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Blackstone and the Sale of Citigroup's Loan Portfolio

At the end of March 2008, Bennett J. Goodman (HBS'84), a Senior Managing Director at Blackstone, one of the world's largest private equity firms, was reviewing materials for the potential purchase of a \$6.11 billion pool of leveraged loans from Citigroup, one of the world's largest banking entities. Most of these loans were used to finance large leveraged buyouts (LBOs) that had been announced in late 2006 and early 2007. In a number of cases, Blackstone had considered making an equity investment. The research and due diligence that Blackstone had performed in the process gave Goodman some degree of confidence that he understood the risks in the loan portfolio. TPG, another large private equity firm that was considering partnering with Blackstone in purchasing the loan pool, had also researched and even participated in many of the LBOs.

Leveraged loans, including those in the loan pool, were generally trading well below par. The subprime mortgage crisis, which erupted in 2007, had led to a re-pricing of a wide range of debt instruments. Some of this re-pricing came from the recognition that risk had been underestimated in the credit boom of the mid-2000s. But Goodman thought that some of the re-pricing—perhaps even most of it—was driven by investors' excessive risk aversion and retrenchment from risky assets, fire sales, and general lack of liquidity in financial markets. This appeared to create an opportunity to generate superior risk-adjusted returns by investing in a large portfolio of credits priced below their fundamental value. The investment would require Blackstone to value and manage a set of opaque and highly illiquid fixed income assets. It would also require large amounts of funding, and the capacity to hold their position for an extended period until debt values recovered.^a

Citigroup would facilitate the transaction by providing debt financing for the purchase of the loan pool. Blackstone would provide the rest of the funds, and would stand in the first loss position. As protection for Citigroup, the debt was secured by the loan pool. Citigroup required that the loan pool be marked to market and, in the event the value of the loan pool fell below a certain threshold, Citigroup had the right to request additional collateral.

^a Blackstone Capital Partners V closed in 2006 \$21.7 billion (\$13.5 billion target). As a point of reference, fund raised in 2003 was \$6.5 billion.

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Goodman, along with Tripp Smith and Doug Ostrover, had just earlier that month closed the sale of their firm, GSO Capital Partners, to Blackstone for approximately \$1.0 billion. GSO became the credit and distressed debt division of Blackstone alongside the firm's Private Equity, Real Estate and Fund of Funds businesses.

While the investment opportunity seemed attractive, and had the support of a number of GSO's general partners, the very dislocations in the market that gave rise to the opportunity also brought substantial risk. In recent months, financial markets had witnessed a set of events that would have been hard to imagine a year earlier. Just a few days prior, Bear Stearns—one of the most prominent global investment banks—had collapsed, leading JPMorgan Chase to buy the bank for a small fraction of its value a year earlier, and then only with assistance from the Federal Reserve. And the economy had moved into a deep recession. Goodman questioned whether anyone could predict how markets would evolve over the next year. He wondered how Steve Schwarzman (CEO) and Tony James (President) would react to such a high profile transaction in the face of such uncertainty. Was the loan pool a great buying opportunity or a great opportunity to remain on the sidelines?

Citigroup's Leveraged Loan Exposure

In the second half of 2007, the banking industry and financial markets began to show signs of considerable stress brought on, in large part, by rising default rates on residential mortgages and the decline in the value of residential mortgage-backed securities. On November 4, 2007, Citigroup announced that the decline in the fair value of its \$55 billion in U.S. sub-prime related direct exposures could be as much as 20%.^b By the end of 2007, Citigroup's financial results were significantly affected by write-downs related to subprime exposures, leveraged lending, a slowdown in investment banking activities, and the collapse of the private label securitization market. Net income was down 83%, and the stock price was down 47% relative to 2006. While Citigroup still appeared to be "well capitalized" from a regulatory capital perspective, its capitalization ratios had declined despite efforts to bolster them.^c With the prospect that it would incur further losses in the months to come, Citigroup was focused on ensuring that it would continue to meet regulatory capital requirements.

