# Crossroads Systems, Inc. 

## Company Details



| Company | Crossroads Systems, Inc. |
| :--- | :--- |
| Headquarters | Austin, TX |
| Employees | Approximately 100 |
| Fiscal Year End | October 31 |
| Listing | CRDS (NASDAQCM) |


| Price Performance |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Aug-11 | Nov-11 | Feb-12 | May-12 | Aug-12 |
|  | YTD | 3 m | 6 m | 12m |
| Return | -22.16\% | -26.55\% | -16.36\% | -46.13\% |
| Last Price |  | \$4.04 |  |  |
| Date of Price |  | 8/15/1 |  |  |
| 52-week Range |  | \$3.20 | \$7.86 |  |
| Shares Outstanding (mm) |  | 11.07 |  |  |

## Analyst Information

Ankur Desai
Director of Investment Research
MDB Capital Group
310-526-5036
adesai@mdb.com

Please read the disclosures beginning on page 9 for important required information, including analyst certification.

## Investment Summary


#### Abstract

Below is our assessment of a recent material announcement relating to Crossroads Systems, Inc. ("Crossroads" or the "Company"). Crossroads is entering the commercialization phase of its StrongBox appliance ("StrongBox"), a network-attached storage ("NAS") appliance (consisting of both hardware and software) that utilizes the 5th generation of the linear tape-open ("LTO") standard.


On August 2nd, 2012, Crossroads announced that it had entered into a professional services agreement with Iron Mountain Information Management, Inc. ("Iron Mountain"). As part of the agreement, Iron Mountain purchased $\$ 3$ million worth of Crossroads common stock at an average purchase price of $\$ 5.15$, which represents a premium of $31.7 \%$ over the previous day's closing price; it is also paying for $\$ 2.2$ million of development costs. We view the Iron Mountain investment as the most positive announcement the Company has made since it transitioned to a focus on commercializing StrongBox.

## Validation of Technology and Business

Iron Mountain is an enterprise-level company with significant resources, so we expect that it evaluated several alternatives before deciding to sign this agreement. In addition, it appears that Iron Mountain is placing a large degree of importance on how to modernize its offerings. We believe that the fact that Iron Mountain chose to partner with Crossroads represents a powerful validation of the StrongBox technology and Crossroads' ability to support it.

## Powerful Market Opportunity

We do not yet know exactly how the economics of the parties' go-to-market approach will work. However, we know that Iron Mountain has approximately 156,000 customers in 35 countries, including more than $97 \%$ of the Fortune 1000. Being able to address a customer base of that size and composition should jumpstart Crossroads' entry to the marketplace.

## Cash Position

The addition of $\$ 5.2$ million in cash to the Company's account will strengthen its financial position and extend its cash runway, which should have a positive impact on its ability to attract customers going forward.

## Background

Under the professional services agreement, Iron Mountain agreed to purchase 582,524 shares of Crossroads' stock for \$3 million, for an average per-share price of $\$ 5.15$. In addition, Iron Mountain has agreed to pay $\$ 2.2$ million for certain of the Company's nonrecurring engineering expenses, of which it had already paid $\$ 1.1$ million as of July 31, 2012.

We view the Iron Mountain investment as the most positive announcement the Company has made since it transitioned to a focus on commercializing StrongBox, as it provides bullish indicators on several different fronts.

## Validation of Technology and Business

We believe this agreement represents a powerful validation of the Company's StrongBox technology by a respected leader in data management and archival. Iron Mountain's purchase price of $\$ 5.15$ per share of Crossroads common equity represents a premium of $31.7 \%$ over the previous day's closing price of $\$ 3.91$ per share.

Iron Mountain is a major player in the information security industry. It provides information protection and storage services to approximately 156,000 customers in 35 countries, including more than $97 \%$ of the Fortune 1000. It had revenues of approximately $\$ 3$ billion in fiscal 2011, and currently has a market capitalization of approximately $\$ 5.6$ billion.

Recent evidence suggests that Iron Mountain is considering how to transition this large, healthy business to keep up with a new technological backdrop. A large part of Iron Mountain's market offering consists of the physical storage of records based on paper, film and tape - what Iron Mountain calls its "Hard Copy" business.

