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2009 Private Capital Markets Report

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PRIVATE CAPITAL MARKETS PROJECT

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SURVEY REPORT | AUGUST 2009

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Graziadio School of Business and Management

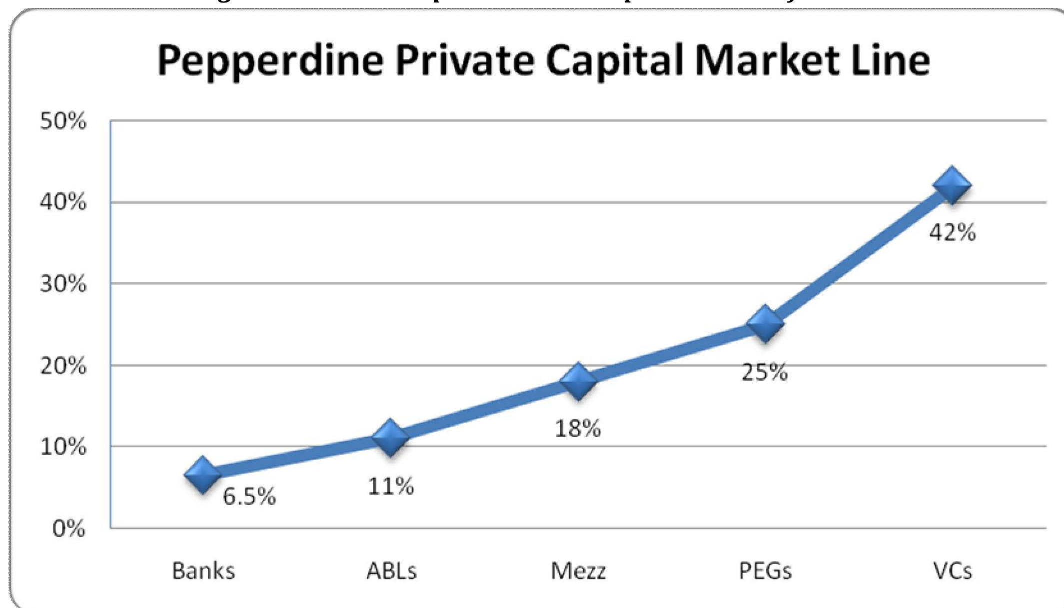
PEPPERDINE PRIVATE CAPITAL MARKETS PROJECT SURVEY

Pepperdine University's Graziadio School of Business and Management recognizes that private businesses account for over half of the gross domestic product and employment base of this country and are extremely important to our economic future. The school established the Pepperdine Private Capital Markets Project, and launched an ongoing research survey, to help private business owners and capital providers make optimal investment and financing decisions.

The Pepperdine private cost of capital survey (PCOC) is the first comprehensive and simultaneous investigation of the behavior of the major private capital market segments. The survey deployed in March/April 2009, specifically examined the behavior of senior lenders, asset-based lenders (ABLs), mezzanine funds, private equity groups, and venture capital firms. The Pepperdine PCOC survey investigated, for each private capital market segment, the important benchmarks that must be met in order to qualify for capital, how much capital is typically accessible, what the required returns are for extending capital in today's economic environment, and outlooks on demand for various capital types, interest rates, and the economy in general.

Our findings indicate that required returns vary significantly by capital type and risk assumed, with senior lenders expecting 6.5%, asset-based lenders demanding 11%, mezzanine funds requiring 18%, private equity groups expecting 25%, and venture capital funds requiring 42%. This relationship is depicted below in the Pepperdine Private Capital Market Line.

Figure 1: Private Capital Market Required Rates of Return



The results from our survey follow by category.

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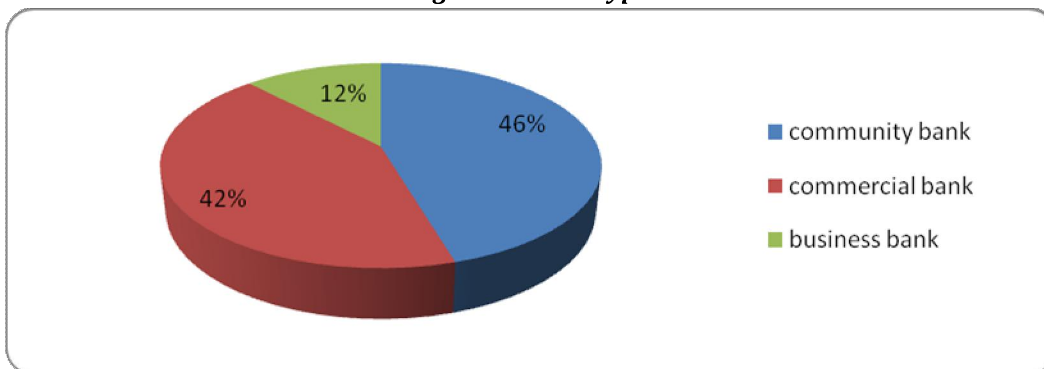
BANK SURVEY INFO

Profile of Respondents

The following responses pertain to our bank survey administered in March/April 2009. Our results are based upon 78 responses to this survey. The respondents are geographically dispersed throughout the United States.

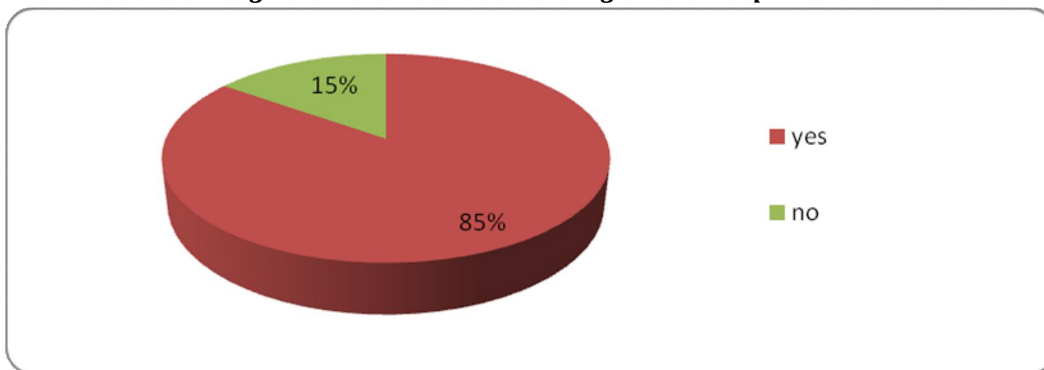
Of the banks surveyed, 46% identified themselves as community banks, 42% as commercial banks and 12% as business banks.

Figure 2: Bank Type



Eighty-five percent (85%) of these banks said they participate in government loan programs (i.e., SBA).

Figure 3: Government Loan Program Participation



Lending Characteristics

Over the four months prior to the survey, lenders report that 67% of all cash flow-based loans were ultimately booked. Sixty-one percent (61%) of all collateral based-loans, excluding real estate, were booked, while 58% of all commercial real estate loans offered were booked.

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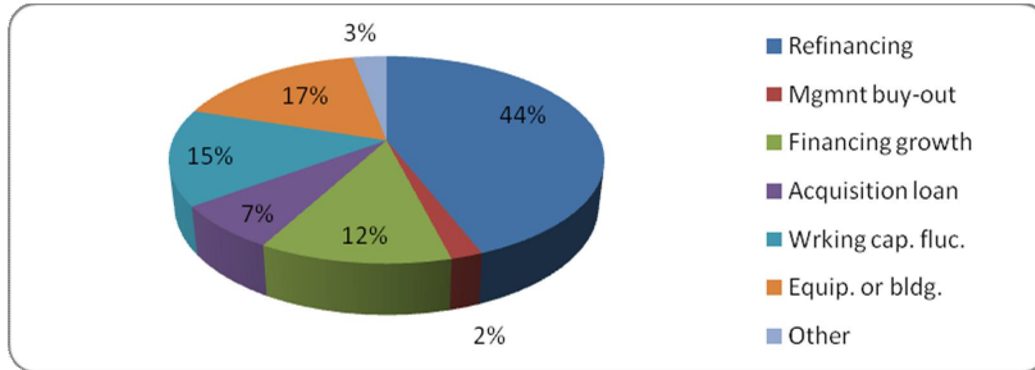
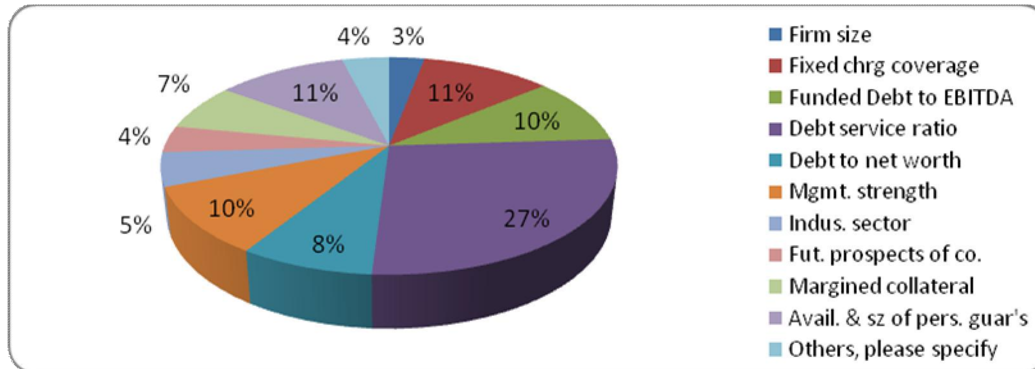
The most common motivation for securing lending was refinancing (44%) followed by the purchase of equipment or buildings (17%). Working capital was also frequently cited as a reason for securing a loan.

Figure 4: Motivations for Loans



The most important factor for deciding whether to extend a loan or not is the debt service ratio. Respondents gave it a 27% weight. Fixed-charge coverage and availability of personal guarantees were also cited as being very important (11%). Funded debt to EBITDA and management strength are important factors as well, being given a 10% weight in the decision to extend credit.

Figure 5: Weight of Factors Considered When Extending a Loan



Banks also report various threshold ratios as being important when determining how much credit to lend. Among these are fixed-charge coverage, funded debt to EBITDA, debt service, and debt to net worth.

Table 1: Critical Ratios When Extending Credit

Indicator	Median
Fixed-Charge Coverage (Min)	1.2
Funded Debt to EBITDA (Max)	3.0
Debt Service (Max)	1.25
Debt to Net Worth (Max)	3.0

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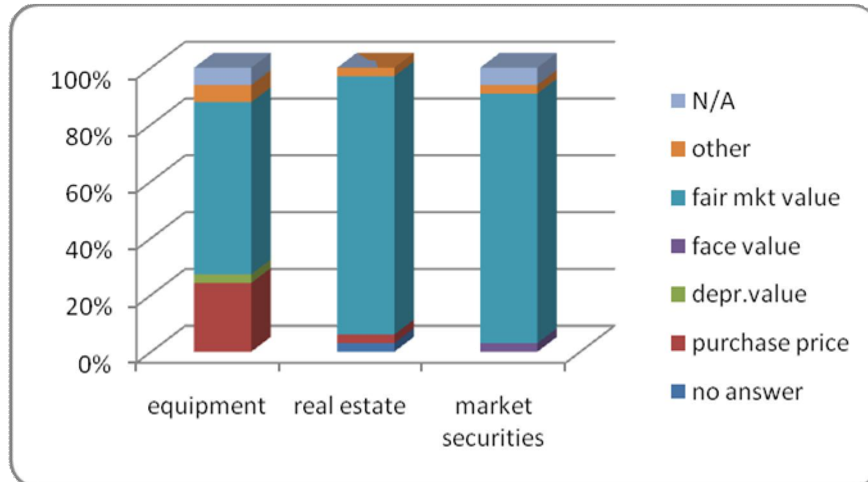
When lending is based upon assets, fair market value is used most often for equipment, real estate, and marketable securities when estimating the amount to lend. Sixty-one percent (61%) use fair market value for equipment, 91% for real estate, and 88% for marketable securities. For equipment, 24% report using purchase price as the key factor for determining the loan-to-value ratio.

Figure 6: Collateral Valuation Standards



Banks report the standard advance rates (or loan-to-value ratio) for each of the following types of assets. Although low-quality and intermediate-quality inventory report the same advance rates, a greater number of banks (85%) report making intermediate-quality inventory loans, whereas just 25% report making low-quality inventory loans.

Table 2: Standard Advance Rates

Collateral	Median
Low-Quality Inventory	25%
Intermediate-Quality Inventory	25%
High-Quality Inventory	50%
Equipment	75%
Real Estate	75%
Land	50%
Cash Flow	80%
Marketable Securities	70%

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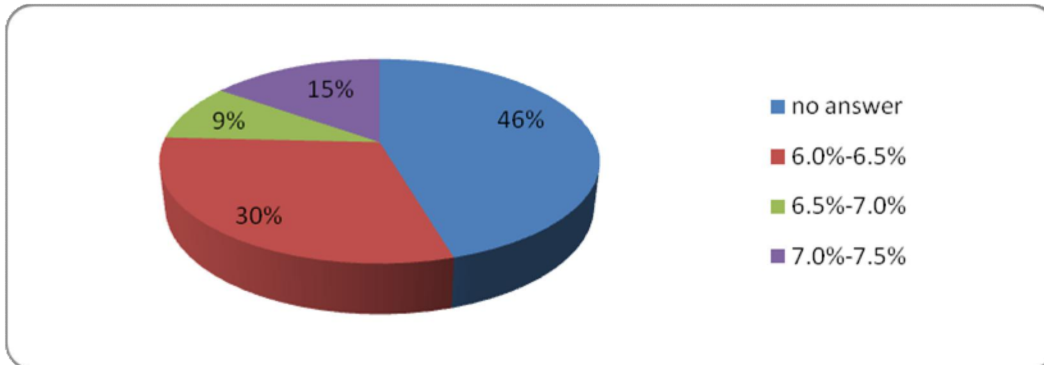
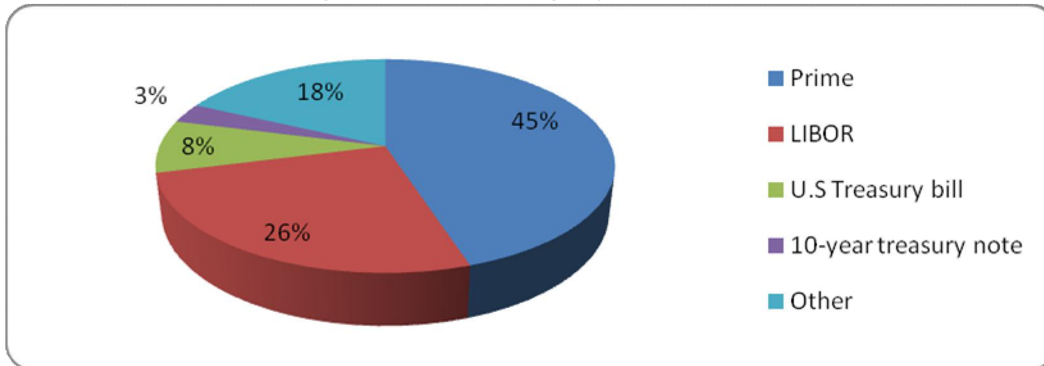
On their current deals, 30% of those who answered said that the approximate all-in interest rate, including spreads over prime and LIBOR, is 6.0% to 6.5%. Fifteen percent (15%) said that the rate is 7.0% to 7.5%, and 9.0% said that the rate is 6.5% to 7.0%.

Figure 7: Rates Charged on Loans



Sixty-two percent (62%) of respondents report using variable rate loans while 38% use fixed rate. For variable rate loans, 45% reference prime while 26% reference LIBOR. Of those referencing LIBOR, nearly 47% use a one-month rate as a reference, while 33% reference the three-month rate.

Figure 8: Loan Pricing Reference Rates



The median loan term on booked deals is 60 months for equipment loans, 180 months for real estate and 12 months for working capital.

Table 3: Loan Terms

Type	Term (median)
Equipment	60 months
Real Estate	180 months
Working Capital	12 months

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Various loan covenants were attached to the loans. Of these, 49% of the time a limit on the level of indebtedness was applied. Forty-one percent (41%) of the time, a restriction was placed on earnings. A debt to EBITDA covenant was applied approximately 36% of the time.

Table 4: Covenants Attached

Answer	Average Value
Limits on Level of Indebtedness	49%
Limits on Distributions	33%
Limits on Management Compensation	6%
Positive Earnings	41%
Fixed-Charge Coverage	34%
Debt to EBITDA	36%

Banks report varying levels of restrictiveness for popular covenants. Specifically, the median debt-to-total assets maximum is 3 times, while the minimum cash flow percentage is 125%. The minimum fixed-charge coverage ratio is 1.2 times, and the maximum debt/EBITDA covenant is 2.75 times.

Table 5: Covenant Thresholds

Covenant	Threshold (median)
Max Debt/Total Assets	3 times
Min Cash Flow Percentage	125%
Min Fixed-Charge Coverage	1.2 times
Max Debt/EBITDA	2.75 times

Banks report that average returns over the prior five years of lending have ranged between 6.75% and 7.3% (medians). The highest returns have resulted from working-capital lending, while real estate lending has produced the lowest returns (6.75%).

Table 6: Historical Returns (5-year)

Type	Return
Real Estate	6.75%
Working Capital	7.30%
Equipment	7.00%
C&I	7.00%

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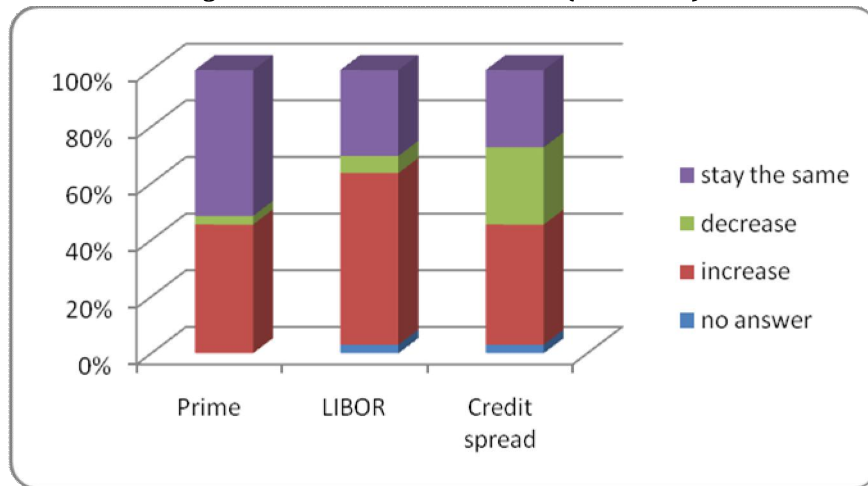
Banks also regularly charge various fees. The median closing fee is 1%, modification fee is 1%, commitment fee is 1%, and prepayment penalties vary in accordance with time. In addition, unused line fees are 0.25%. Other fees regularly charged include audit fees and attorney's fees when relevant.

Outlook on Business Lending Market and Economy

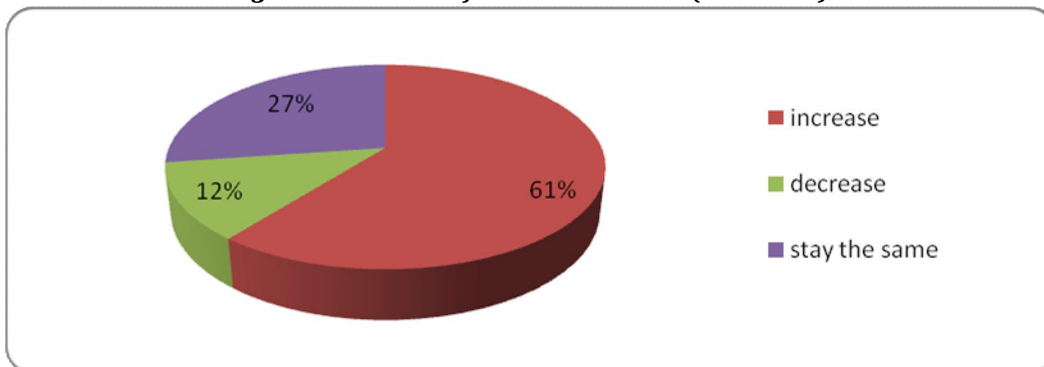
Over the next 12 months, 45% of those surveyed believe that the prime interest rate will increase, while 52% believe those rates will stay the same. For LIBOR interest rates, 61% believe they will increase, while 30% believe those rates will stay the same. Forty-two percent (42%) believe that credit spreads will increase, while 27% believe they will stay the same, and another 27% believe they will decrease.

Figure 9: Interest Rate Forecast (12-month)



The majority of the banks (61%) said that they believe that the demand for loans in general will increase over the next 12 months.