One particular source of concern was Citigroup's portfolio of leveraged loans, which at the end of 2007 stood at \$22 billion. Most of Citigroup's leveraged loan exposure was for LBOs that had been announced in late 2006 and early 2007, including Alltel, First Data, TXU, and Harrah's Entertainment. **Exhibit 1** lists the largest LBO loans arranged by Citigroup. **Exhibit 2** shows the total volume of leveraged loan issuance through the first quarter of 2008.

As the lead underwriter of a loan, Citigroup's goal was to profit from underwriting fees and sell the bulk of the loans to a syndicate of investors, including other banks, mutual funds, hedge funds, insurance companies and sponsors of collateralized loan obligations (CLOs) and collateralized debt obligations (CDOs). As part of the underwriting process, Citigroup would have to commit to fund the buyout even if it was unable to place the loans with other banks and institutional investors.^d A

^b The information in this section is drawn from Citigroup's Securities and Exchange Commission filings covering firm's activity in the second half of 2007.

^c At the moment, the minimum total capital requirement for banks was set at 8% of risk-weighted assets. To be considered well-capitalized under the Federal Reserve Board Prompt Corrective Actions a bank would have to hold 10% of its risk-weighted assets. As of December 31, 2007 Citigroup's total capital ratio was at 10.7%, down from 11.7% a year before.

^d LBO debt financing was typically committed at the time of the LBO bid. This so called "staple financing" was especially common for large LBOs. Yet often there would be a substantial delay between the financing commitment and the deal closing.

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large LBO typically used senior unsecured notes in addition to loans. Notes also promised lucrative underwriting fees and Citigroup was willing to fully guarantee funding by committing to issue a bridge loan to make up any shortfall in financing. Providing such a funding guarantee facilitated the transaction, but posed risks to Citigroup in the event it could not place the debt. This risk was realized in the fall of 2007 when securitization markets shut down and institutional investors were reluctant to invest in leveraged loans and notes. As a result, Citigroup's leveraged loan portfolio ballooned to \$22 billion. Several of these positions were leftovers from failed syndicated efforts. Further, Citigroup had committed to another \$21 billion of leveraged loans.

Citigroup's leveraged loan exposure posed two main challenges for the bank. First, leveraged loans were costly from a regulatory capital perspective since they received a 100% risk weight. By contrast, real estate loans only received a 50% risk weight, and highly rated securities only a 20% weight. With a capital requirement of 8%, this would mean that Citigroup would need \$80 million of capital for every billion dollars of leveraged loans. Reducing its leveraged loan portfolio would ease Citigroup's capital requirements, but might entail selling the loans below their fundamental value, possibly at fire sale prices. The second challenge posed by holding these loans was posed by their accounting treatment. Since a substantial fraction of these loans was intended to be sold and as such would be classified as "held-for-sale" under accounting requirements, their value was marked-to-market. With the leveraged-loan index (LCDX) dropping to 97 cents on the dollar in the fall of 2007 (from par level in summer of the same year), Citigroup had to recognize \$1.5 billion losses on its leveraged loan portfolio for the fiscal year ending on December 31, 2007. By March of 2008, the LCDX index dropped to 92 cents on the dollar, and analysts estimated that write-downs on the leveraged loan portfolio for the first quarter of 2008 could be as high as the total leveraged loans related losses for 2007. Volatility in the pricing of leveraged loans would add further volatility into Citigroup's earnings and its stock price.

The Loan Portfolio Transaction

With these concerns in mind, Citigroup approached several large investors, including private equity firms and hedge funds, about purchasing leveraged loans from its portfolio.

Blackstone, along with its partner, TPG, expressed interest in a portfolio that contained sixteen different issuers with total face value of \$6.11 billion from the total \$22 billion portfolio. (See Exhibit 3.) Most of the portfolio was comprised of debt used to fund deals reviewed by Blackstone and/or led by TPG. The largest exposure, accounting for 25% of the portfolio, was debt used to fund the 2007 buyout of Alltel sponsored by TPG and Goldman Sachs Capital. The riskiest debt instrument in the portfolio was Harrah's senior unsecured notes used to fund the 2008 LBO sponsored by TPG and Apollo. These notes comprised 3% of the portfolio.

Overall, roughly 75% of the portfolio was comprised of senior secured debt holding first-lien claim on borrowers' fixed and intangible assets. The remaining 25% comprised of unsecured bonds.

