ratios for direct, single-hotel mortgages

Institution	Median Year 2000	IQR Year 2000	Median Year 2005	IQR Year 2005
Life insurance company	1.40	1.35-1.40	1.40	1.40-1.40
Conduit	1.40	1.40-1.40	1.40	1.40-1.45
Money-center bank	1.40	1.30-1.40	1.40	1.40-1.40
Community bank	1.40	1.35-1.40	1.40	1.40-1.40
Regional bank	1.35	1.35-1.40	1.40	1.40-1.40
Pension fund	1.35	1.30-1.40	1.40	1.40-1.40
Thrift institution	1.30	1.30-1.40	1.40	1.35-1.40
Finance company	1.30	1.30-1.40	1.40	1.35-1.40
Investment bank	1.30	1.30-1.32	1.40	1.30-1.40

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Table 5
Interest rates for direct, single-hotel mortgages

Institution	Median Year 2000	IQR Year 2000	Median Year 2005	IQR Year 2005
Community bank	8.50	8.20-9.0	9.0	9.0-9.0
Money-center bank	8.60	8.50-9.0	8.50	8.25-9.0
Pension fund	8.60	8.20-8.80	8.50	8.30-9.0
Life insurance company	8.60	8.20-8.80	8.50	
Regional bank	8.75	8.50-9.0	8.80	8.75-9.25
Conduit	8.85	8.80-9.0	9.0	8.9-9.0
Thrift institution	9.0	9.0-9.0	9.0	9.0-9.20
Investment bank	9.0	9.0-9.0	9.0	9.0-9.35
Finance company	9.25	9.0-9.5	9.0	9.0-9.5

years, according to the experts. Finally, finance companies loan terms are predicted to be seven years in both 2000 and 2005.

According to the experts, the amortization period will vary narrowly (between 20 and 25 years) among all the financial institutions for both prediction periods.

Table 5 presents the panel's predictions on interest rates charged for direct single-hotel mortgages. The interest-rate prediction by the panel does not foresee much difference in interest rates among financial institutions. In the years 2000 and 2005, rates vary narrowly between 8.5 percent and 9 percent.

Life insurance companies and investment banks are predicted to make the largest direct, single-hotel mortgages in the years 2000 and 2005; their maximum loan-size IQR ranges from $75 to $100 million. Pension funds follow, with a loan-size IQR of $45 to $100 million. Money-center banks are predicted to have loan-size IQRs of $50 to $60 million. These four large lenders are predicted to make minimum loans of between $5 and $10 million for both prediction periods.

Regional banks and conduits could be considered intermediate lenders according to the size of their loans, which ranged from $15 to $17.5 million in 2000; loans by conduits are predicted to increase slightly to $18 million in 2005. Finance companies could also be considered intermediate lenders; they are predicted to make maximum loans of $20 million in 2000 and $22.5 million in 2005. The minimum loan size for the intermediate lenders is expected to be between $2 and $4 million.

Finally, thrifts and community banks (small lenders) are predicted to have maximum loans of $10 million and minimum loans of $1.5 million and $2 million, respectively.

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The structure of a loan made by a lender is a function of six interrelated elements (criteria and terms). These include the debt-coverage ratio, loan-to-value ratio, loan term, amortization period, interest rate, and size of loan. The overall economic environment, the Federal Reserve's monetary policy, the regulatory environment of financial institutions, and the performance of the industry or company to which the loan is being made generally affect these lending criteria and terms. These lending terms and criteria determine the ability of hotel borrowers to access capital.

When conditions are favorable, more borrowers will be able to access loans; when conditions are stringent, the reverse is true. In the early 1980s, lending terms and criteria were relaxed and favored borrowers, which resulted in an oversupply of "undisciplined" capital to the lodging industry, which led to overbuilding. Because of the overbuilding in the lodging industry and other commercial real estate sectors, lending terms and criteria were tightened from 1990–1993, which resulted in a scarcity of capital for the lodging industry. From 1994 to 1998, lending terms improved, and once again the lodging industry had ready access to capital.

Based on the predictions of the Delphi panel, the overall lending terms and criteria for the two prediction periods will remain favorable. Debt-coverage ratios, which provide the lender with a cushion against a reduction in the property's income stream, were predicted at about 1.40;[4] this is approximately the same as the current period's debt-coverage ratio. In the early 1990s, when lending criteria were stringent, the debt-coverage ratio was as high as 1.70. Similarly, loan-to-value ratios[5] were predicted at 75 percent in 2000; most financial institutions were expected to reduce this to 70 percent in 2005. To put this in perspective, loan-to-value ratios in 1997–1998 have been in the 75 to 80 percent range. Therefore, the panel's prediction for 2000 is a continuation of this liberal trend. However, the panelists were more conservative for 2005, when they predict that lenders will demand more equity in proportion to debt. It is important to note that there is a direct relationship between the debt-coverage ratio and loan-to-value ratios and the amount of debt capital flowing to the lodging industry. The Delphi panel's predicted loan-to-value ratio and debt-coverage ratios are indicative of an optimistic scenario in terms of debt availability in the predicted years.

Rates vary little

It is interesting to note that there is not much variation among the financial institutions with regard to interest rates in the predicted periods. This may be indicative of two factors: the continued increase in competition among financial institutions, and the merging of different types of financial institutions into single, larger

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entities, resulting in multiple sources for their capital base.[6] In keeping with its predictions for other lending terms, the panel's interest-rate predictions of 8.0 to 9.25 percent are optimistic. Interest rates, based upon a financing survey by HMBA and *Lodging Hospitality,* were in the 8.0 to 9.0 percent range as of April 1998.[7]

In the short term, the panel's predictions on terms are still favorable at 15 to 20 years for permanent lenders such as life insurance companies and pension funds, and 10 years for construction lenders such as commercial banks. In comparison, at the height of the building boom in the early and mid-1980s, many loans were made with 5- to 10-year terms, because lenders were afraid of looming inflation.[8] Judging by their predictions about interest rates, it appears that the panelists are quite optimistic about long-term inflation prospects and do not foresee a major reduction of loan terms in the future.

Changes in the minimum loan sizes that financial institutions are willing to make in the future are clear indications of the competitive landscape that is expected to prevail in the future for financial institutions. The overall differences between the minimum-loan size of large lenders (pension funds, investment banks, life insurance companies, money-center banks), intermediate lenders (regional banks, finance companies), and small lenders (community banks, thrifts) have been progressively narrowing. Based on the panel's predictions, thrifts (small lenders) will make minimum loans of about $1 million, but finance companies (intermediate lenders) will also compete in this market by making minimum loans of $1 million as well. Large lenders are also expected to drop their threshold; the panel's predicted IQR for minimum loans for large lenders ranged from $5 to $10 million.

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[4] A debt coverage ratio of 1.40 means that the lender requires $1.40 in net income for each $1.00 of debt.

[5] The loan-to-value ratio expresses the relationship between the amount of a loan and the value of the property when the loan is made. At a 75 percent LTV, a property valued at $1 million could get a loan of up to $750,000.

[6] For example, if a financial institution is a combination of a commercial bank and an investment bank, its cost of capital may be lower, thus giving it the ability to provide loans at a lower rate of interest.

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