Figure 10: Demand for Loans Forecast (12-month)



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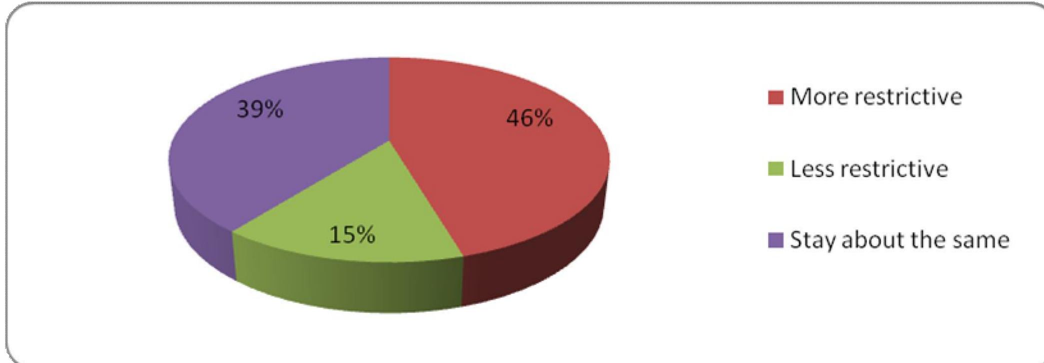
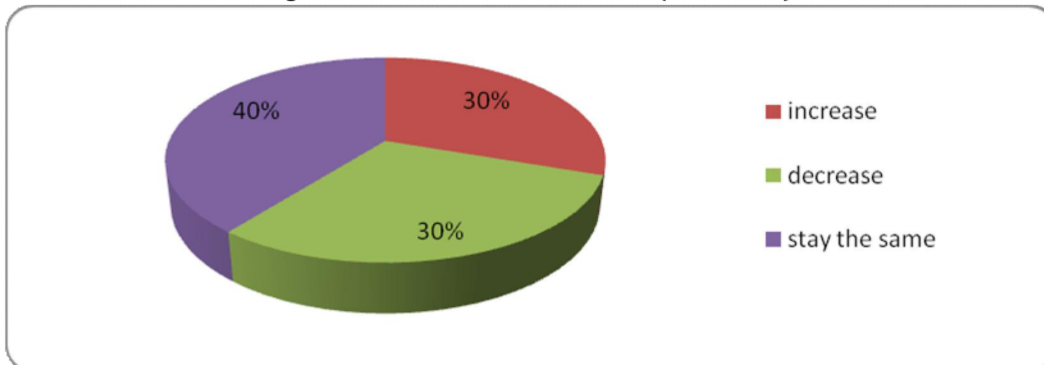
Over the next 12 months, most lenders believe that lending in general will become more restrictive (46%) or stay about the same (39%). Only 15% felt that lending will become less restrictive.

Figure 11: Lending Restrictiveness Forecast (12-month)



Forty percent (40%) of those surveyed believe that the Gross Domestic Product (GDP) will stay the same over the next 12 months. Of the 30% that believe the GDP will increase, 50% believe it will only increase by 1% to 2%. Of the 30% that believe it will decrease, 60% believe it will only decrease by 1% to 2%. Overall the median expectation is -1.6%.

Figure 12: GDP Outlook Forecast (12-month)



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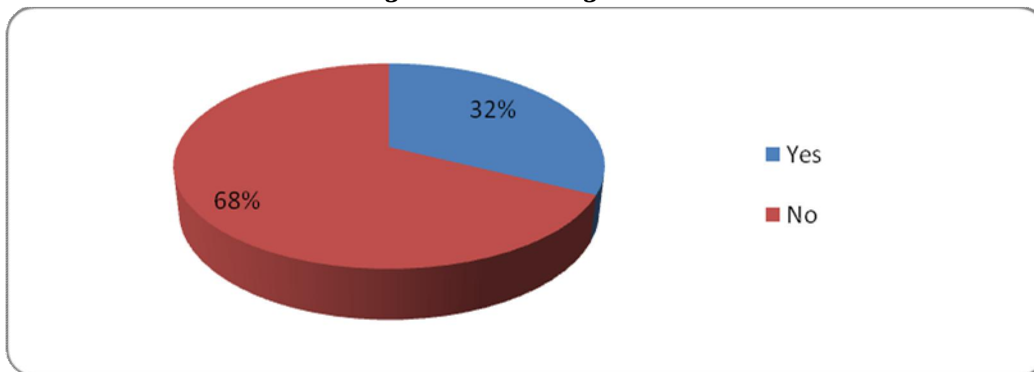
ASSET-BASED LENDER SURVEY INFO

Profile of Respondents

The following responses pertain to our asset-based lender (ABL) survey administered in March/April 2009. Our results are based upon 69 responses to this survey. The respondents are geographically dispersed throughout the United States.

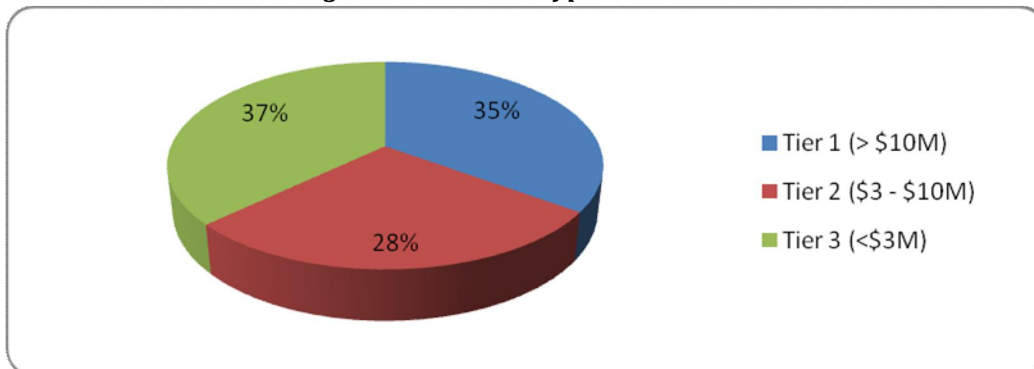
Of those surveyed, only 32% said they were regulated by the Federal Deposit Insurance Corporation (FDIC).

Figure 13: FDIC Regulation



Asset-based lenders generally segment themselves in the various tier types. Approximately 35% of ABLs in the survey are Tier 1, meaning they generally lend amounts greater than $10 million. Approximately 28% classify themselves as Tier 2, as they lend between $3 and $10 million. The final group (37%) serves the smaller market.

Figure 14: ABL Tier Type Distribution



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Lending Characteristics

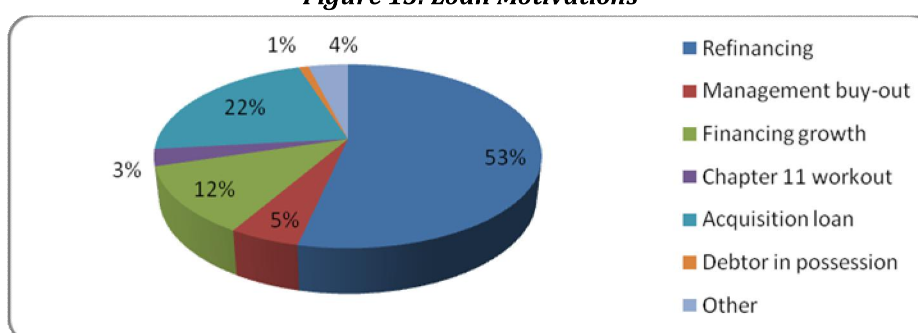
Of those active in offering asset-based loans over the prior four months, the median number of operating asset-based loans offered was 6. The conversion rate on these was approximately 33%. For real estate loans, the median number booked was 1 based upon 5 offered.

Table 7: Offered and Booked Loans (median)

	Offered	Booked	Hit Rate
Operating Asset	6	2	33%
Real Estate	5	1	20%

Refinancing topped the list for borrowers' motivation for obtaining an asset-based loan (53%) over the past four months. Acquisitions were cited as the next most frequent motivation (22%) followed by financing growth (12%).

Figure 15: Loan Motivations



The following standards were cited when deciding whether to lend or not. They included fixed-charge coverage (minimum of 1.0), funded debt to EBITDA (maximum of 4.25 times) and debt service ratio (minimum 1.2 times).

Table 8: Critical Ratios When Extending Credit

Indicator	Median
Fixed-Charge Coverage (min)	1.0
Funded Debt to EBITDA (max)	4.25
Debt Service Ratio (min)	1.2

When their firm calculates the standard advance rate (or loan-to-value ratio) for a particular real estate asset, 60% of those surveyed said they estimate the loan-to-value ratio by using fair market value. For accounts receivable, 52.5% said they use face value. Approximately 69.7% said they use a method other than those listed below when estimating the loan-to-value ratio for equipment, while 38.9% claim "other" as the primary determinant of value of inventory. A large component of this category is likely associated with orderly and distressed liquidation values.

Table 9: Methods Used to Value Assets

	Purchase	Book	FMV	Face	Other
Equipment	0.0%	12.1%	18.2%	0.0%	69.7%
Inventory	5.6%	13.9%	22.2%	19.4%	38.9%
A/R	7.5%	10.0%	10.0%	52.5%	20.0%
Real Estate	5.7%	0.0%	60.0%	0.0%	34.3%

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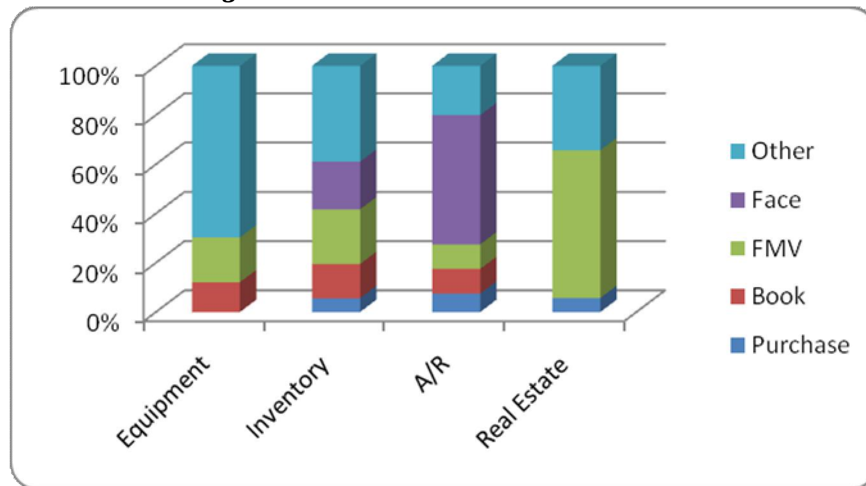
Figure 16: Methods Used to Value Assets



Advance rates vary by type of collateral. The median of accounts receivables advance rates is 85%, while marketable securities follow closely behind at 80%. The median advance rate response for low-quality inventory is 22.5%.

Table 10: Lending Advance Rates (median)

Accounts Receivable	85.0%
Inventory – Low quality	22.5%
Inventory - Intermediate quality	35.0%
Inventory – High quality	55.0%
Equipment	67.5%
Real Estate	65.0%
Land	50.0%
Firm's Cash Flow	65.0%
Marketable Securities	80.0%

Eighty percent (80%) of the time, loans are variable rate. Forty-six percent (46%) of the time, loans are priced by referencing prime, while 48% of the time the reference rate is LIBOR. Interest rate spreads vary dramatically by lender ranging from prime plus 0.5% to prime plus 16%. LIBOR spreads, used more frequently by larger organizations and based upon a 3-month rate most often, range from LIBOR plus 3.5% to LIBOR plus 6%. The medians are as follows:

Table 11: Median Rate Spreads

Index	Spread (%)
Prime Spread	3.50%
LIBOR Spread	3.75%

The loan terms varied significantly by asset type. Equipment loans ranged from 24 to 72 months, real estate loans ranged from 12 to 240 months, and working-capital loans ranged from 12 to 60 months. The medians are reported below:

Table 12: Loan Term by Collateral

Type	Months
Equipment	60
Real Estate	60
Working Capital	36

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The most common financial covenant is the limit on distributions (85.3%), followed by limits on level of indebtedness (78.8%) and fixed-charge ratio (75.9%). The median fixed-charge ratio threshold was 1.1 times and the median debt-to-EBITDA ratio was 4.5 times.

Table 13: Covenant Frequency

Covenant	Frequency
Limits on Level of Indebtedness	78.8%
Limits on Distributions	85.3%
Limits on Management Compensation	42.3%
Positive Earnings (pretax income/sales)	48.0%
Fixed Charge	75.9%
Debt to EBITDA	52.2%

Fees are also very common on asset-based loans. Closing fees ranged from 0.5% to 4% of the loan amount, modification fees from 0.1% to 3%, commitment fees from 0.5% to 1.5%, collateral monitoring fees from 0.1% to 12%, unused-line fees from 0.25% to 1%, audit fees from $750 per person per day to $1,000 per person per day, and attorneys' fees generally at cost. Other fees cited include insurance, annual fee, and due diligence fees.

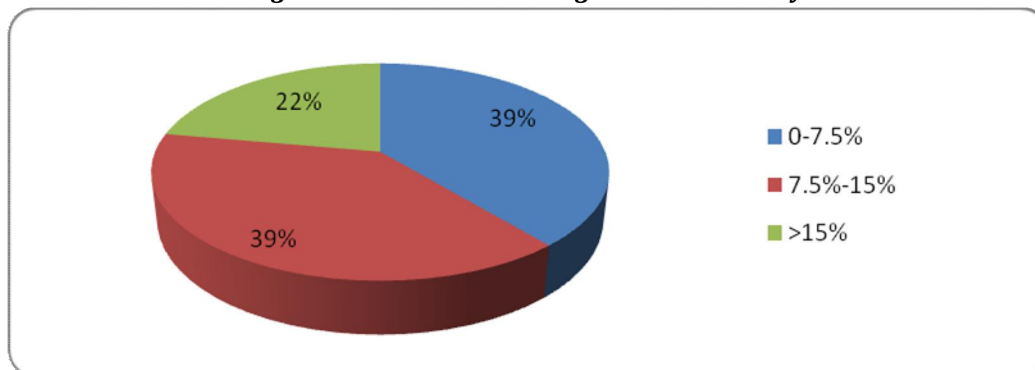
As for all-in rates, they varied significantly by type of asset and size. The highest rates were charged on working-capital assets, followed by equipment loans. The rate ranges are reported below.

Table 14: Rate Ranges (current)

Asset	Rates
Real Estate	4.75-18%
Working Capital	5.00-36%
Equipment	5.25-19%
C&I	5.25-14%

For business loans being booked currently, 39% of those surveyed said that 7.5%-15.0% is the all-in rate that the borrower will pay for the loan (expressed on an annualized basis), while another 39% said those same rates are 0-7.5%, and 22% said the rates were greater than 15%. The median rate reported is 11.0%.

Figure 17: All-In Rates Being Booked Currently



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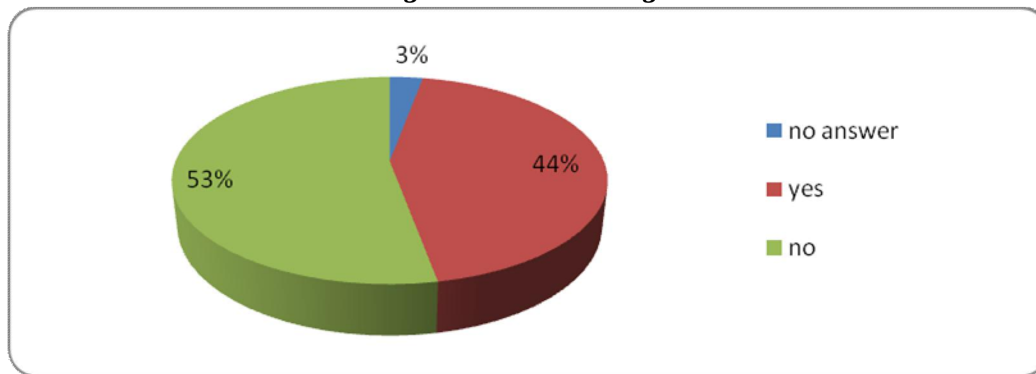
The median realized returns for booked deals over the past five years range from 8% to 18%. Working-capital returns were cited as being the largest (18%), followed by equipment loans (12%).

Table 15: Realized Rates of Return

Loan Type	Rate
Real Estate	8%
Working Capital	18%
Equipment	12%
C&I	8%

Of those surveyed, 53% report that they do not use a risk-adjusted return on capital (RAROC) model to assess performance.

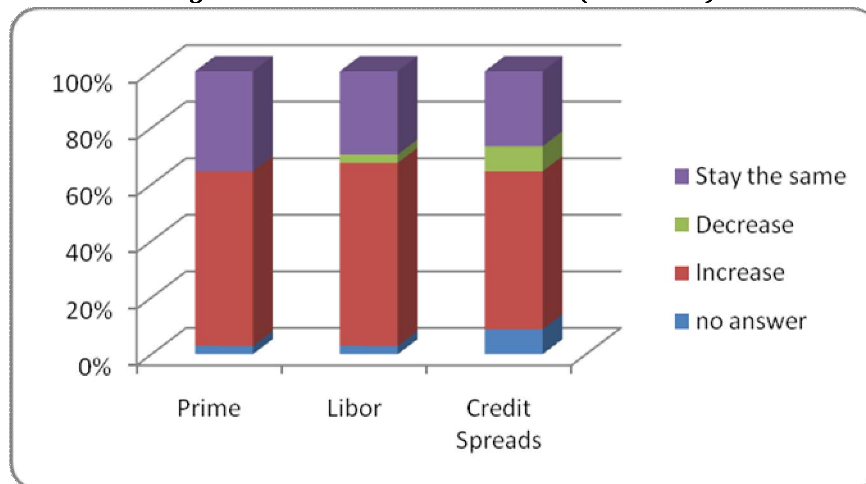
Figure 18: RAROC Usage



Outlook on Lending Market and Economy

The majority of asset-based lenders believe that interest rates for asset-based loans will increase over the next 12 months. Of those surveyed, 62% believe the prime rate will increase, 65% believe LIBOR will increase, and 56% believe credit spreads will increase.

Figure 19: Interest Rates Forecast (12-month)



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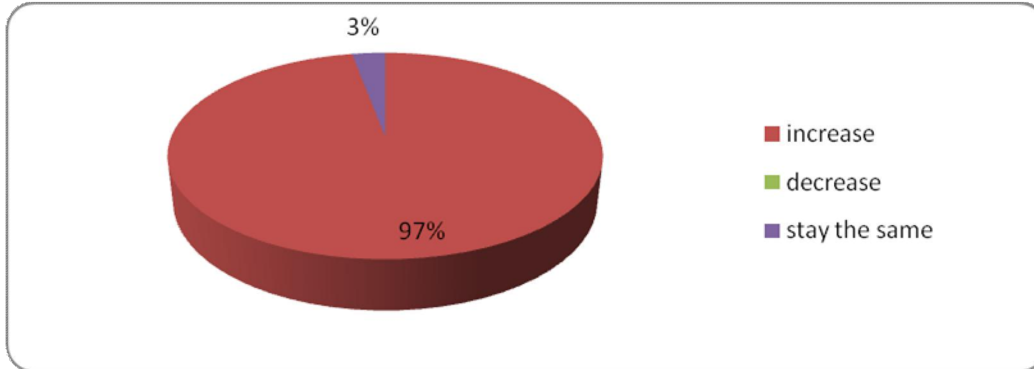
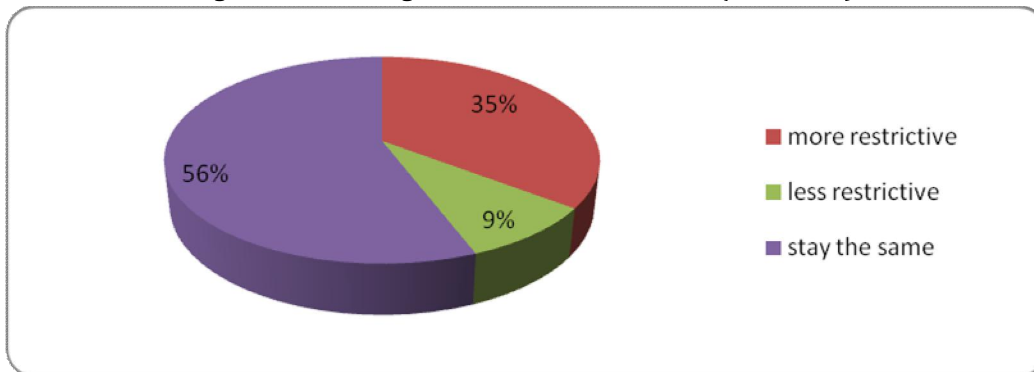
Almost all those surveyed (97%) believe that the demand for asset-based loans in general will increase over the next 12 months.

Figure 20: Demand for Asset-Based Loans Forecast (12-month)



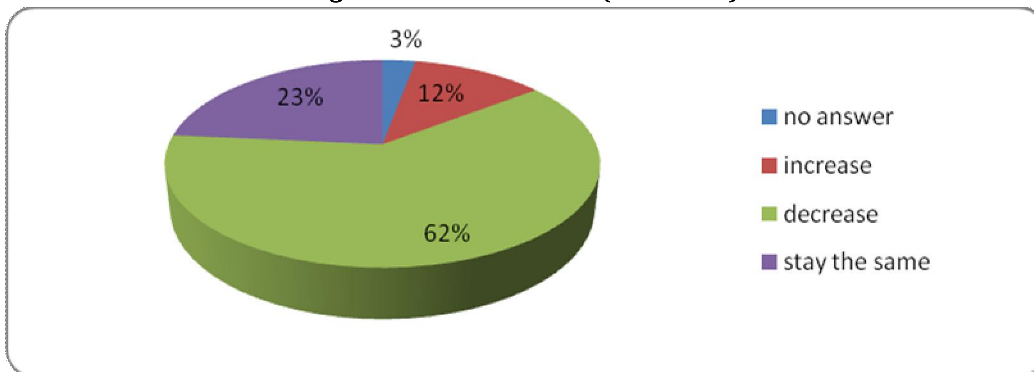
Fifty-six percent (56%) believe that asset-based lending in general will stay the same, and 35% believe it will become more restrictive.

Figure 21: Lending Restrictiveness Forecast (12-month)



Sixty-two percent (62%) of the respondents believe that the Gross Domestic Product for the United States will decrease over the next 12 months.