For example, Harrah's buyout was announced on October 2, 2008 and approved by shareholders on December 19, 2006. At that point, the transaction included commitments of \$5.9 billion of equity and \$15.8 billion of new debt. Harrah's was the world's largest gaming and lodging company. However, for the transaction to be closed, the buyers had to go through a long and arduous process of obtaining casino licenses in every state where Harrah's operated. The necessary regulatory approvals for Harrah's were finalized on December 24, 2007, two month ahead of the expected date. The financing of the acquisition was closed on January 28, 2008.

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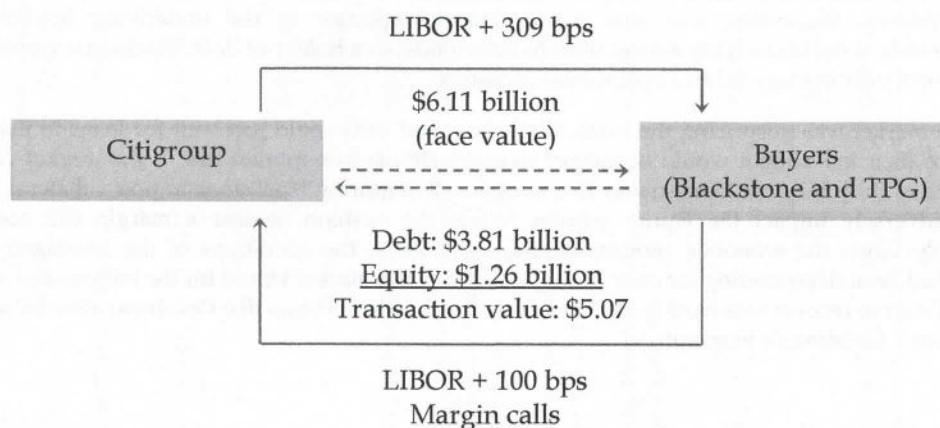
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The weighted average coupon of the portfolio was LIBOR+309 basis points (bps).^e (See **Exhibit 4** for information on the forward LIBOR.) The weighted average coupon for the senior secured loans in the portfolio was LIBOR+277 bps. On average, the loans in the portfolio were rated "B"/"B-".

Financing

After some period of negotiation, Blackstone, TPG and Citigroup set the purchase price for the \$6.11 billion loan portfolio at 83 cents on the dollar.^f Citigroup offered to provide 80% leverage for senior secured loans and 60% leverage for senior unsecured notes. Overall, Citigroup offered non-recourse debt financing for 75% of the purchase price. According to the deal terms, Blackstone and TPG would contribute a total of \$1.26 billion of equity.

Figure A Transaction Structure



Source: Casewriters.

The cost of the Citigroup financing was LIBOR+100 bps. The financing had a tenor that matched the average maturity of the loans in the portfolio with the interest payment not due until after the coupon interest was received from the instruments in the portfolio. Moreover, the financing included a "recycling provision," which gave Blackstone the ability to use the same financing terms for reinvestment in any assets as long as the total credit did not exceed \$3.81 billion. This meant that Blackstone could at, any point, further diversify its portfolio by selling some of their positions and reinvesting the proceeds in other loans. The recycling provision would be available for four years from the loan closing.

The underlying loan portfolio would be used as collateral on the \$3.81 billion financing. If the total value of the loans fell below 66.4% of its face value (80% of the purchase price), Blackstone and TPG would have to post additional collateral. (See **Figure A**.)

^e LIBOR is the London Interbank Offer Rate, determined on a daily basis, and based on estimates by a panel of banks of the rate at which they can borrow on an unsecured basis. Typically, the LIBOR used to calculate the interest rate on the notes and loan reset on a quarterly basis.

^f The portfolio valuation was a collaboration between Blackstone private equity arm (Blackstone Capital Partners), its credit arm (Blackstone Debt Advisors) and recently acquired GSO Capital Partners, a credit-oriented alternative asset manager focused on the leveraged finance marketplace.

Assessing the Deal

A key to the investment from Blackstone's perspective was that the loan portfolio was substantially undervalued. In its view, Blackstone had carefully selected the portfolio so that the expected default rates would be smaller than those for average "B"-rated securities, which historically were estimated at 5.91% for the first year (Exhibit 5). The default probabilities implied by credit default swaps (CDS) were substantially higher. For example, the CDS for Harrah's Entertainment notes implied a default probability in the subsequent year of 20.82% ($=1147.35 \text{ bps} / (1 - 0.449)$), where 0.449 is the historical recovery rate on defaulted senior unsecured notes.⁸ (Historical recovery rates are reported in Exhibit 6. Exhibit 7 provides data on credit default swaps spreads for the senior unsecured debt of the issuers in the Citigroup loan portfolio.)

Even if the market was indeed wrong, there were several risk factors to consider. Although Blackstone tried to assemble a diverse portfolio, a default for any individual credit would adversely impact returns. Blackstone was also not a financial sponsor in the underlying buyouts. If fundamentals of the underlying issuers were to deteriorate, as a holder of debt, Blackstone would not have control over managerial and operational decisions.

If the market was mispricing the loans, Blackstone and TPG could just wait for loans to mature. However, their investment would be subject to quarterly mark-to-market risk. If the market values continued to drop they could be subject to a margin call, requiring Blackstone to post collateral. This would adversely impact the equity returns. While the cushion against a margin call seemed reasonably large, the economic conditions and, specifically, the conditions of the leveraged loan market had been deteriorating for over half a year. When the market would hit the bottom and when it would start to recover was hard to say even for a debt market veteran like Goodman. (See Exhibit 8 for Bennett J. Goodman's biography).

⁸ A CDS is a contract that promises a payoff to the buyer in the event a particular loan or bond defaults (such as failing to make interest payments or filing for bankruptcy protection). Should a default occur, the buyer of a CDS is paid par value in exchange for the underlying debt instrument, or is paid the difference between par value and the market value of the debt instrument. In exchange for this insurance, the buyer makes quarterly payments to the seller. These payments are referred to as the CDS spread and are quoted in basis points per year. Thus, a loan with a CDS spread of 500 basis points requires the buyer to pay 5% of the par value to the seller on an yearly basis or 1.25% per quarter. Higher spreads correspond either to a higher default probability, a lower recovery rate, or both. Here, the recovery rate is assumed fixed. To estimate default probability implied by CDS spreads, one could use the following formula: *Probability of default in a given year = CDS spread / (1-Recovery rate)*.

Exhibit 1 Largest LBO Loans Arranged by Citigroup

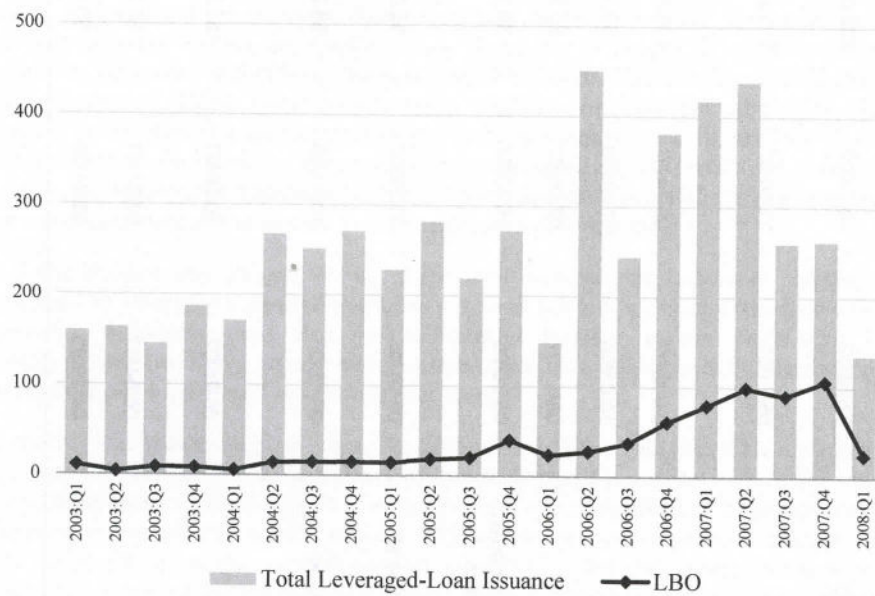
Borrower	Industry	Primary Sponsors	Announcement Date	Closing Date	Senior Debt (billion)	Subordinated Debt (billion)
TXU	Power producers and energy traders	KKR, Black Canyon Capital, TPG	02/26/07	10/10/07	\$20.00	\$7.00
Alltel	Wireless telecommunications services	TPG, GS Capital Partners	05/21/07	11/16/07	\$16.25	\$7.70
First Data	Data processing	KKR	04/02/07	09/24/07	\$15.00	--
Harrah's Entertainment	Casinos and gaming	Apollo, TPG	10/03/06	01/28/08	\$9.25	\$6.75
Thomson Learning	Education services	Apax, OMERS Capital Partners	05/11/07	07/05/07	\$5.88	--
Kinder Morgan	Oil and gas	GS Capital Partners, AIG Private Equity, Carlyle Group, Riverstone Holdings, Scotiabank Private Equity	05/30/06	05/30/07	\$5.76	\$8.74
Aramark	Food services	GS Capital, JPM Partners, Thomas H Lee Partners, Warburg Pincus	05/01/06	01/26/07	\$5.00	\$1.20
Freescal Semiconductor	Semiconductors	Blackstone, Carlyle, Permira Funds, TPG, AXA Private Equity, AIG Investments	09/15/06	12/01/06	\$4.25	\$4.35
Avaya	Communications equipment	Silver Lake, TPG	06/28/07	10/26/07	\$3.80	\$2.20
Hema		Lion Capital	06/04/07	07/31/07	€0.74	--
Flextronics		KKR, Sequoia Capital	04/19/06	09/01/06	\$0.90	--