Figure 22: GDP Forecast (12-month)



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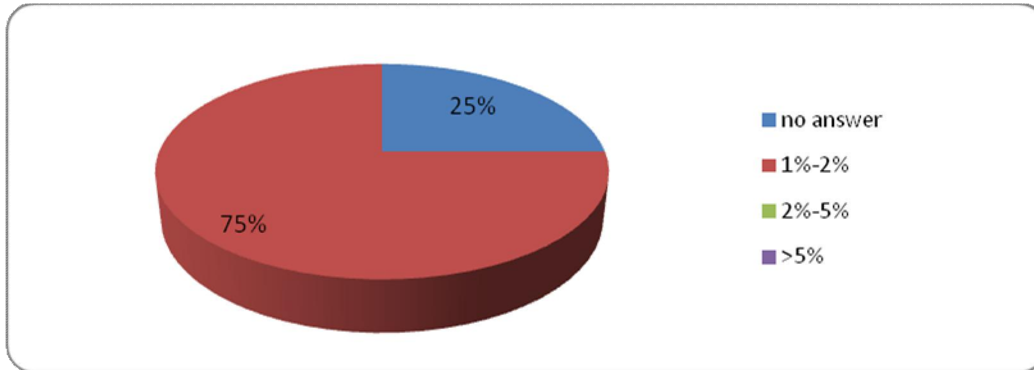
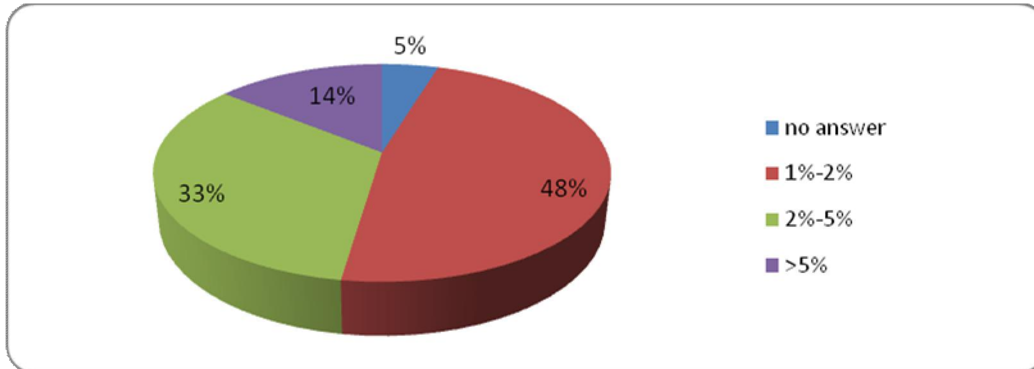
Of the 12% who believe the GDP will increase, 75% believe it will only increase by 1-2%.

Figure 23: Distribution of GDP Forecast (increase)



Of the 62% who believe the GDP will decrease, 48% believe it will only decrease by 1-2%, but 33% believe it will decrease by 2-5%.

Figure 24: Distribution of GDP Forecast (decrease)



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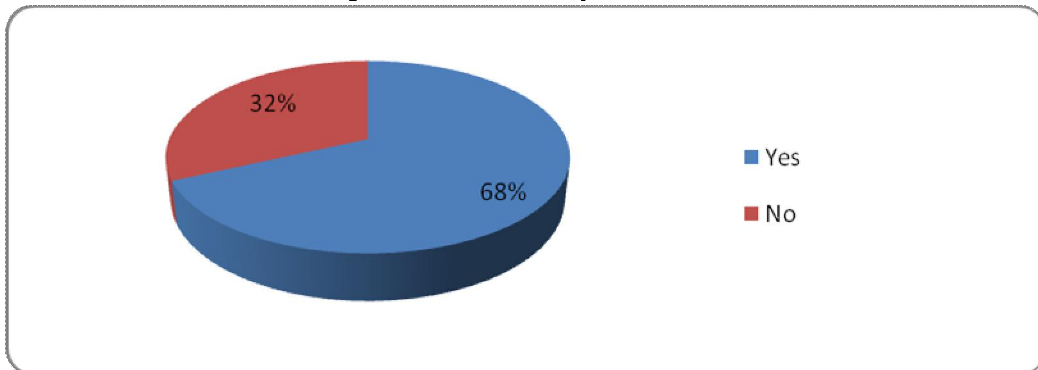
MEZZANINE SURVEY INFO

Profile of Respondents

The following responses pertain to our mezzanine capital survey administered in March/April 2009. Our results are based upon 39 responses to this survey. The respondents are geographically dispersed throughout the United States.

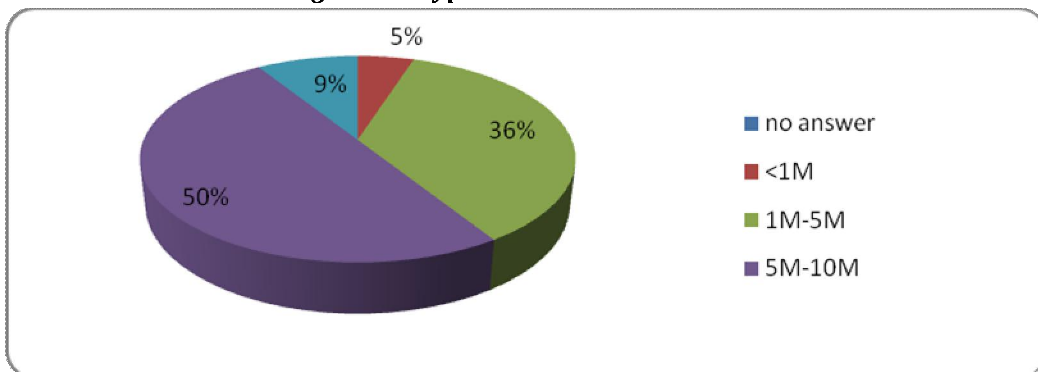
Of those surveyed, 68% identified their firm as a small business investment company (SBIC).

Figure 25: SBIC Classification



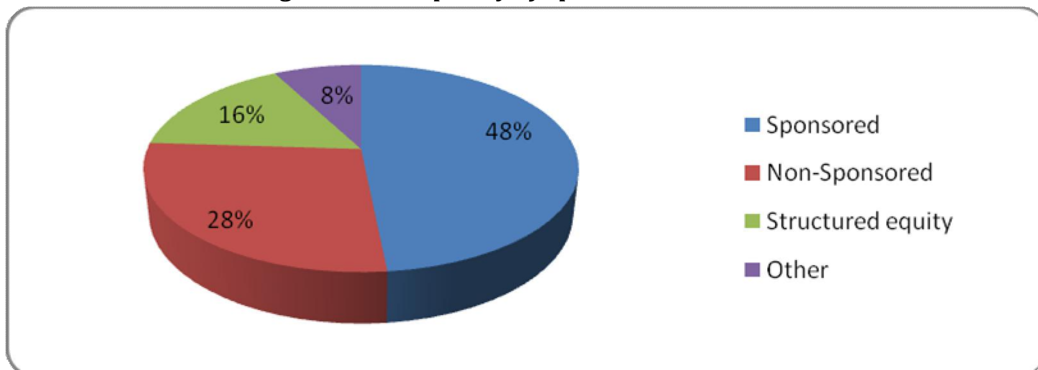
Fifty percent (50%) of the respondents reported that the typical size of their investment in any one company is $5M-$10M, and 36% say the typical size is $1M-$5M.

Figure 26: Typical Investment Sizes



Mezzanine capital providers indicate that 48.4% of their deals are sponsored, which means they join a private equity group in the deal. Just 27.6% of deals are non-sponsored.

Figure 27: Frequency of Sponsored Deals



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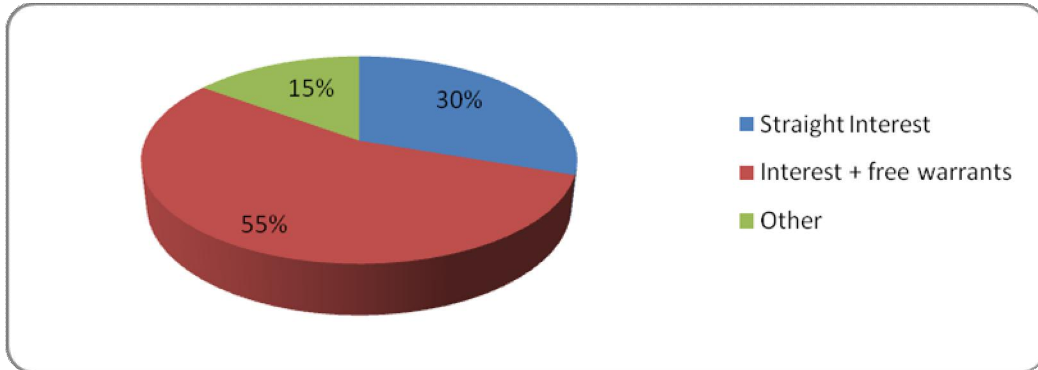
Lending Characteristics

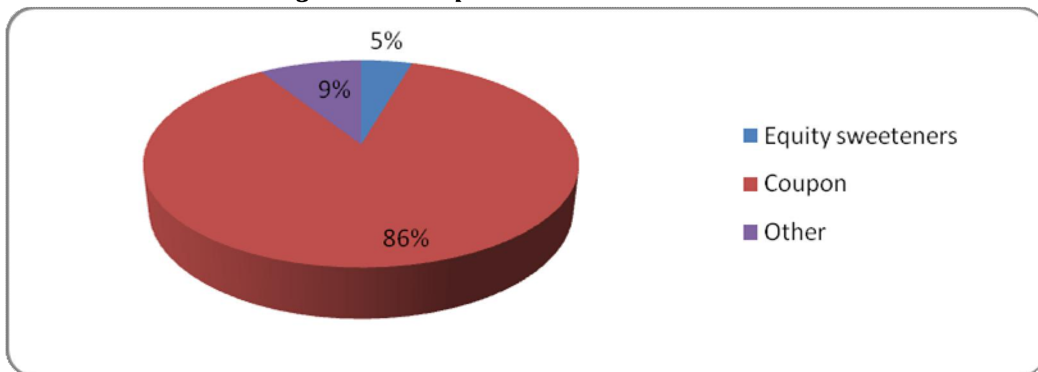
Approximately thirty percent (30.24%) of those who answered said that their booked deals are with straight interest, while 55% said that their deals include interest plus free warrants.

Figure 28: Deal Structure



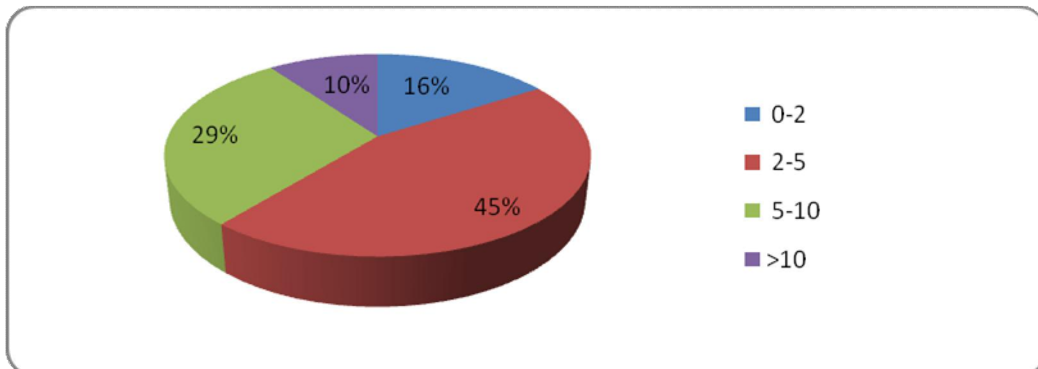
Eighty-six percent (86%) reported that their division or firm receives most of its compensation from coupon payments.

Figure 29: Compensation Distribution



Mezzanine capital providers issued a wide range of proposal letters over the past four months. The largest concentration issued was in the 2 to 5 category (45%) while 16% issued fewer than two. The median reported was four.

Figure 30: Proposal Letters Issued



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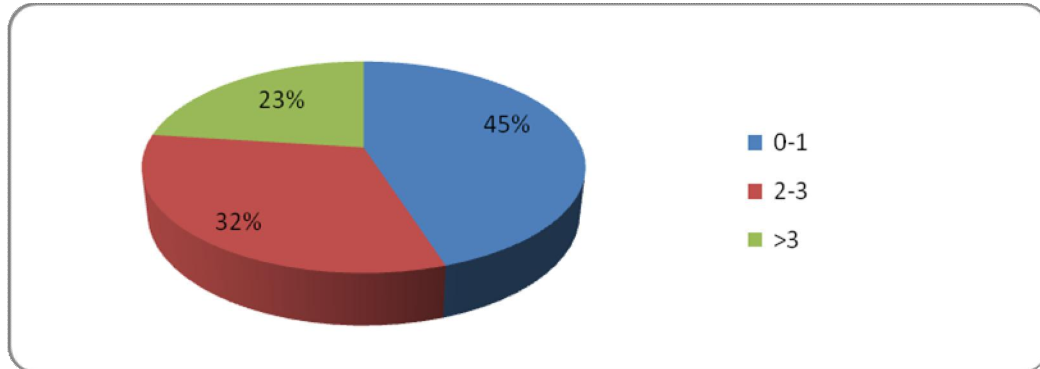
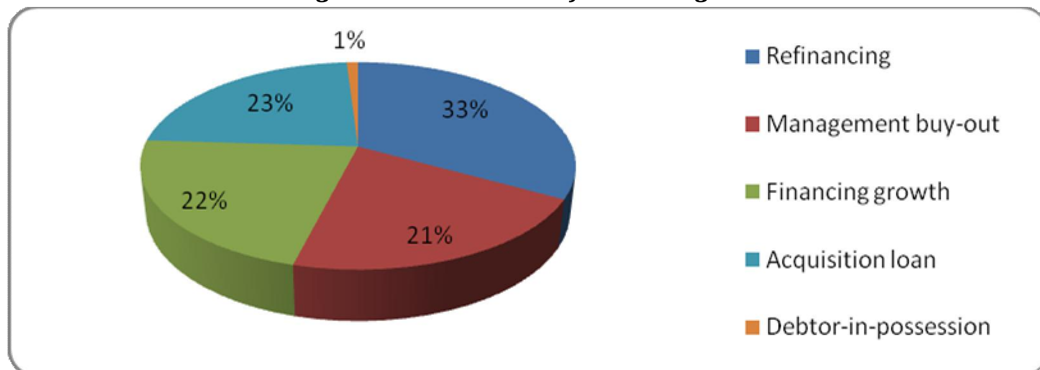
Forty-five percent (45%) said that their firm has booked one or fewer mezzanine loans over the last four months while 23% indicated booking more than three loans. The median number booked was 2, which indicates a median hit rate of approximately 50%.

Figure 31: Bookings



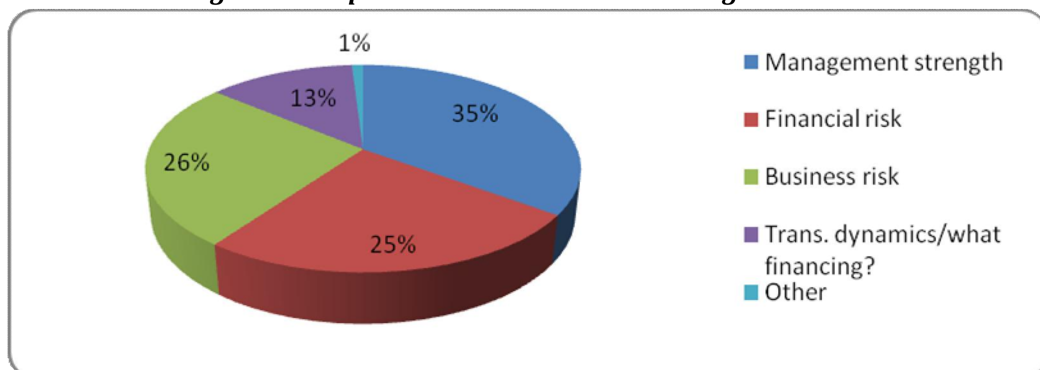
Over the last four months, 33% said that refinancing was the motivation for the borrower to secure mezzanine capital while 23% indicated acquisition purposes, and 22% report financing growth as the primary reason.

Figure 32: Motivations for Funding



Management strength (35%), business risk (26%) and financial risk (25%) were reported to be the most important factors when determining whether to extend credit or not.

Figure 33: Important Factors When Extending Credit



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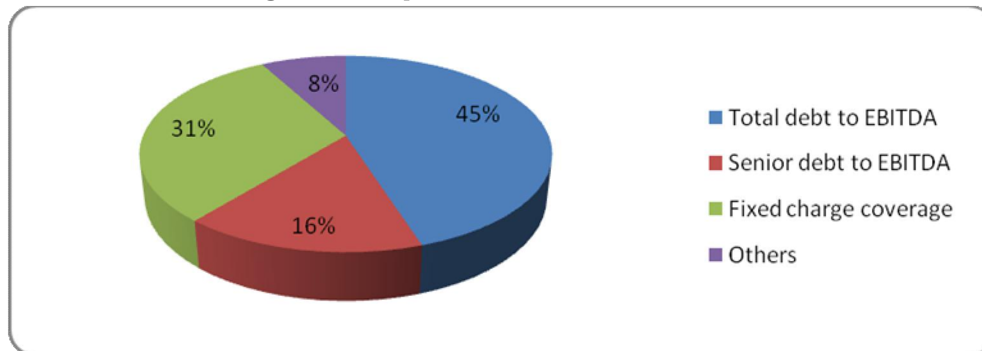
Of the factors important to consider when deciding whether to extend a loan or not, total debt to EBITDA (45%) was weighted as being the most important factor followed by fixed-charge coverage (31%) and senior debt to EBITDA (16%).

Figure 34: Important Financial Factors



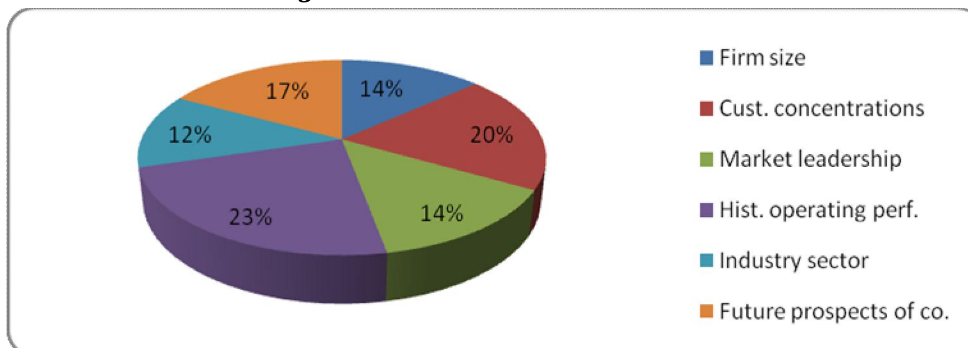
On a pre-funding basis, when regarding financial risk, survey respondents report that the median threshold for total debt to EBITDA is 3.75 while the maximum senior debt-to-EBITDA ratio is 2.5. The minimum fixed-charge coverage ratio is 1.2 (median).

Table 16: Pre-Funding Financial Thresholds

Parameter	Median
Total Debt to EBITDA (max)	3.75
Senior Debt to EBITDA (max)	2.5
Fixed-Charge Coverage (min)	1.2

Regarding business risk, when deciding to extend a loan or not, historical operating performance was determined to be the most important factor (23.4%) followed by customer concentrations (19.7%) and future prospects of company (17.2%).

Figure 35: Business Risk Factors



When determining whether to provide capital, mezzanine providers identify $10,000,000 in sales (median) as the minimum size company for consideration, providing it is exhibiting a minimum sales growth rate of 5%.

Table 17: Size and Growth Requirements

Parameter	Threshold
Minimum Firm Size	$10,000,000
Minimum Sales Growth Rate	5%

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When determining the maximum amount of capital to extend, mezzanine capital providers cite the following important thresholds. In particular the most frequently cited ratio of capital-to-cash flow metric is 4.0 times while the maximum allocated to senior debt is 2.5 times. Capital providers also cite a minimum fixed-charge coverage ratio of 1.2 times.

Table 18: Financial Ratio Thresholds

Parameter	Median Ratio
Maximum Multiple of Recast EBITDA	4.0
Maximum Multiple of Operating Cash Flow	4.0
Maximum Total Debt to EBITDA	4.0
Maximum Senior Debt to EBITDA	2.5
Minimum Fixed-Charge Coverage	1.2

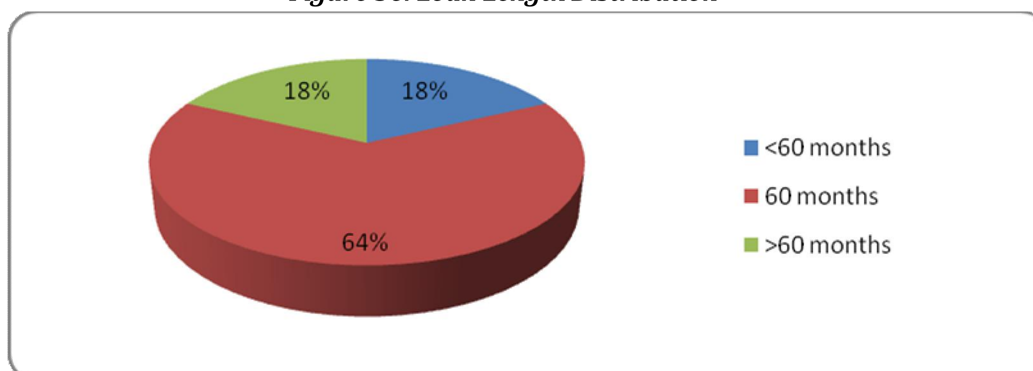
Approximately 47.8% of respondents report charging a coupon interest rate of 12-13% while 43.4% report charging a rate that exceeds 13% on capital extended. The median rate reported in the survey was 13%.

Table 19: Coupon Rate Distribution

Coupon	Percent
10-11%	8.8%
12-13%	47.8%
14-15%	21.7%
16-17%	21.7%

The most frequent loan term reported is 60 months. Approximately 64% of all survey respondents report extending capital for a 60-month term. Just 18% of respondents report shorter loan terms than 60 months and the same frequency is reported for terms greater than 60 months.