Source: Compiled by casewriters using data from CapitalIQ and DealScan.

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Exhibit 2 Quarterly Leveraged Loan Issuance, U.S. (billion US dollars)



Source: Compiled by casewriters using data from Reuters, LPC.

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Exhibit 3 Loan Portfolio Considered by Blackstone

Issue	Currency	Initial spread fees in)	Amount (million US dollars)	Concentration per name	% of Tranche	Price
Alltel TL B-1	USD	L+275	100	2%	3%	90.0
Alltel TL B-2	USD	L+275	1,050	17%	18%	90.0
Alltel – Senior Notes	USD	L+350	350	6%	7%	80.0
Avaya – TL	USD	L+275	400	7%	11%	83.0
Crump – TL	USD	L+300	100	2%	19%	85.0
Dana TL	USD	L+375	150	2%	10%	91.0
FECI – Rail	USD	L+225	80	1%	13%	78.0
FECI – Property	USD	L+225	120	2%	12%	78.0
Federal Mogul Tranche B	USD	L+193.75	500	8%	26%	81.0
First Data – Senior Notes	USD	L+350	148	2%	4%	83.0
First Data – Senior PIK Notes	USD	L+450	261	4%	10%	75.0
First Data – Senior Sub Notes	USD	L+475	238	4%	10%	73.5
Flextronics (unsecured)	USD	L+225	366	6%	21%	88.0
Harrah's TL	USD	L+300	287	5%	4%	91.8
Harrah's Sr. Notes	USD	L+819	160	3%	2%	84.8
Hema – TLB	EUR	L+250	174	3%	29%	76.0
Hema – TLC	EUR	L+300	174	3%	29%	76.0
Iris Software – TLB	GBP	L+275	261	4%	39%	78.0
Nycomed – TLA	USD	L+200	50	1%	2%	83.5
Nycomed – TLB	EUR	L+250	40	1%	2%	79.0
Nycomed – TLC	EUR	L+300	40	1%	2%	79.0
Payless ShoeSource – TL	USD	L+275	400	7%	55%	81.0
Riverdeep – TL	USD	L+400	128	2%	3%	92.0
Tribune – TL	USD	L+300	300	5%	14%	66.5
TXU TL B – 1	USD	L+350	232	4%	1%	91.5
Total		L+309	6,107	100%	17%	83.0

Source: Blackstone.

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Exhibit 4 Forward LIBOR Rates

1 month	2.47%
3 month	2.89%
6 month	3.13%
1 year	3.87%
2 year	4.61%
3 year	4.87%
4 year	4.99%
5 year	5.13%
10 year	5.71%

Source: Bloomberg.