Figure 36: Loan Length Distribution



Mezzanine capital providers monitor firms in a variety of ways. While all survey respondents report requiring board observation rights and required audited financials, just 38% take a seat as a board member. Nearly 96% report requiring monthly financial statements and perform regular covenant testing to ensure compliance.

Table 20: Monitoring Activity Frequency

	Board Mem	Board Observation Rights	Mentoring Key Mgr	Required Audited Financials	Monthly financials	Regular Covenant Test
Yes	38.1%	100.0%	66.7%	100.0%	95.8%	95.8%
No	61.9%	0.0%	33.3%	0.0%	4.2%	4.2%

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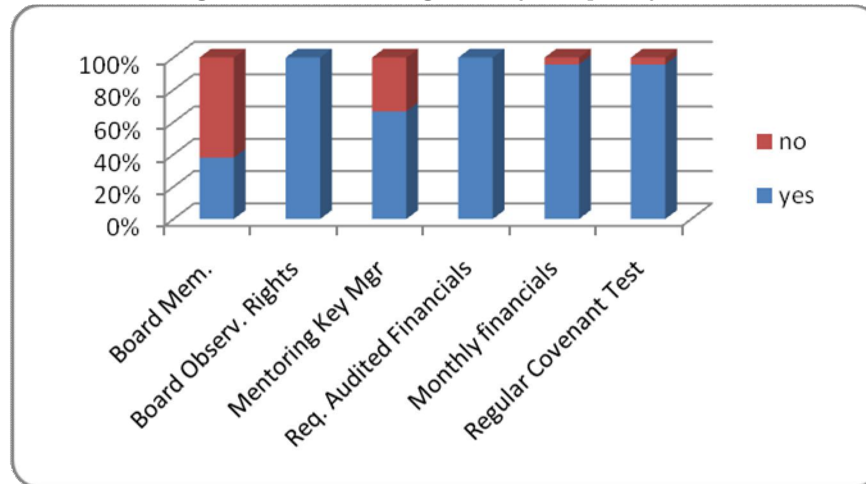
Figure 37: Monitoring Activity Frequency

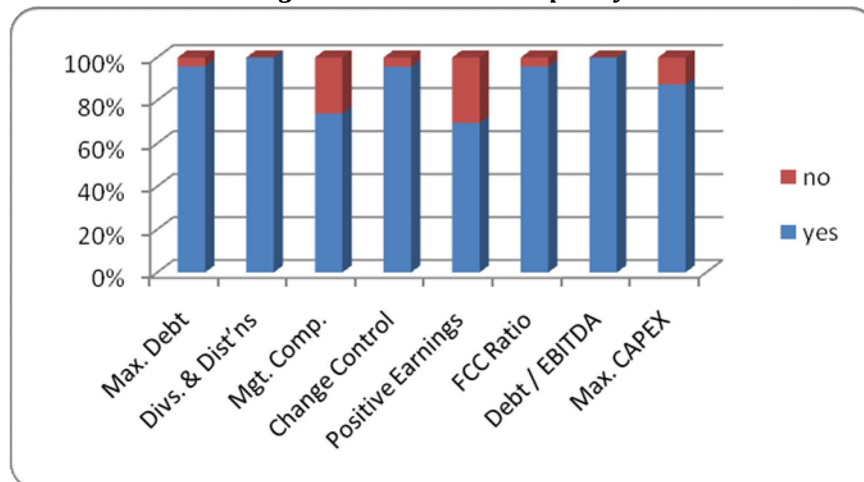


Loan covenants are utilized to restrict certain behaviors and accelerate the loan in the event of default. Over 90% of respondents cite regular use of covenants related to maximum debt (95.8%), dividends and distributions (100%), change in control (95.7%), fixed-charge coverage ratio limits (95.8%), and limits on the levels of debt relative to EBITDA (100%). Other covenants regularly used include limits on management compensation (73.9%), positive earnings requirements (69.6%), and limits on capital expenditures (87.5%). In addition, the median fixed-charge coverage ratio covenant reported is 1.18, while the median total debt to EBITDA trigger is 4.0 times.

Table 21: Covenant Frequency

	Max Debt	Divs & Dist'ns	Mgmt Comp	Change Control	Positive Earnings	FCC Ratio	Debt / EBITDA	Max CAPEX
Yes	95.8%	100.0%	73.9%	95.7%	69.6%	95.8%	100.0%	87.5%
No	4.2%	0.0%	26.1%	4.3%	30.4%	4.2%	0.0%	12.5%

Figure 38: Covenant Frequency



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Mezzanine capital providers frequently structure deals that are subject to fees. Approximately 90% of respondents indicate charging some sort of a closing fee. The average closing fee is 1.91% while the median number reported is 2%. Approximately 32% also report charging a commitment fee. Prepayment fees are also standard. Year 1 prepayment fees average 5.11% while the median reported is 5%. Year 2 prepayment fees average 3.84% while the median is 4%.

Table 22: Fees Types and Amounts

	Commit Fee	Closing Fee	Prepay Fee (yr 1)	Prepay Fee (yr 2)	Prepay Fee (yr 3)	Prepay Fee (yr 4)	Prepay Fee (yr 5)
Avg	0.44%	1.91%	5.11%	3.84%	2.47%	1.32%	0.42%
Min	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Max	2.25%	3.50%	15.00%	10.00%	7.00%	6.00%	1.00%

Various rights are frequently contracted with capital recipients. In particular, in the vast majority of situations, tag-along rights, drag-along rights, piggyback registration, anti-dilution rights, put rights, and registration rights are included in deals.

Table 23: Frequencies of Various Rights

	Tag-Along Rights	Drag-Along Rights	Piggyback Registration	Anti-dilution Rights	Put Rights	Registration Rights
Yes	87.0%	87.0%	91.3%	91.3%	87.0%	95.7%
No	13.0%	13.0%	8.7%	8.7%	13.0%	4.3%

Current deals are being priced with a hurdle rate of 18% (median) or 17.9% average. The range in rate is from 10 to 24%. The reported 5-year average historical return on mezzanine capital funds is 20.6% with a range from 8 to 47%.

Table 24: Current Hurdle Rate and Historical Returns

	Hurdle Rate on New Deals	5-yr Average Return
Median	18.0%	19.0%
Average	17.9%	20.6%

For those firms indicating a deviation between their hurdle and actual realized rates of return, the top reason cited is "early exit" followed by "change in exit multiple" and other economic influences. Nearly 14% indicated that historical returns and hurdle rates were equivalent.

Table 25: Reasons for Deviations from Hurdle Rates

	Change in Exit Multiple	Early Exit	Late Exit	Economic	Other	N/A (matched rates)
Average	24.2%	28.3%	3.6%	23.6%	6.6%	13.6%

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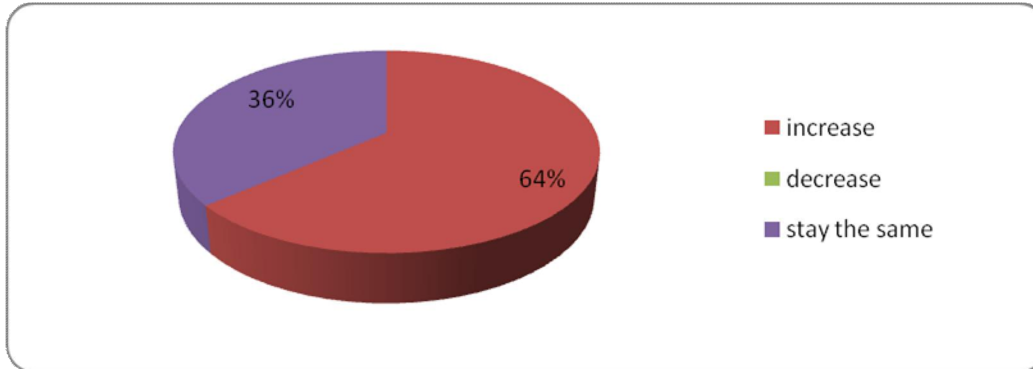
Outlook on Lending Market and Economy

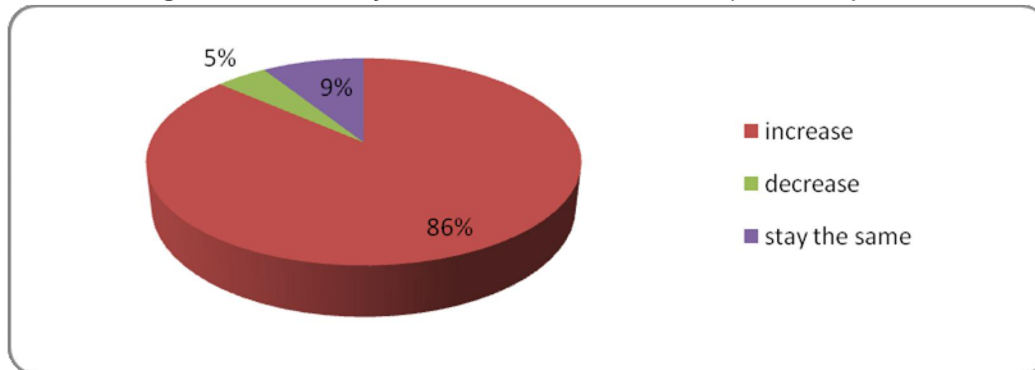
Over the next 12 months, 64% of those surveyed believe that interest rates (all-in) for mezzanine loans will increase. None of the survey participants believe rates will decrease.

Figure 39: Mezzanine Rate Forecast (12-month)



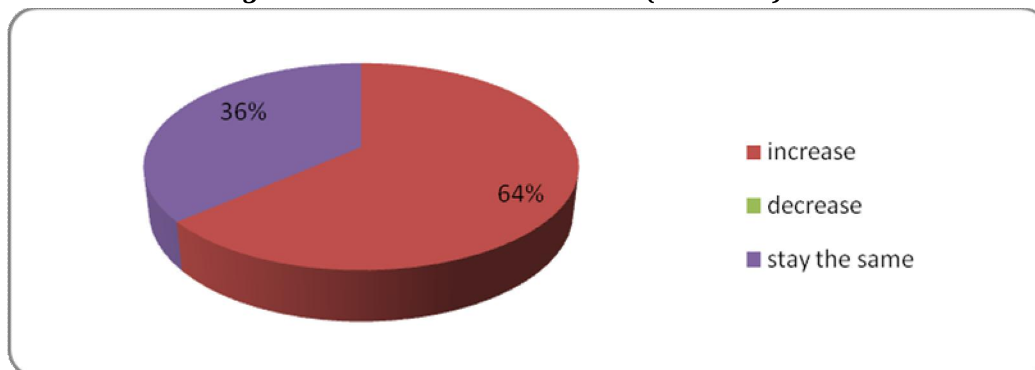
Eighty-six percent (86%) believe that the demand for mezzanine loans will increase over the next 12 months.

Figure 40: Demand for Mezzanine Loan Forecast (12-month)



Sixty-four percent (64%) believe that mezzanine lending will become more restrictive over the next 12 months.

Figure 41: Restrictiveness Forecast (12-month)



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Of the survey respondents, 57.1% believe GDP will decline, while just 19.0% believe it will increase over the next 12 months. The average estimate is for -0.8%.

Table 26: GDP Forecast (12-month)

Negative	57.1%
Zero	23.8%
Positive	19.0%
Average of Estimates	-0.8%

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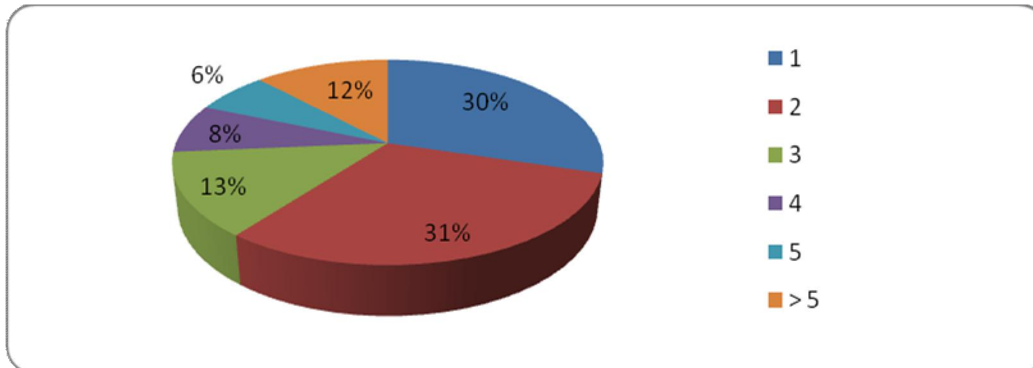
VENTURE CAPITAL SURVEY INFO

Profile of Respondents

The following responses pertain to our venture capital survey administered in March/April 2009. Our results are based upon 185 responses to this survey. The respondents are geographically dispersed throughout the United States.

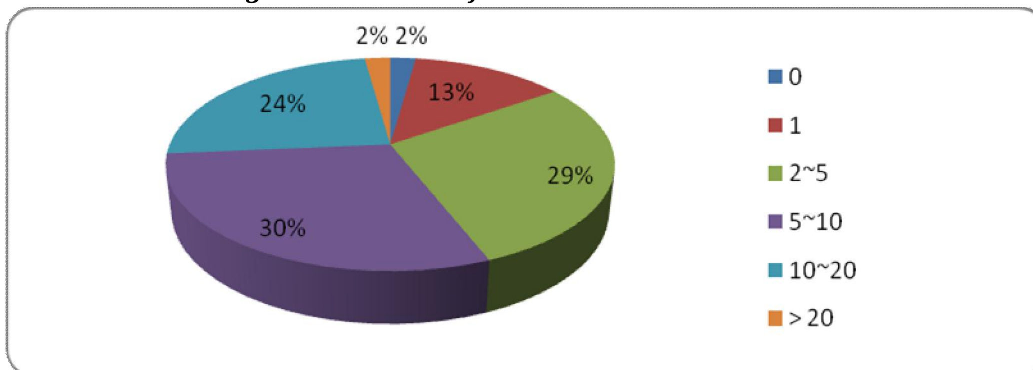
Of those surveyed, 31% said that their organization has two funds, and 30% said it has one fund.

Figure 42: Number of Funds



The most frequent category for the number of investments as they pertain to the current fund is 5-10 (30%). Twenty-nine percent (29%) indicate holdings between 2 and 5 investments, while 24% report between 10 and 20. The median number of investments is 4.

Figure 43: Number of Investments in Current Fund



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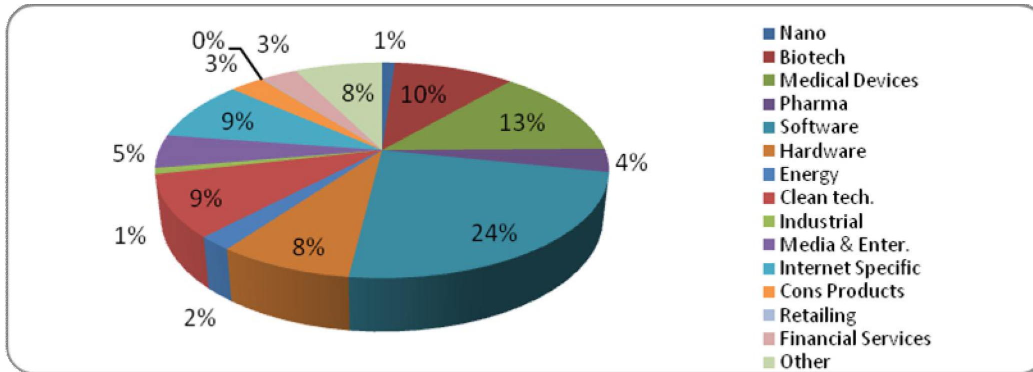
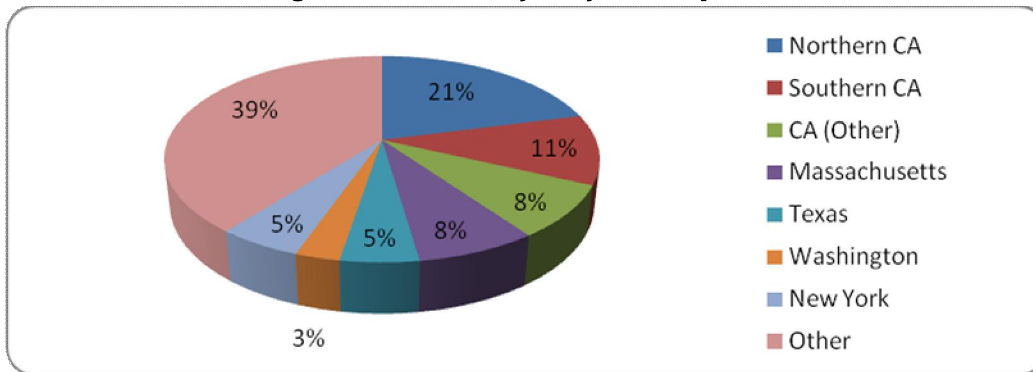
The venture capital firms surveyed invest approximately 24% of their investment capital in the area of software, followed by medical devices (13.4%), biotech (10.3%), clean technology (9.3%), and Internet specific (9.1%).

Figure 44: Investment by Business Type



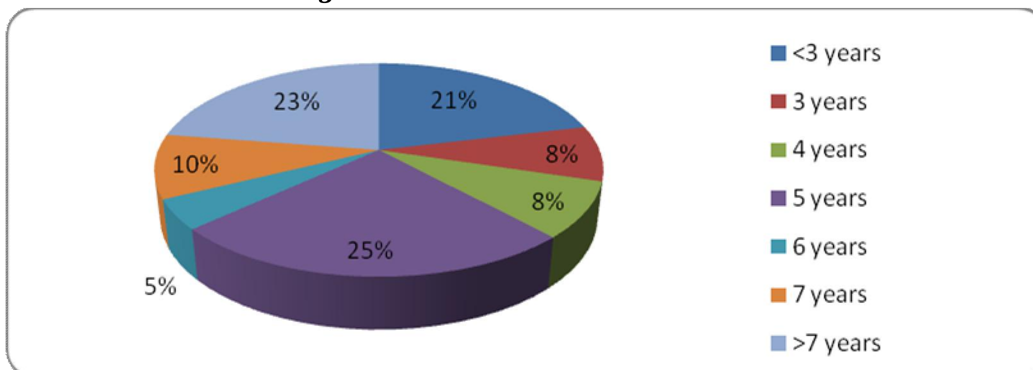
Geographically, California is home to approximately 40.2% of current portfolio companies. Massachusetts is domicile to 7.6%, New York 5.3%, and Texas 4.9%.

Figure 45: Location of Portfolio Companies



Twenty-one percent (21.3%) of respondents indicate the current fund time horizon of fewer than 3 years, while 22.6% report a time horizon of greater than 7 years. The most heavily weighted response, however, was five years (25.5%).

Figure 46: Current Fund Time Horizon



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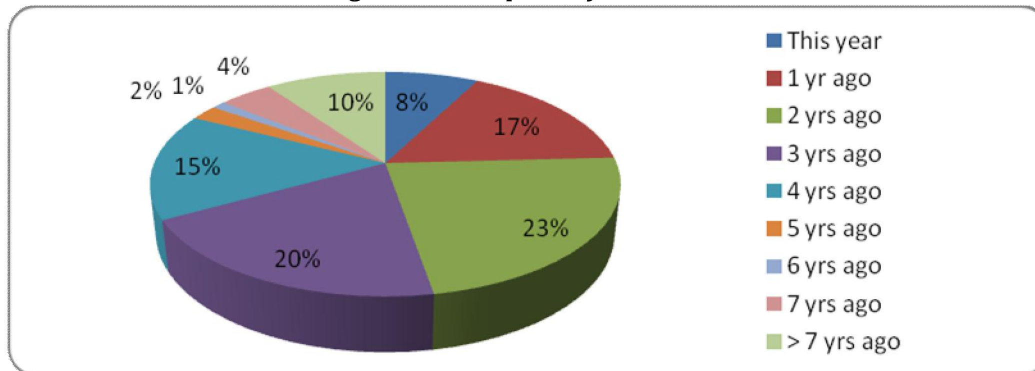
Nearly 43% of survey respondents indicate that their fund was formed 2-3 years ago. Eight percent (8%) of survey participants report launching their fund this year.

Figure 47: Inception of Fund Date



Investment Characteristics

Venture capital investing encompasses companies of various sizes. The smallest companies are classified as Stage 1 while the largest are classified as Stage 6. Respondents indicate the most frequent investment stage to which capital is deployed is Stage 4 (28.3%), followed by Stage 1 (22.5%).

Table 27: Investment by Stage of Company

Stage	Average
Stage 1: No product revenues to date and limited expense history, typically an incomplete management team with an idea, plan, and possibly some initial product development.	22.5%
Stage 2: Still no product revenue but substantive expense history, as product development is underway and challenges are thought to be understood.	17.0%
Stage 3: Significant progress in product development; key development milestones met and development is near completion, but generally no product revenue.	17.8%
Stage 4: Additional key development milestones met and some product revenue, but still operating at a loss.	28.3%
Stage 5: Product revenue and operating profitability or breakeven/positive cash flows.	10.9%
Stage 6: Established financial history of profitable operations or generation of positive cash flows.	3.5%
TOTAL	**100.0%**

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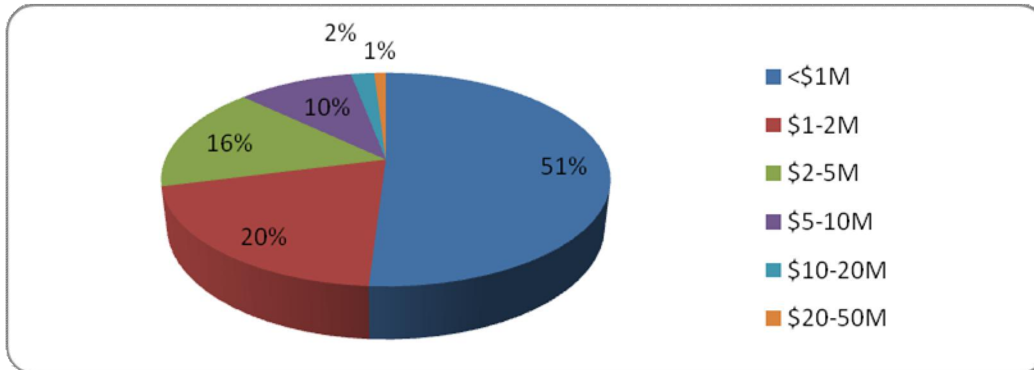
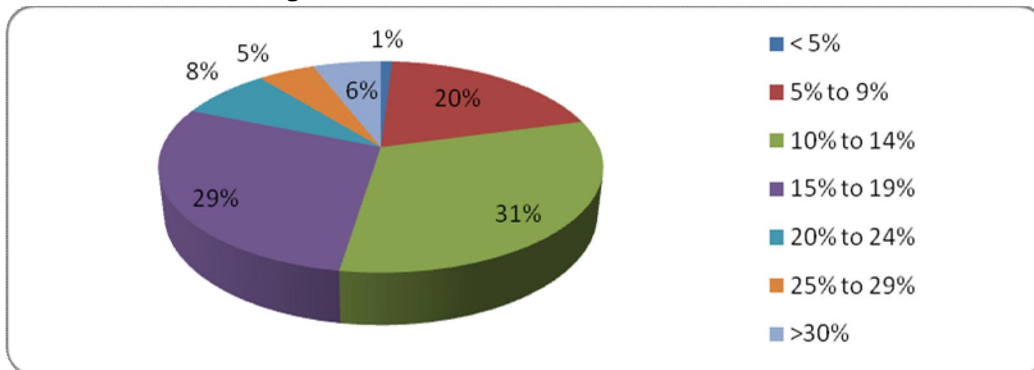
Fifty-one percent (51%) report a minimum equity investment per deal of less than $1 million. Seventy-one percent (71%) indicate a minimum investment of $2 million or less. Twenty-nine percent (29%) do not invest in deals smaller than $2 million.

Figure 48: Minimum Investment Amounts



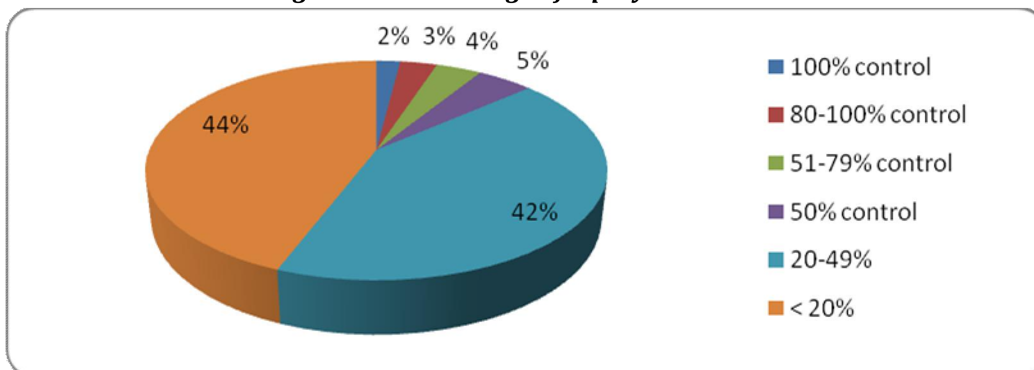
According to the fund charters, 21% of funds restrict investment concentrations greater than 9%, while 53% restrict concentrations greater than 14%. Just 11% allow concentrations greater than 25%.

Figure 49: Investment Concentration Limits



Venture capitalists are known for taking minority positions in companies. Over eighty-six percent (86.3%) are non-control transactions. Of these, our analysis reveals that nearly 67% of the transactions are between 10% and 30% equity ownership.

Figure 50: Percentage of Equity Purchased



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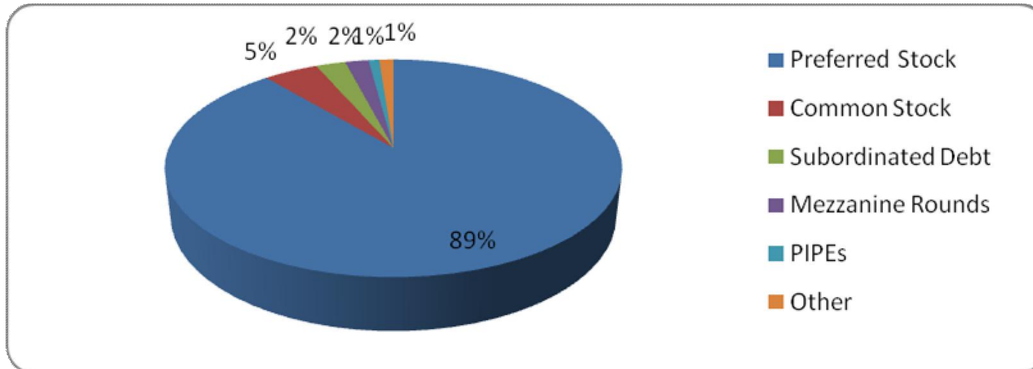
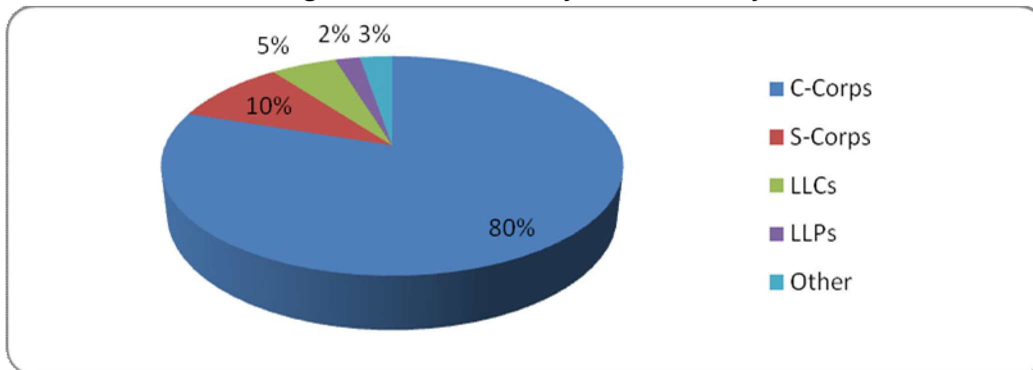
Most of the investment dollars are made in preferred stock (88.8%) of the investee company. Just 4.6% of investment dollars are invested in common stock.

Figure 51: Investment Security Types



The majority of companies that are targets of venture capital are C-corporations (80.1%). S-corporations account for approximately 9.6% of investments.

Figure 52: Investment by Business Entity



Venture capital firms use a variety of investment analysis techniques to evaluate investments. Of these, 96% report using a market analysis, while 78% use a multiple analysis. Sixty-seven percent (67%) indicate they use a gut feel, which is used more frequently than a discounted cash-flow analysis (DCF).

Table 28: Frequency of Investment Analysis Techniques

Analysis	Percent
DCF	43%
Multiple Analysis	78%
Option Analysis	10%
Simulation Analysis	22%
Gut Feel	67%
Market Analysis	96%
Other	43%

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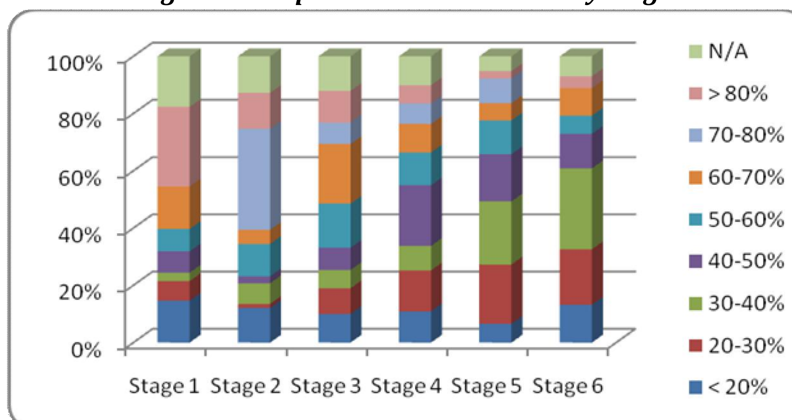
The relevancy and minimum acceptable 5-year growth rate of EBITDA varies with stage of company. Approximately 25.8% indicate the EBITDA growth rate over the next five years is not applicable to the investment-making process for stage 1 investments, whereas just 6.3% report its lack of relevance for Stage 6 companies. For Stage 1 companies, the most frequently cited expected EBITDA growth rate category is "greater than 80%," whereas Stage 6 companies are expected to grow at 30-40% in the most frequently chosen category.

Table 29: Expected EBITDA Growth by Stage

Growth	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Less than 20%	21.4%	21.4%	16.7%	19.0%	9.5%	11.9%
20-30%	10.0%	2.5%	15.0%	25.0%	30.0%	17.5%
30-40%	4.3%	12.8%	10.6%	14.9%	31.9%	25.5%
40-50%	10.9%	4.3%	13.0%	37.0%	23.9%	10.9%
50-60%	11.4%	20.0%	25.7%	20.0%	17.1%	5.7%
60-70%	21.7%	8.7%	34.8%	17.4%	8.7%	8.7%
70-80%	0.0%	62.5%	12.5%	12.5%	12.5%	0.0%
Greater than 80%	40.7%	22.2%	18.5%	11.1%	3.7%	3.7%
N/A	25.8%	22.6%	20.1%	17.6%	7.5%	6.3%

Figure 53: Expected EBITDA Growth by Stage



The same pattern applies to sales growth rates. As investments are directed towards larger companies, the revenue growth rate expectation, over a 5-year period, declines significantly.

Table 30: Expected Sales Growth by Stage

Growth	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Less than 20%	9.5%	7.6%	3.4%	2.2%	4.4%	14.3%
20-30%	4.8%	6.3%	10.3%	15.7%	29.4%	20.4%
30-40%	6.0%	10.1%	16.1%	30.3%	32.4%	28.6%
40-50%	15.5%	13.9%	20.7%	16.9%	11.8%	10.2%
50-60%	9.5%	5.1%	9.2%	13.5%	5.9%	10.2%
60-70%	3.6%	5.1%	9.2%	4.5%	4.4%	0.0%
70-80%	3.6%	6.3%	4.6%	3.4%	0.0%	0.0%
Greater than 80%	21.4%	20.3%	12.6%	5.6%	2.9%	4.1%
N/A	26.2%	25.3%	13.8%	7.9%	8.8%	12.2%

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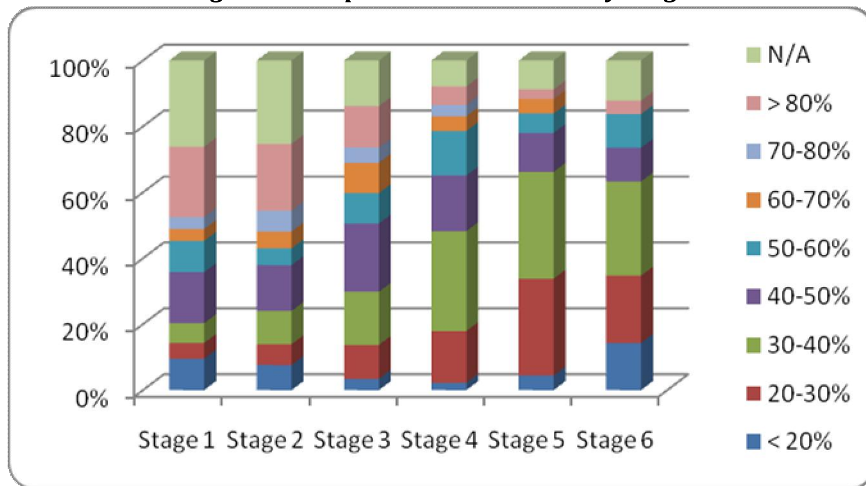
Figure 54: Expected Sales Growth by Stage



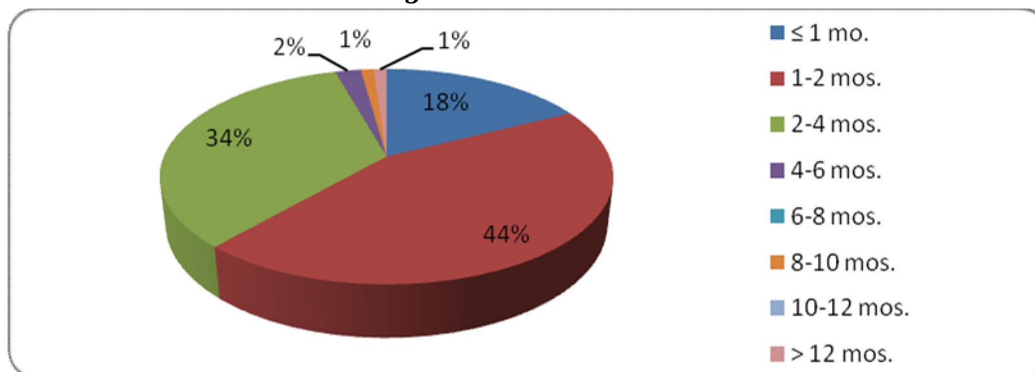
In order to close one deal, the following activities are conducted. The median numbers are reported.

Table 31: Steps to Close One Deal

Activity	Number
Business Plans Received	100
Meetings with Principals	20
Term Sheets Issued	2
Letters of Intent Signed	1

Forty-four percent (44%) of participants report the time to close a deal after the letter of intent is signed is 1 to 2 months while 34% report the process taking between 2 and 4 months.

Figure 55: Time to Close



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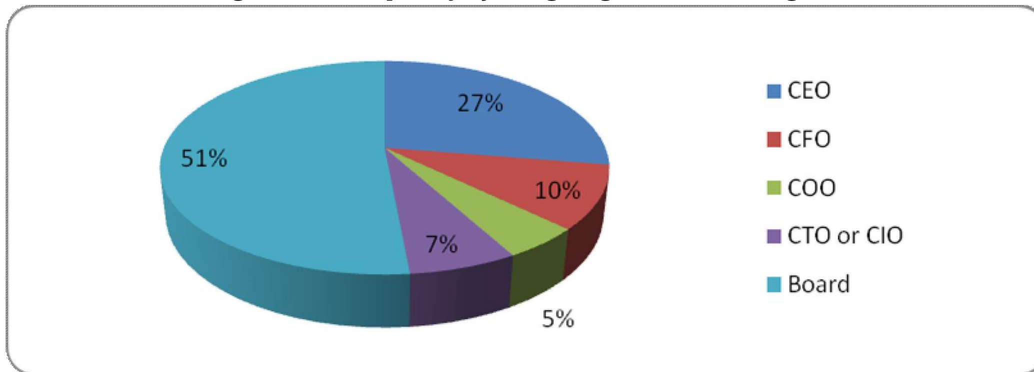
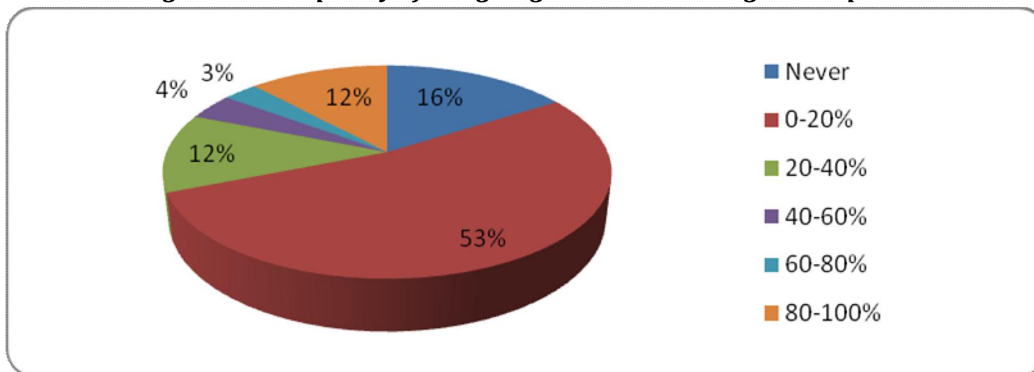
Firms occasionally will assign an outside manager to oversee the company in which funds are invested. Board members are assigned in approximately 51% of the cases while CEOs are assigned in approximately 27% of the deals.

Figure 56: Frequency of Assigning Outside Managers



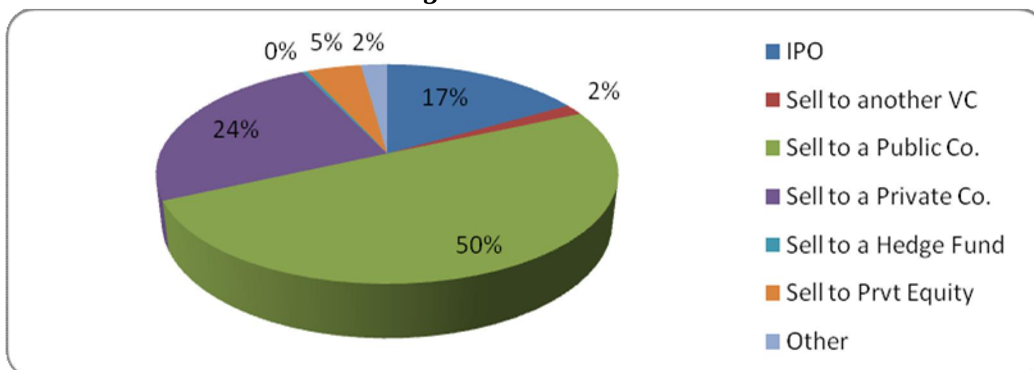
During the due diligence process, occasionally outside experts are hired to help in certain areas. Sixteen percent report that outside experts are never hired while 53% indicate that experts are hired between 0% and 20% of the time.

Figure 57: Frequency of Assigning Outside Due Diligence Experts



Regarding exit plans, venture capitalists report selling to a public company (49.9%) as the most likely course of action for a liquidity event. Nearly 24.6% indicate their plans to sell to a private company while 16.8% are planning for an initial public offering (IPO).

Figure 58: Exit Plans



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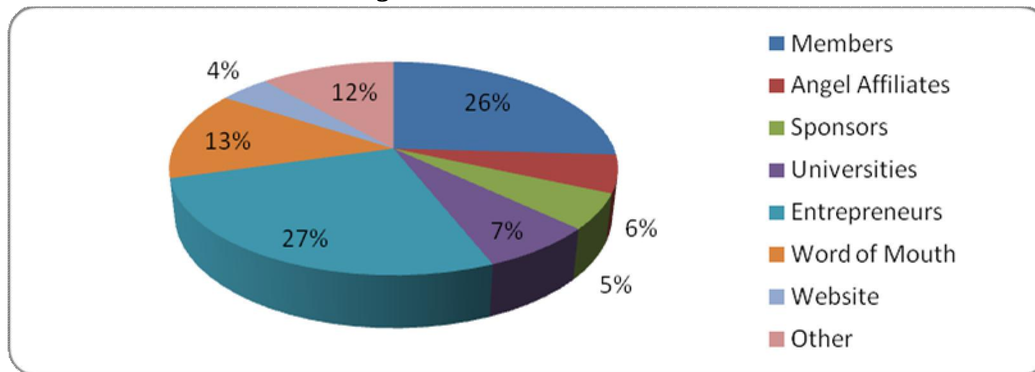
Deal flow comes from a variety of sources. The largest category is entrepreneurs themselves (26.6%) followed by members (25.9%) and word of mouth (13.5%).

Figure 59: Deal Flow Sources

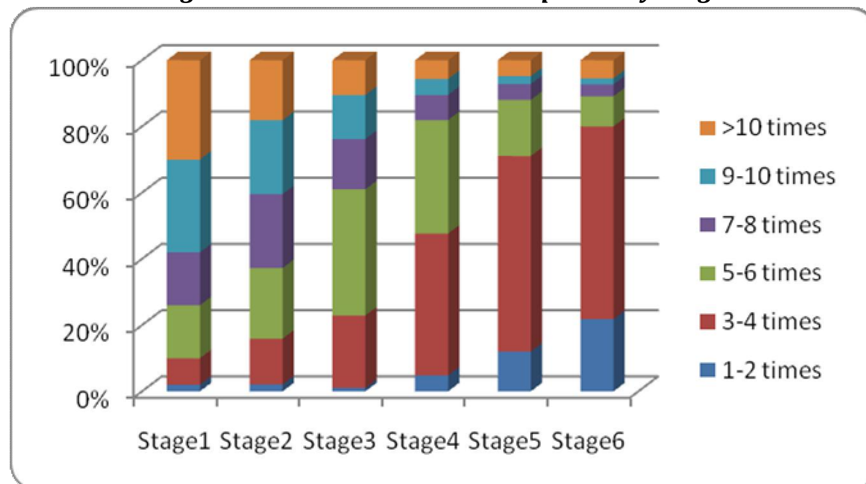


Target sales prices to total venture investment (TVI) ratios decline as investee companies are larger and exhibit greater levels of profitability and operating history. Approximately 58% of survey participants expect greater than 9 times TVI for Stage 1 investments, while nearly 80% of venture capitalists expect returns of less than 4 times on Stage 6 investments. Stage 1 investors expect an average 8.2 ratio of sales price to TVI, while Stage 6 investors expect 3.9 times.