Exhibit 5 Cumulative Default Rates by Rating: 1981–2005 (%)

Year	AAA	AA	A	BBB	BB	B	CCC/C
1	0.00	0.01	0.04	0.27	1.20	5.91	30.41
2	0.00	0.03	0.13	0.81	3.71	13.60	40.02
3	0.03	0.08	0.25	1.40	6.68	20.55	46.13
4	0.07	0.16	0.42	2.25	9.94	26.23	50.55
5	0.11	0.25	0.64	3.11	12.74	30.48	56.04
10	0.60	0.92	1.90	6.63	24.04	44.75	66.72

Source: Standard & Poor's.

Exhibit 6 Recovery Rates (%)

	1982–2004	1998–2003	2004
Loans	77.5	74.1	95.4
Senior Secured Notes	57.4	48.6	80.8
Senior Unsecured Notes	44.9	32.9	50.1
Senior Subordinated Notes	39.1	29.9	44.4
Subordinated Notes	32.0	22.4	N/A
Junior Subordinated Notes	28.9	20.8	N/A

Source: Standard & Poor's.

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Exhibit 7 Average Five-Year Credit Derivatives Swaps (CDS) Spreads on Senior Notes^a (bps)

Date	Alltel	First Data	Flextronics	Harrah's	Tribune	TXU
Apr-07	101.73	49.50	N/A	207.48	343.05	210.88
May-07	150.25	227.00	N/A	204.55	450.56	205.08
Jun-07	251.94	345.22	N/A	240.30	512.73	261.68
Jul-07	404.50	513.00	N/A	469.25	765.92	440.73
Aug-07	450.26	570.70	288.75	542.58	898.97	455.72
Sep-07	466.85	578.43	285.01	470.65	922.49	501.93
Oct-07	450.88	519.28	239.63	418.33	891.24	491.30
Nov-07	573.76	574.32	237.05	535.68	967.24	603.98
Dec-07	603.85	586.95	N/A	578.78	1681.23	541.48
Jan-08	711.25	733.55	252.62	845.75	1814.41	601.63
Feb-08	859.80	808.84	272.64	1053.50	N/A	676.16
3/1/08-3/14/08	984.60	893.75	N/A	1147.35	3434.03	699.15

Source: Thomson Datastream and Bloomberg.

^aCDSs are quoted as annual insurance premium in percentage of notional amount. For example, a CDS Spread of 1,000 bps means that default insurance for a notional amount of \$100 costs \$10 p.a. (\$2.5 per quarter).

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Exhibit 8 Bennett J. Goodman Biography

Bennett Goodman is a Founder of GSO Capital Partners ("GSO"), Senior Managing Director of Blackstone and a Member of Blackstone's Management Committee. Since joining Blackstone in 2008, Mr. Goodman focuses on the management of GSO, which is Blackstone's credit investment platform with over \$50 billion of alternative assets under management ("AUM") ranging from hedge funds, mezzanine vehicles, distressed funds and other investment strategies. Before founding GSO Capital Partners in 2005, Mr. Goodman was the Founder and Managing Partner of the Alternative Capital Division of Credit Suisse. Mr. Goodman joined Credit Suisse in November 2000 when they acquired Donaldson, Lufkin & Jenrette ("DLJ") where he was Global Head of Leveraged Finance. Mr. Goodman joined DLJ in February of 1988 as the founder of the High Yield Capital Markets Group. In 1993, DLJ became the #1 global issuer of high yield bonds, and Mr. Goodman's team retained that coveted market position for the next 11 consecutive years. Prior to joining DLJ, Mr. Goodman worked in the high yield business at Drexel Burnham Lambert from 1984 to 1988. Mr. Goodman is on the Board of Directors of the Film Society of Lincoln Center and the Cancer Research Institute. He is a member of the American Jewish Committee's Board of Trustees and he also serves on the Investment Committee of the Lafayette College endowment. Mr. Goodman received Institutional Investor's 2012 Money Manager of The Year Award. He also received the 2004 Lifetime Achievement Award from Euromoney Magazine for his career achievements in the global capital markets. He graduated from Lafayette College and the Harvard Business School.

Source: Blackstone.