Table 32: Expected Sales Multiples

Multiple	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1-2 Times	2.0%	2.1%	1.0%	4.8%	12.0%	21.8%
3-4 Times	8.0%	13.8%	21.9%	42.9%	59.0%	58.2%
5-6 Times	16.0%	21.3%	38.1%	34.3%	16.9%	9.1%
7-8 Times	16.0%	22.3%	15.2%	7.6%	4.8%	3.6%
9-10 Times	28.0%	22.3%	13.3%	4.8%	2.4%	1.8%
More than 10 Times	30.0%	18.1%	10.5%	5.7%	4.8%	5.5%
Average	***8.2***	***7.4***	***6.4***	***5.1***	***4.3***	***3.9***

Figure 60: Sales to TVI Ratios Expected by Stage



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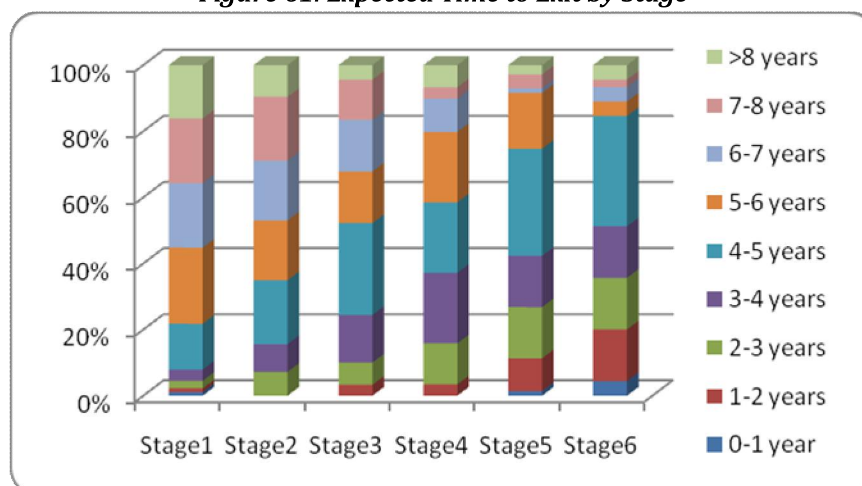
Participants also report that the time of expected exit event for a Stage 1 company is 6.2 years while a Stage 6 company's holding period is 3.8 years.

Table 33: Expected Liquidation Event Timeline

Time to Exit	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
0-1 Year	1.1%	0.0%	0.0%	0.0%	1.4%	4.4%
1-2 Years	1.1%	0.0%	3.3%	3.4%	9.9%	15.6%
2-3 Years	2.3%	7.2%	6.7%	12.4%	15.5%	15.6%
3-4 Years	3.4%	8.4%	14.4%	21.3%	15.5%	15.6%
4-5 Years	13.8%	19.3%	27.8%	21.3%	32.4%	33.3%
5-6 Years	23.0%	18.1%	15.6%	21.3%	16.9%	4.4%
6-7 Years	19.5%	18.1%	15.6%	10.1%	1.4%	4.4%
7-8 Years	19.5%	19.3%	12.2%	3.4%	4.2%	2.2%
Greater than 8 Years	16.1%	9.6%	4.4%	6.7%	2.8%	4.4%
Average	***6.2***	***5.8***	***5.1***	***4.7***	***4.1***	***3.8***

Figure 61: Expected Time to Exit by Stage



The implied returns based upon expectations of sales multiples along with estimates of liquidity event time frames indicate expected returns of between 40.5% and 43.5%.

Table 34: Implied Rates of Return

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Returns	40.5%	41.3%	43.5%	41.1%	42.3%	43.3%

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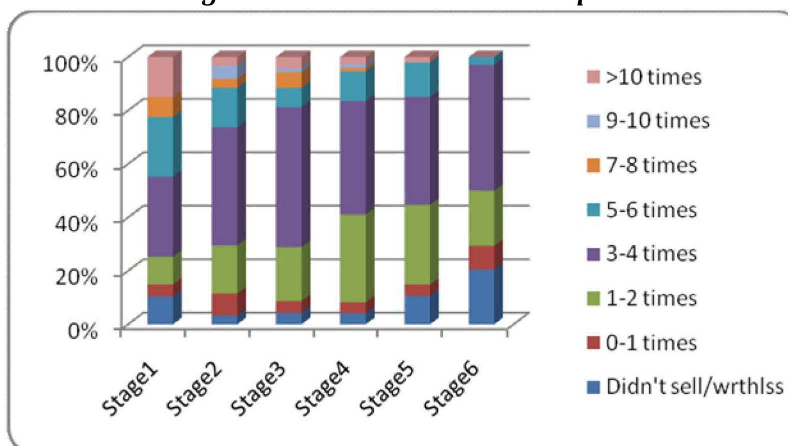
For those venture capital funds that had a fund prior to the current fund (approximately 64%), actual results indicate sales prices to TVI ratios that are less than those expected on current funds. The most frequent response for all stages is 3-4 times. And survey participants indicated that between 3.3% and 20.6% of investments, depending on stage, did not sell or were worthless.

Table 35: Prior-Fund Sales Multiples

Multiple	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Did Not Sell/Worthless	10.4%	3.3%	4.3%	4.1%	10.6%	20.6%
0-1 Times	4.5%	8.2%	4.3%	4.1%	4.3%	8.8%
1-2 Times	10.4%	18.0%	20.3%	32.9%	29.8%	20.6%
3-4 Times	29.9%	44.3%	52.2%	42.5%	40.4%	47.1%
5-6 Times	22.4%	14.8%	7.2%	11.0%	12.8%	2.9%
7-8 Times	7.5%	3.3%	5.8%	1.4%	0.0%	0.0%
9-10 Times	0.0%	4.9%	1.4%	1.4%	0.0%	0.0%
More than 10 Times	14.9%	3.3%	4.3%	2.7%	2.1%	0.0%
Average	***4.6***	***3.7***	***3.6***	***3.1***	***2.8***	***2.2***

Figure 62: Prior-Fund Sales Multiples



For past funds, survey participants report varying times to exit for the different stages of company life cycle. As expected, Stage 6 companies allowed for an earlier exit (3.5 years) than Stage 1 companies (6.2 years).

Table 36: Prior-Fund Time to Liquidation

Time to Exit	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
0-1 Year	0.0%	1.4%	1.2%	0.0%	0.0%	0.0%
1-2 Years	0.0%	0.0%	1.2%	1.3%	1.9%	18.2%
2-3 Years	3.9%	4.2%	7.3%	6.3%	25.9%	18.2%
3-4 Years	6.6%	6.9%	13.4%	26.6%	22.2%	21.2%
4-5 Years	10.5%	13.9%	24.4%	24.1%	27.8%	27.3%
5-6 Years	17.1%	25.0%	22.0%	22.8%	18.5%	15.2%
6-7 Years	25.0%	26.4%	19.5%	8.9%	3.7%	0.0%
7-8 Years	26.3%	16.7%	7.3%	6.3%	0.0%	0.0%
Greater than 8 Years	10.5%	5.6%	3.7%	3.8%	0.0%	0.0%
Average	***6.2***	***5.8***	***5.1***	***4.8***	***4.0***	***3.5***

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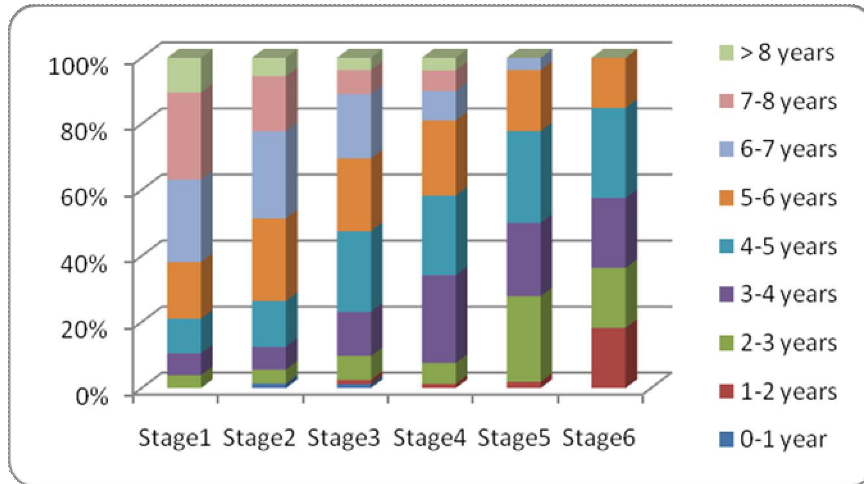
Figure 63: Prior-Fund Time to Exit by Stage



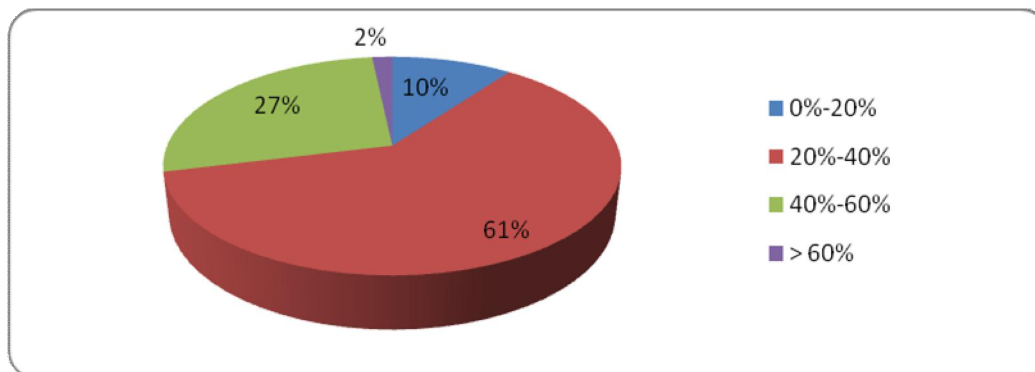
As shown below, implied actual returns on the most recently closed fund range from 24.4% to 29.8%, which is significantly less than the returns expected on the current fund. Very little variability exists between the stages.

Table 37: Prior-Fund Implied Returns

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Returns	27.6%	25.5%	28.3%	26.7%	29.8%	24.4%

Survey participants report that their hurdle rates or cost of capital varies significantly. Nearly 61% of those surveyed report that their cost of capital is between 20% and 40%. The median cost of capital reported is 33%.

Figure 64: Self-Reported Hurdle Rates



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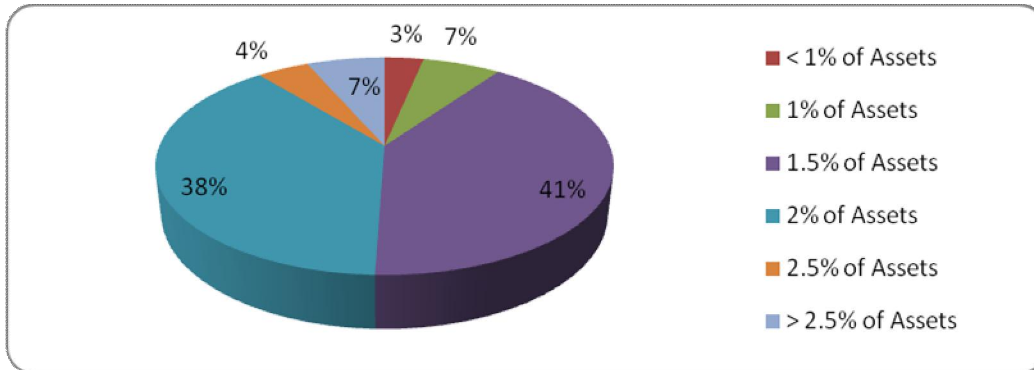
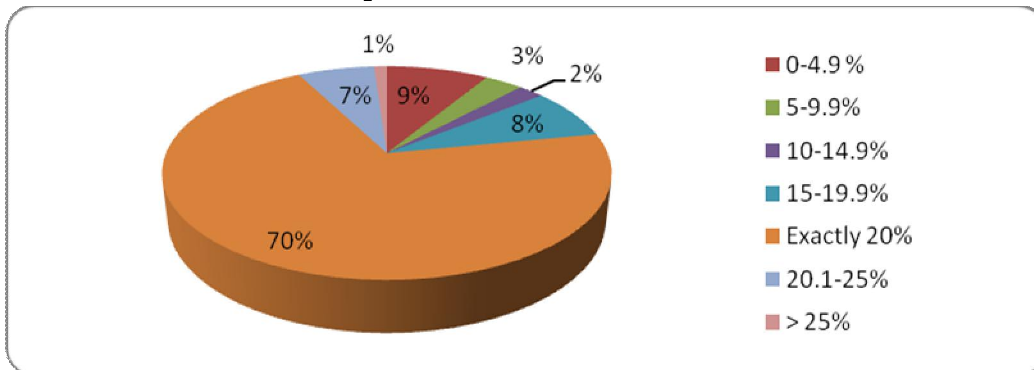
Venture capital fund frequently rely on fund management fees to cover operating expenses. The vast majority (79%) of venture capital funds report charging a fund management fee between 1.5% and 2% of assets.

Figure 65: Fund Management Fees



Seventy percent (70%) of survey respondents report charging exactly 20% for a carried-interest fee after the investment is paid.

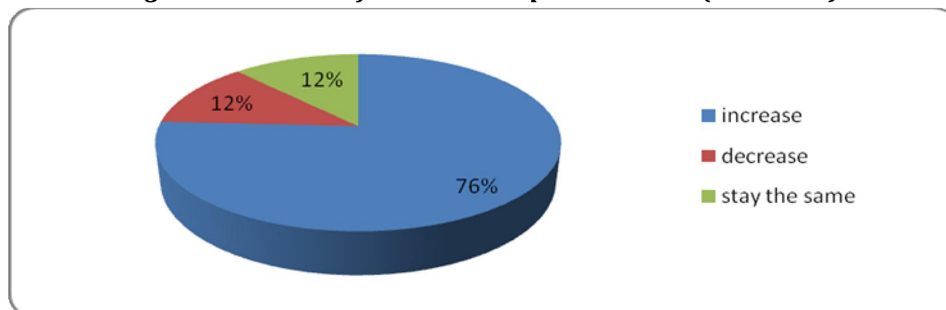
Figure 66: Carried-Interest Fee



Outlook on Venture Capital Market and Economy

The vast majority (76%) of venture capitalists believe the demand for venture capital will increase over the next 12 months.

Figure 67: Demand for Venture Capital Forecast (12-month)



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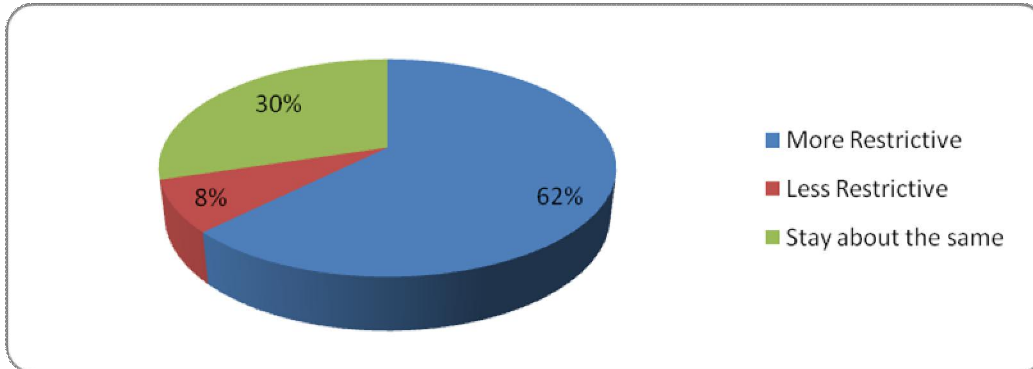
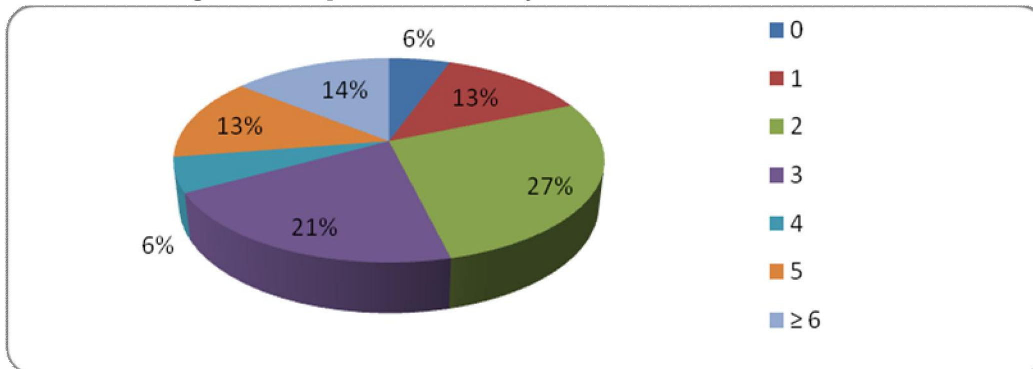
Sixty-two percent (62%) of survey participants believe that venture capital investing in general will become more restrictive, and 30% report it staying about the same over the next 12 months.

Figure 68: Venture Capital Restrictiveness Forecast (12-month)



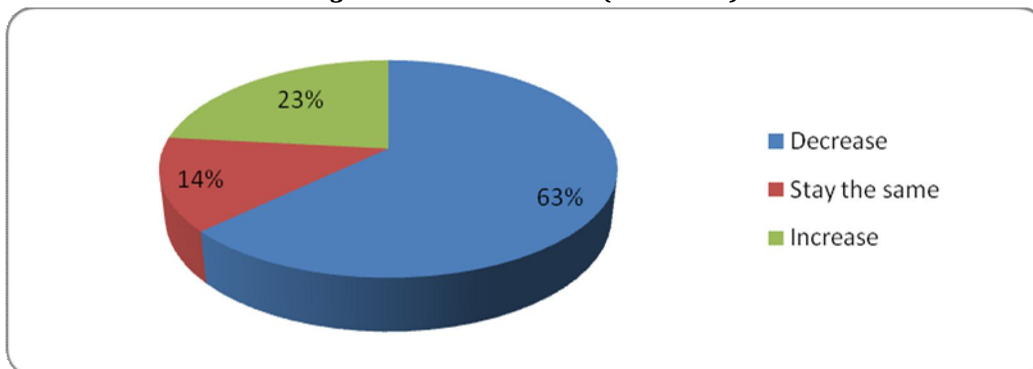
Forty-six percent (46%) of survey respondents indicated that they intend to make two or fewer investments over the next 12 months in their current fund. Fifty-four percent (54%) report the intention to make three or more investments.

Figure 69: Expected Number of Investments Next 12 Months



Nearly 63% of survey respondents indicate that the Unites States Gross Domestic Product will decline over the next 12 months, while 23.3% report an expected increase. The median estimate of GDP change is -1.60%.

Figure 70: GDP Forecast (12-month)



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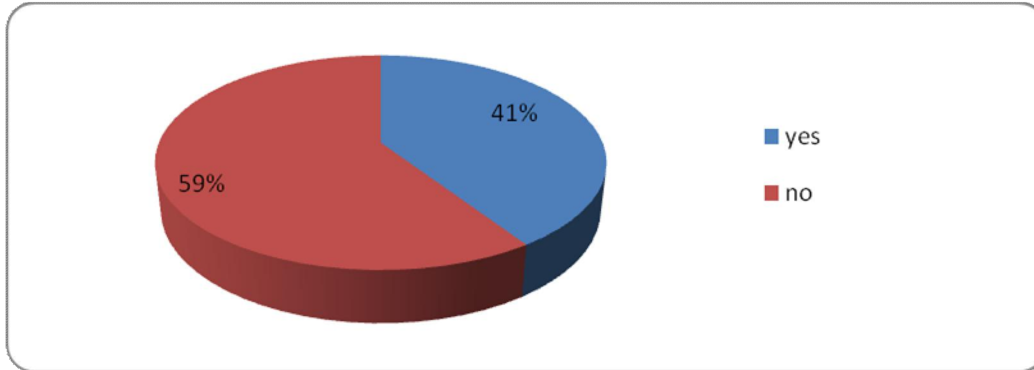
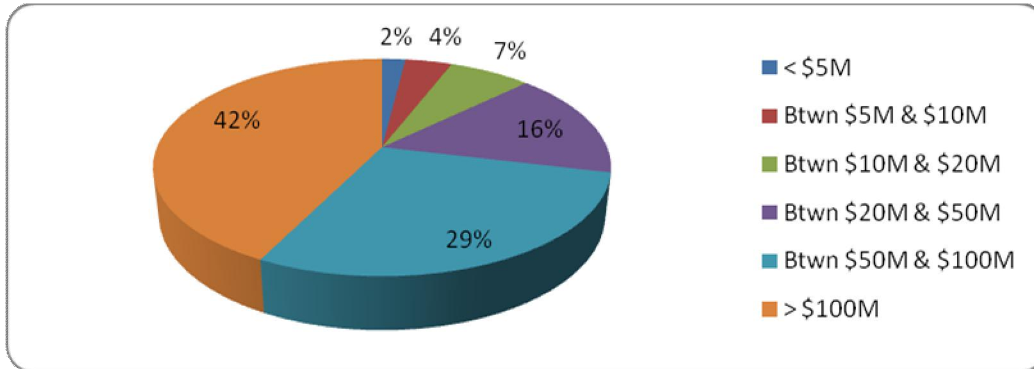
Fifty-nine percent (59%) of respondents indicate plans to raise funds over the next year.

Figure 71: Fundraising Outlook (12-month)



For those planning a fundraising campaign, 43% report that they plan to raise more than $100 million in capital followed by 29% indicating plans to raise between $50 and $100 million.

Figure 72: Fundraising Amount Forecast



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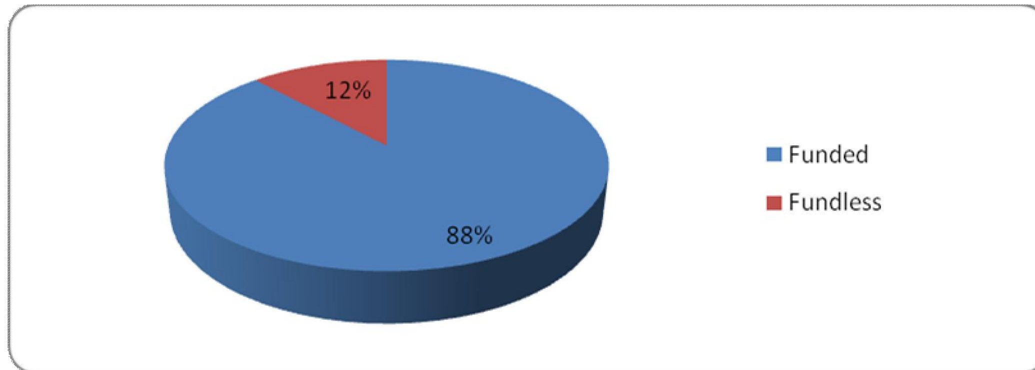
PRIVATE EQUITY SURVEY INFO

Profile of Respondents

The following responses pertain to our private equity (PE) survey administered in March/April 2009. Our results are based upon 256 responses to this survey. The respondents are geographically dispersed throughout the United States.

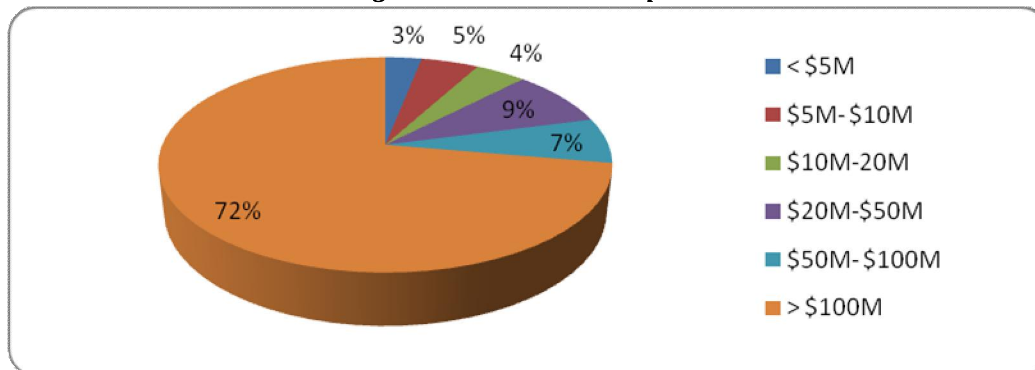
Of those surveyed, 88% said they are funded whereas 12% indicate they are fundless funds.

Figure 73: Distribution of Funding Classification



Approximately 72.2% report that committed capital is greater than $100 million. Roughly 15.4% indicate committed capital between $20 and $100 million.

Figure 74: Committed Capital



Survey participants report having 51.8% of their funds left to deploy, which equates to an average of $295.9 million per fund ($100 million median).

Table 38: Capital Left to Deploy

	Percent	Amount ($M)
Average	51.8%	$295.89
Median	50.0%	$100.00

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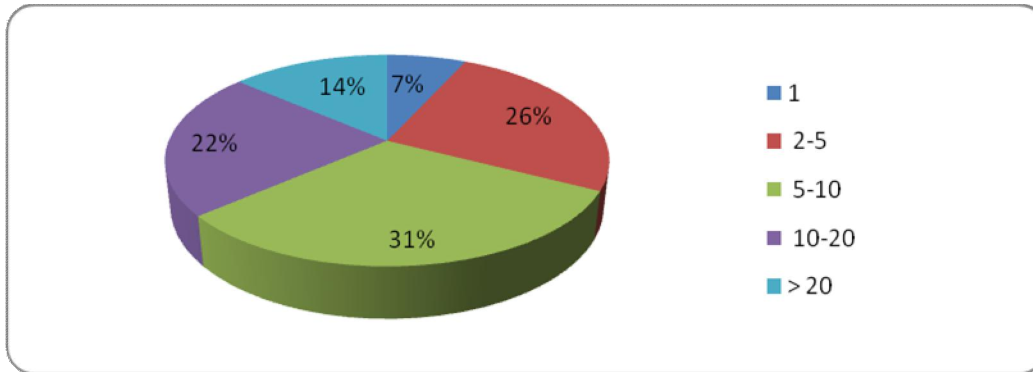
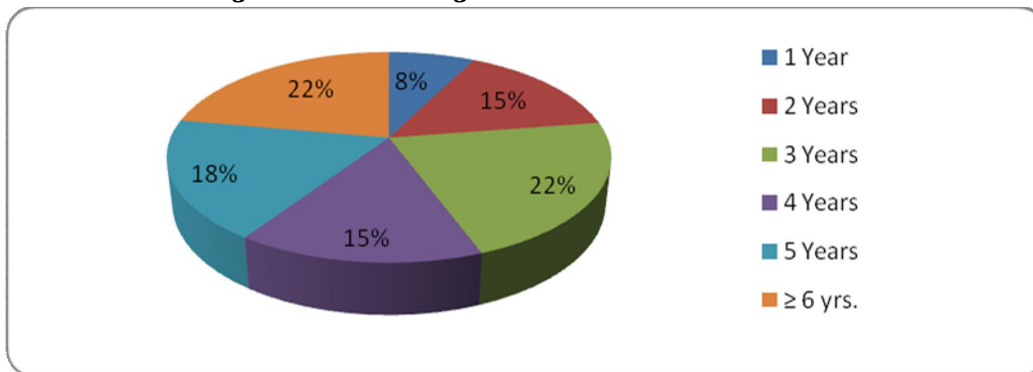
Responses indicate that the most frequent number of portfolio companies in which the respondents have an investment in the current fund is 5 to 10 (31.3%). Approximately 26% of respondents report having between 2 and 5 portfolio companies in their current fund, while 22.5% report between 10 and 20.

Figure 75: Number of Portfolio Companies



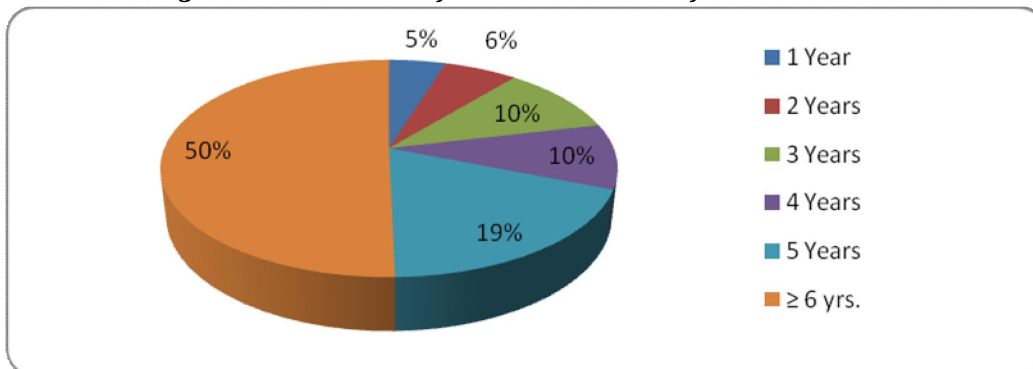
A schedule of the remaining time horizon for the current fund is below. Just 7.5% of respondents report a remaining time horizon of 1 year. Approximately 45% of private equity funds report a remaining time horizon of 3 years or less.

Figure 76: Remaining Time Horizon on Current Fund



Approximately 50.3% report that the current fund's investment charter has 6 or more remaining years.

Figure 77: Remainder of Investment Charter for Current Fund



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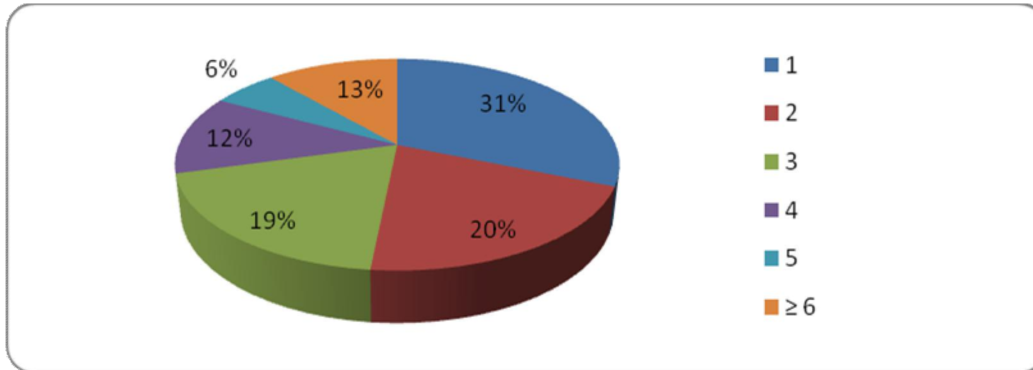
Investment Characteristics

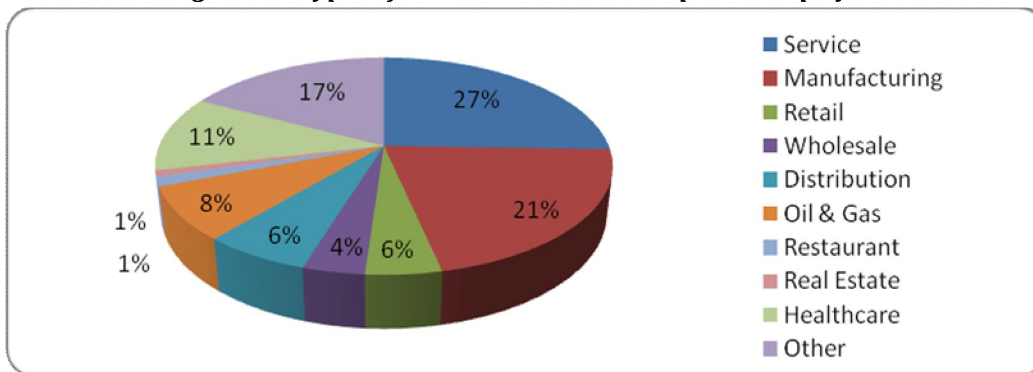
Approximately 31% of participants report making just one investment over the prior 12 months whereas 11.5% report making 6 or more. Approximately 70% of PE firms made three or fewer.

Figure 78: Number of Investments Made in Last 12 Months



Private equity groups invest in a variety of businesses. Among those, service businesses top the list at 25.5% while manufacturing garnered 21.1% of responses.

Figure 79: Types of Businesses in Which Capital Is Deployed



Minimum investment amounts per deal vary by fund. Approximately 8% of funds report a minimum investment amount per deal within the range of $50 - $100 million. Just 7.5% of funds will consider an investment amount of $1 million or less, while approximately 40% of funds will consider investments smaller than $5 million. Approximately 59% of participants will consider investments greater than $20 million.

Table 39: Range of Investment Sizes

Range	Minimum	Maximum
Less than $1 Million	7.5%	2.2%
$1-2 Million	9.7%	1.5%
$2-5 Million	23.1%	6.7%
$5-10 Million	20.9%	10.4%
$10-20 Million	16.4%	20.9%
$20-50 Million	14.2%	23.1%
$50-100 Million	8.2%	16.4%
More than $100 Million	0.0%	18.7%
Total	**100.0%**	**100.0%**

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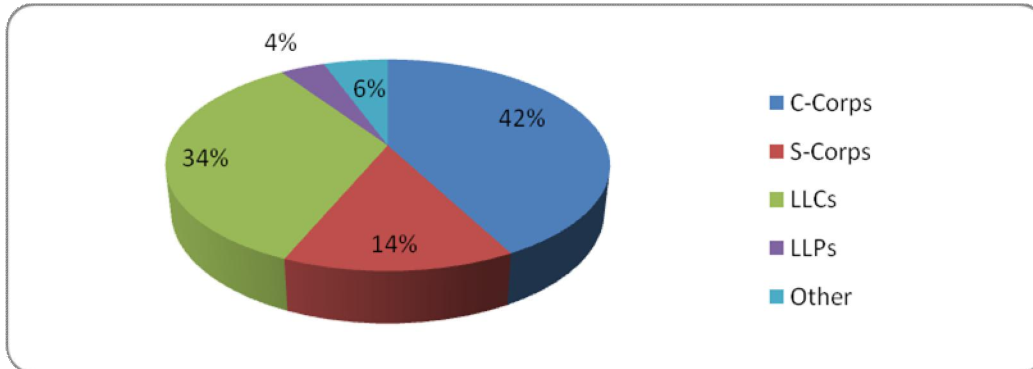
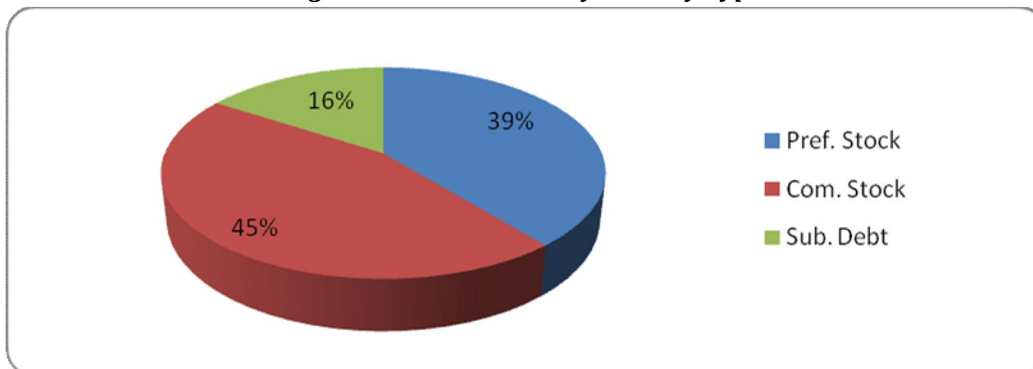
Most frequently C-corporations are the recipient of PE investment dollars (42.2%) followed by LLCs (34.1%) and S-corporations (14.2%).

Figure 80: Investments by Business Entity Type



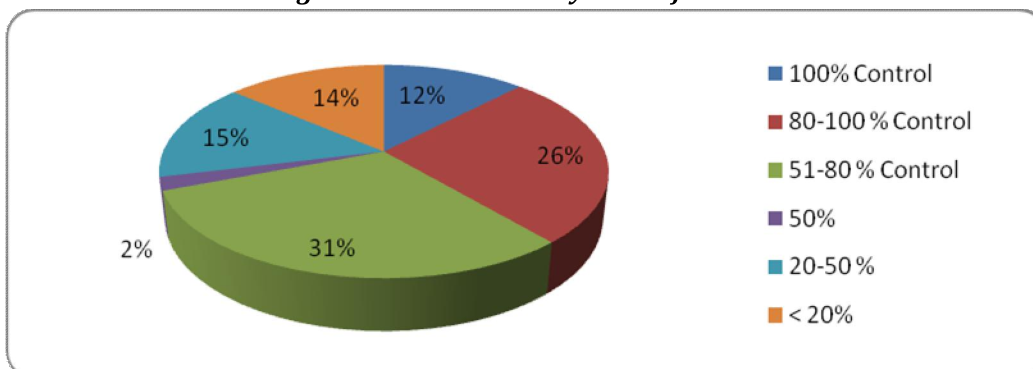
Most often, investments are made in common stock (45.1%) followed by preferred stock (39.1%) and subordinated debt (15.9%).

Figure 81: Investments by Security Type



Survey respondents indicate that although the majority of transactions are control (69%), approximately 29% are strictly minority positions.

Figure 82: Investments by Level of Control



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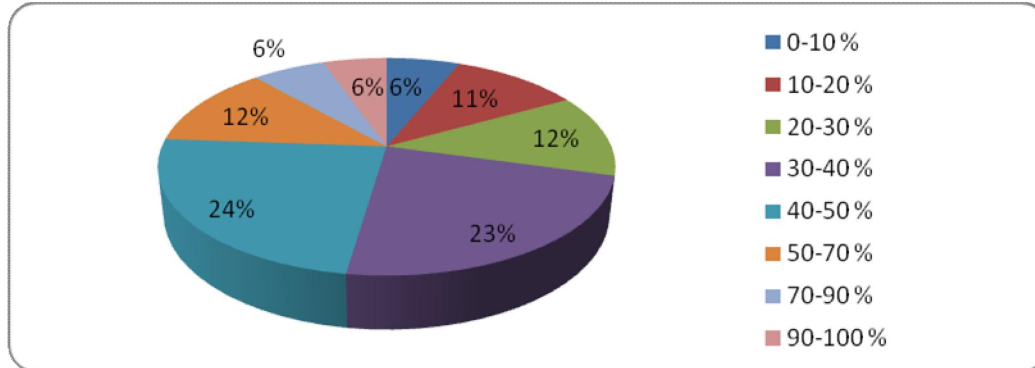
Private equity firms report that the target equity ratio as a percentage of all invested capital in the overall capital structure is most commonly between 20 and 50%. The calculated median is 41%.

Figure 83: Target Equity Ratio



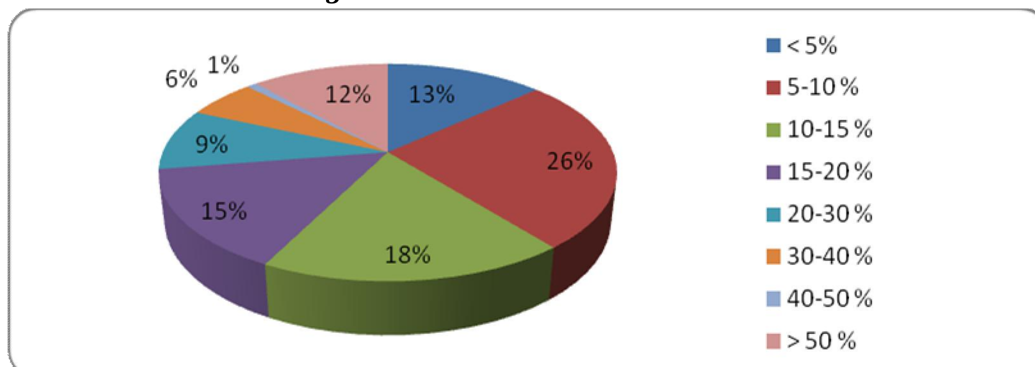
Several investment analysis techniques are used to evaluate potential investments. Ninety-eight percent (98%) of those surveyed said they use IRR, 57% use DCF, 95% use multiple analysis, only 20% use option analysis, 45% use simulation analysis, and 83% assume the Year 5 exit multiple is the same as the entry multiple when evaluating a potential investment.

Table 40: Investment Analysis Techniques

Type	Percent
IRR	97.8%
DCF	56.8%
Multiple Analysis	94.6%
Option Analysis	19.7%
Simulation Analysis	44.7%
Year 5 Exit Multiple Is Same as Entry Multiple	82.8%
Other	45.0%

Private equity firms report for investment candidates that the minimum revenue growth expected over the next five years is 5% to 10% annually according to 26% of those surveyed, 10% to 15% according to 18% of the people who answered, and 15% to 20% according to 15%.

Figure 84: Minimum Revenue Growth



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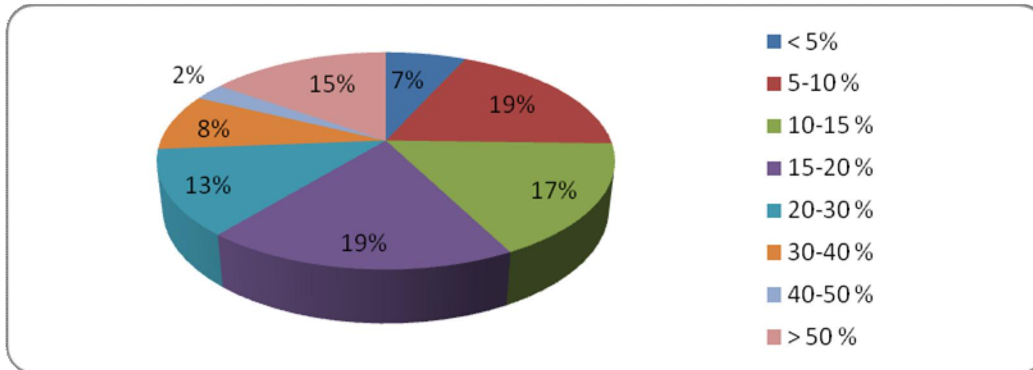
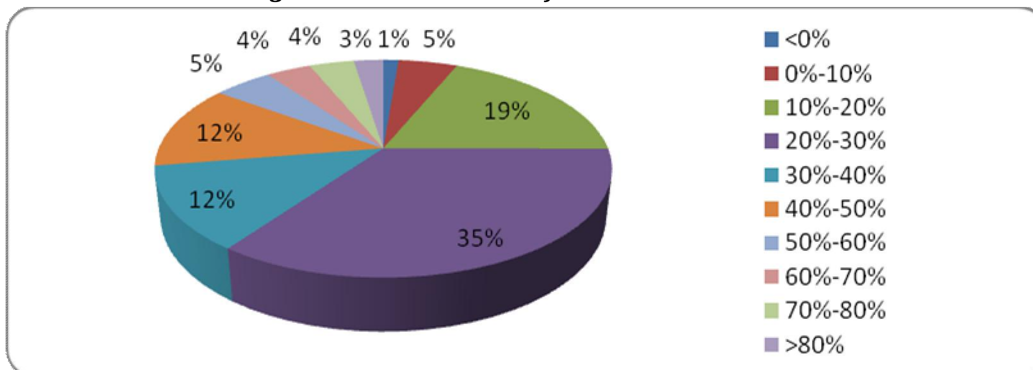
Investment candidacy also requires a certain amount of growth in earnings before interest, taxes, depreciation, and amortization (EBITDA). Eighteen percent (18%) said that the minimum EBITDA growth expected over the next five years is 15% to 20% and another 18% said 5% to 10%, while 17% reported 10% to 15% growth expected.

Figure 85: Minimum EBITDA Growth



On the last closed fund, 35% of respondents report having actual rates of return of between 20% and 30% while 18.8% report returns between 10% and 20%. Overall, approximately 75% of private equity funds earned greater than 20% on the last closed fund. The median reported was 31.9%.

Figure 86: Actual Rates of Return on Last Fund



Seventy-seven percent (77%) of those surveyed said that many or a large percentage of deals carried the average return.

Table 41: Investment Contribution Distribution

Answer	Percent
One or a Small Percentage of Deals Carried the Average Return	23.0%
Many or a Large Percentage of Deals Carried the Average Return	77.0%
Total	**100.0%**

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We collected results on the current fund with and without portfolio companies included. If portfolio companies are included at fair value, the results indicate that approximately 78% of respondents are earning returns of between 0% and 30%, with the largest classification being in the 0% to 10% range. If we exclude portfolio companies, then the 0% to 10% classification is consistent suggesting a large number of PE groups are underperforming both expectations and prior performance. The median return excluding portfolio companies is 10% while the median return when including them is 14%.

Figure 87: Current Returns Excluding Portfolio Companies

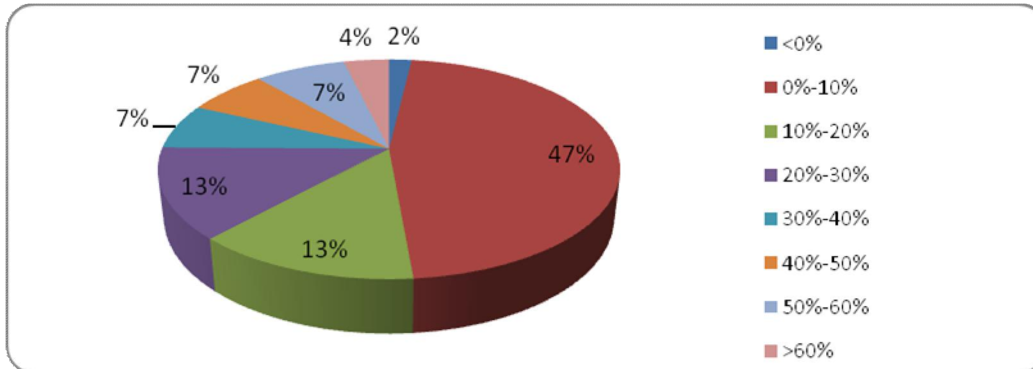
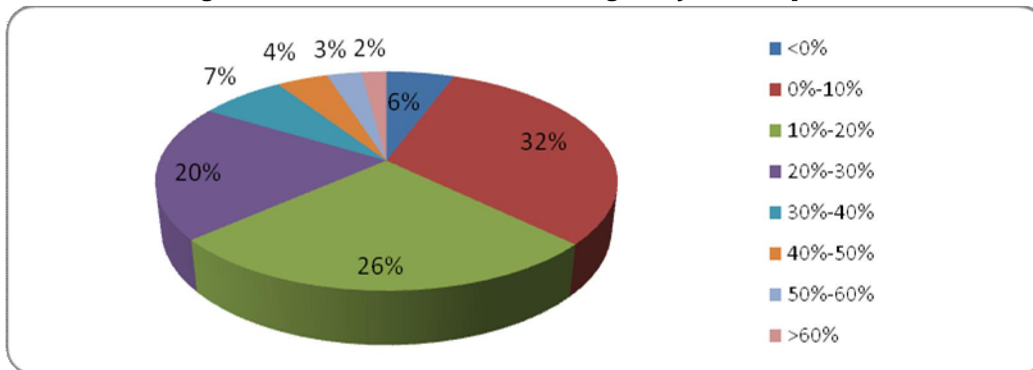
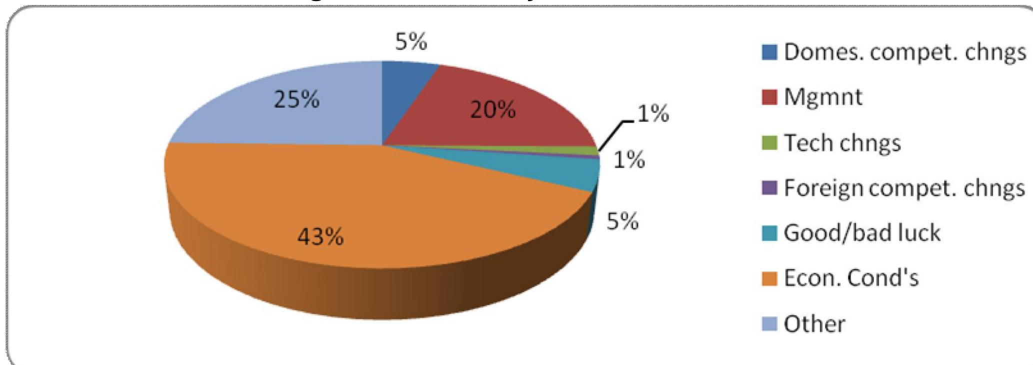


Figure 88: Current Returns Including Portfolio Companies



For those funds reporting deviations between actual returns and hurdle rates on the current fund, economic conditions were cited most frequently as a reason for the deviation (43.3%). Management was given a weight of 20% followed by domestic competition changes (5.2%).

Figure 89: Sources of Return Deviations



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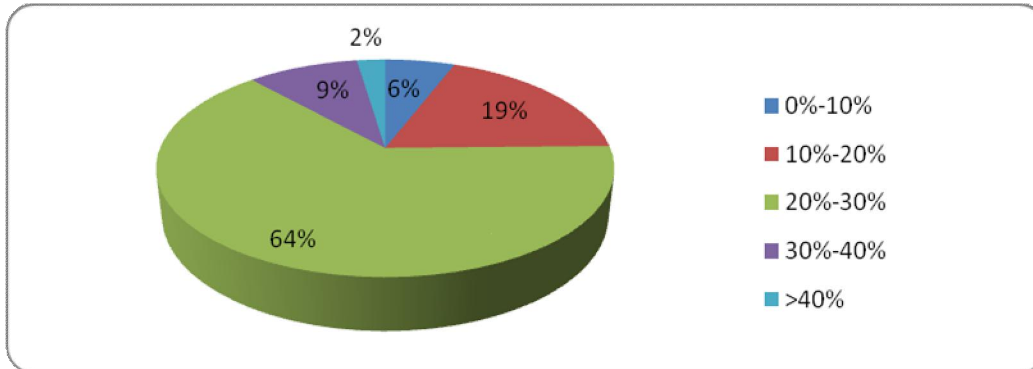
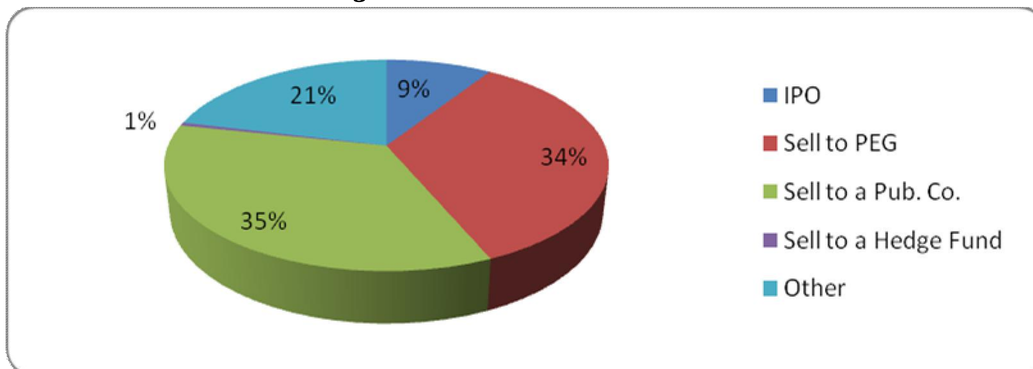
Hurdle rates are important when evaluating new investments. Approximately 63.5% said that the hurdle rate for the current fund for new investments is 20% to 30%. The median hurdle rate reported was 25%.

Figure 90: Hurdle-Rate Distribution



Survey participants report that exit plans often involve selling to another PE group (34.3%) or selling to a public company (34.7%). Just 9.2% plan on an initial public offering as a liquidity event.

Figure 91: Investment Exit Plans



Private equity firms spend a significant amount of time evaluating potential investments. In order to close one deal, survey participants report reviewing 80 business plans, conducting 15 meetings with principals, issuing 5 term sheets, and getting 2 letters of intent signed.

Table 42: Deal Flow Funnel

	Median Response
Business Plans Reviewed	80
Meetings with Principals Conducted	15
Term Sheets Issued	5
Letters of Intent Signed	2

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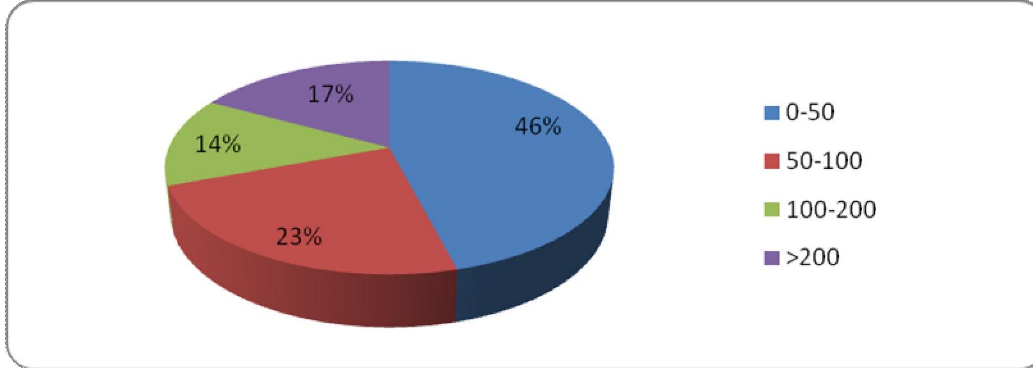
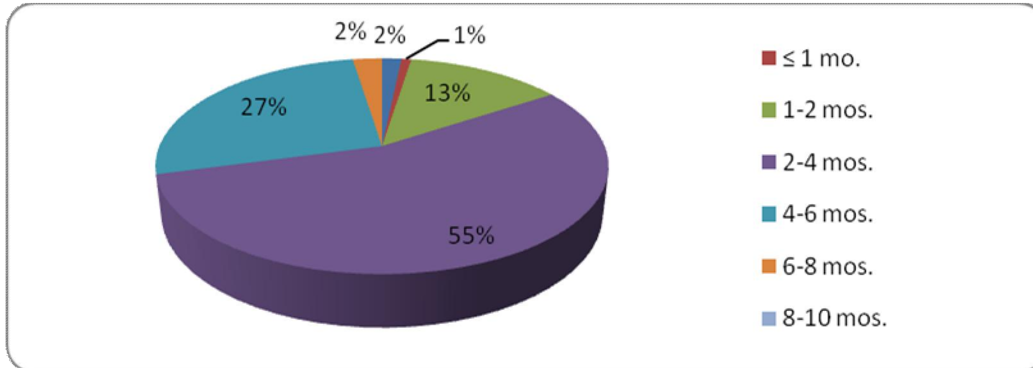
Approximately 46% report reviewing up to 50 business plans while 23.4% review between 50 and 100. Just 17.1% reviewed more than 200 plans.

Figure 92: Number of Business Plans Reviewed to Close One Deal



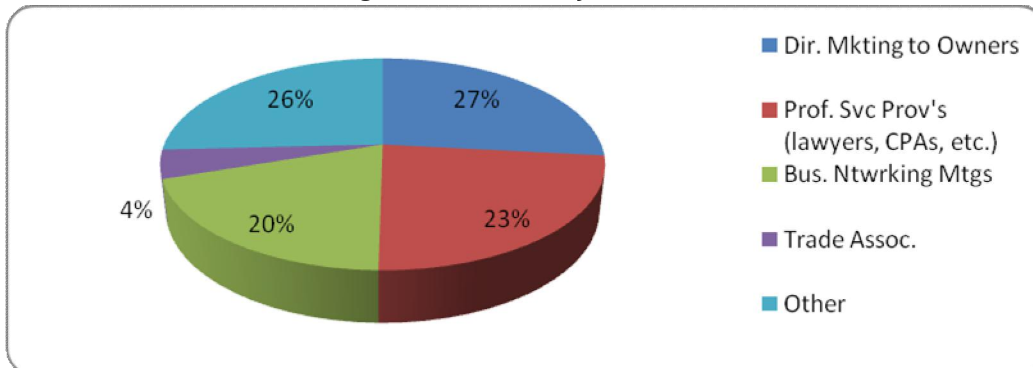
After negotiations take place, according to 55% of those who answered, it currently takes 2 to 4 months to close a deal after the letter of intent (LOI) is signed.

Figure 93: Time to Close a Deal After LOI Signed



Deal flow is extremely important to private equity groups. They report that 26.7% of their companies for consideration come from direct marketing to owners. Another 23.6% comes from lawyers, CPAs, financial advisors, etc. Business networking meetings account for 19.6%.

Figure 94: Sources of Deal Flow



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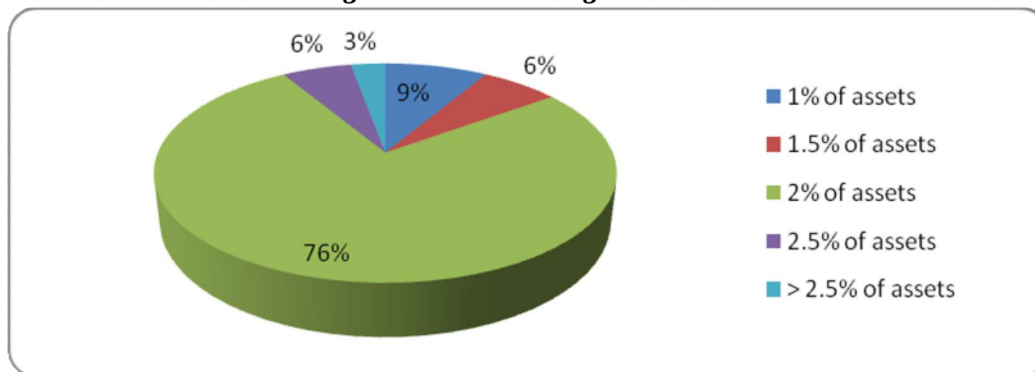
PE firms occasionally will change executive-level management in a deal. Survey participants report changing the CFO most frequently (38.5%), followed by the CEO (24.6%) and COO (19.7%).

Table 43: Frequency of Executive Changes

Manager	Percent
CEO	24.6%
COO	19.7%
CFO	38.5%

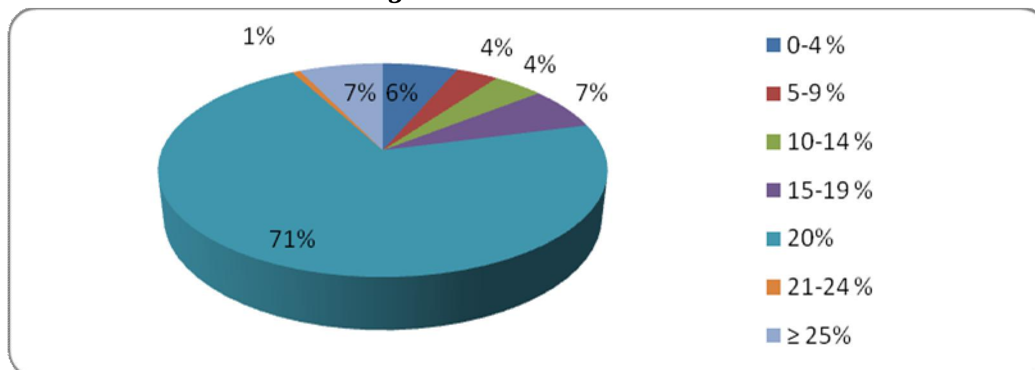
Fund management fees are frequently used to fund operating expenses. The fund management fee ranges from 1% (8.6% of survey respondents) to over 2.5% of assets (3% report). The most frequent fund management fee is 2% of assets (76.3%).

Figure 95: Fund Management Fees



Carried interest ranges from 0% to over 25%. The most common response was exactly 20% as reported by 71% of survey participants.

Figure 96: Carried Interest



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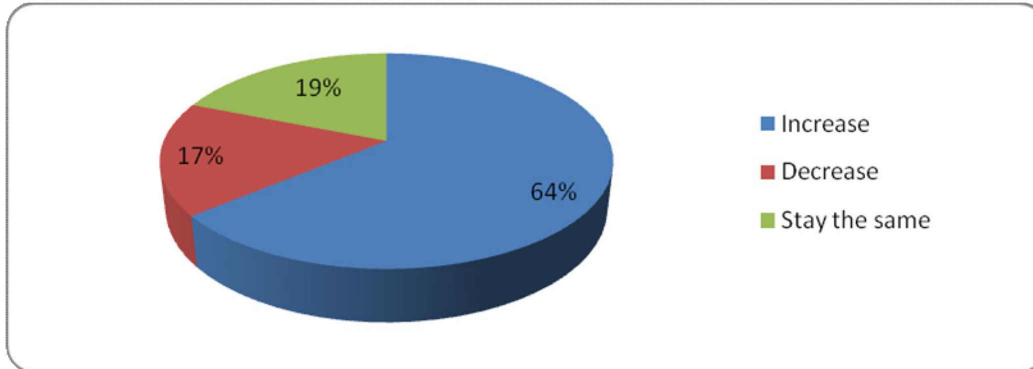
Outlook on Private Equity Market and Economy

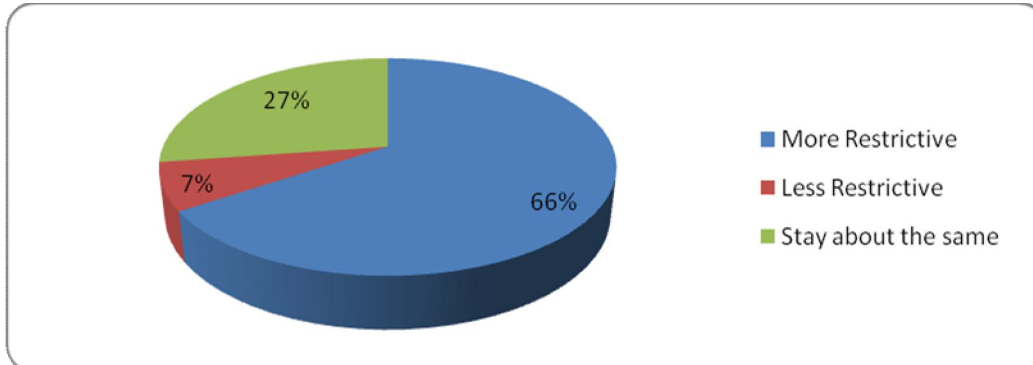
Over the next 12 months, 64% of those surveyed believe that the demand by companies for private equity will increase. The average of estimates called for an increase in demand of 18.2%.

Figure 97: Demand for Private Equity Forecast (12-month)



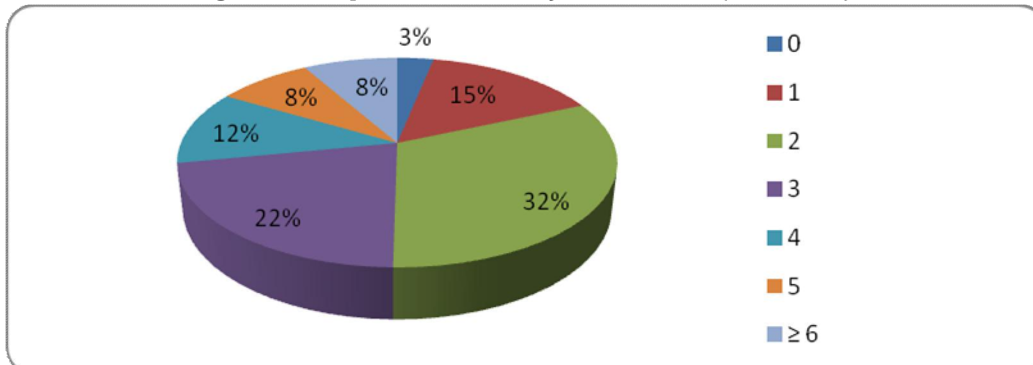
Over the next 12 months, 66% believe that private equity investing in general will become more restrictive, while 27% believe it will stay about the same.

Figure 98: Restrictiveness of Private Equity Forecast (12-month)



PE firms expect to make a significant number of investments over the next 12 months. Approximately 71% expect to make three or fewer investments.

Figure 99: Expected Number of Investments (12-month)



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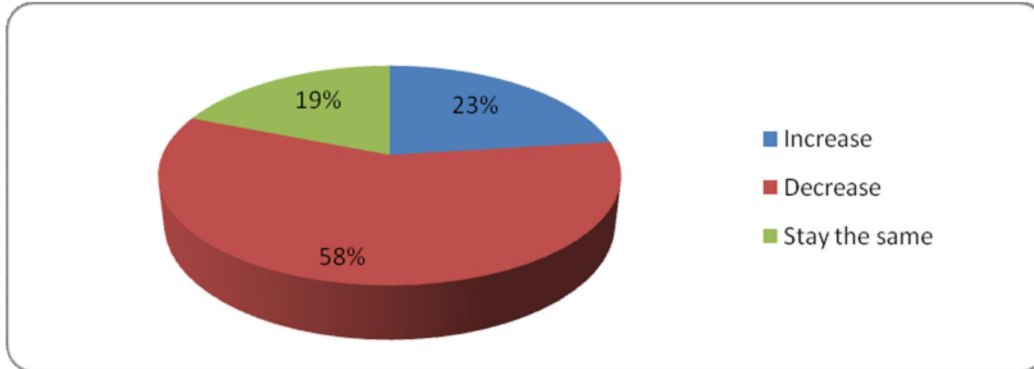
Fifty-eight percent (58%) believe the Gross Domestic Product (GDP) for the United States will decrease, while 23% believe it will increase, and 19% believe it will stay the same. The average of forecasts calls for a 1.77% decline in GDP over the next 12 months.

Figure 100: GDP Forecast (12-month)



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