As its customers move to digitize these records, Iron Mountain has made overtures into the digital space. However, it has not had success in making this transition to date. Recently, Iron Mountain attempted to grow into cloud storage with its Virtual File Store service, which provided features such as email management and archiving, eDiscovery, and backup/recovery. In April of 2011, Iron Mountain abandoned this business, writing off $\$ 284$ million as impairment charges. The following week, Iron Mountain replaced CEO Bob Brennan. We believe that this agreement represents Iron Mountain's newest effort to modernize its business. We also believe that, given recent history, Iron Mountain's management likely takes this newest effort very seriously. (Crossroads management indicated that the parties negotiated this agreement for approximately two years, which further signals to us that Iron Mountain took this decision very seriously.)

Since Iron Mountain has such broad market reach, we believe its selection of Crossroads as a channel partner represents a complete validation of the StrongBox and Crossroads' ability to support it. Iron Mountain would certainly have evaluated all of the other options in the digital storage space-from Hierarchical Storage Management providers to other firms that support the LTO standard. This is a very bullish signal for Crossroads, and should reduce the risk premium investors place on its stock.

## Details

## Powerful Market Opportunity

This relationship should jump-start Crossroads' entry to the marketplace. Though we have not yet been able to discern exactly how the two companies will work together in the channel, we see two very plausible options.

First, Crossroads could sell StrongBoxes to Iron Mountain, and Iron Mountain could use those StrongBoxes to offer its customers remote data archival that is always online. Alternatively, Crossroads could use Iron Mountain as a go-to-market partner, and sell StrongBoxes directly to Iron Mountain's customers; in that scenario, Iron Mountain would largely provide support services to the customers, including data ingestion, data retention policies, and troubleshooting.

Considering the size and composition of Iron Mountain's customer base, either model represents a huge opportunity for Crossroads. We will continue to monitor as Crossroads and Iron Mountain disclose details about the specific economics of their business partnership. In any case, however, we believe that the market opportunity inherent in this agreement should reduce the risk premium investors place around Crossroads successfully entering the marketplace with StrongBox.

## Cash Position

The additional funding will provide strength to Crossroads' balance sheet, which will be critical as the Company continues to pursue enterprise sales. As we noted in our initiation report on Crossroads dated June 1, 2012, it is often important for enterprise players to see that its suppliers have strong financial positions, so they know that these suppliers will survive to provide ongoing product support. The addition of $\$ 5.2$ million in cash to the Company's account serves to strengthen its financial position and extend its cash runway, which should have a positive impact on its ability to attract customers going forward.

## Competitive Risk

The data storage market is very competitive, and includes large enterprise level players in both tape-based and disk-based storage solutions working to develop and enhance new technologies. Data storage players include both LTFS vendors (such as IBM and Quantum) as well as traditional, disk-based hierarchical storage management ("HSM") vendors.

The storage business is an important one for many of these large players. So we expect they will exert their market power and resources to defend and grow their market position. If Crossroads is able to continue to generate positive momentum by making more announcements like the Iron Mountain agreement, that would serve to diminish this risk.

## Customer Acquisition Risk

Enterprise customers may be reluctant to award a major contract to a company as small as Crossroads. However, we note that the Iron Mountain agreement, as well as Crossroads' other recent channel partnerships with Fujitsu and Fujifilm, mitigate this risk by providing significant technology validation and putting the face of a larger, more established company on Crossroads' technology.

## Marketing Risk

Crossroads will have to make a compelling case differentiating StrongBox from the other LTFS and HSM products in order to gain traction in the marketplace. It clearly was able to do so with Iron Mountain; however, if the Company is unable to continue to educate its target customers on the benefits of its technological advantage, the value of that advantage may diminish.

## Sales Risk

In addition to pursuing channel partners such as Iron Mountain, Crossroads is currently in the process of scaling up a team to sell StrongBox direct to end users. If the Company is unable to adequately staff, train, and deploy this sales force in a timely manner, this could undermine its ability to sell StrongBox in the near term.

## Financing Risk

Though the Company may not need to significantly increase its capital expenditures to support the growth of StrongBox, it will need to increase operating expenses with respect to headcount to build its direct sales force. The cash proceeds from the Iron Mountain agreement should help mitigate this risk. In addition, Crossroads is pursuing a sale of key data storage patents for its legacy products (the " 972 Patent Family"), which should provide more growth capital.

## Management Risk

Crossroads' management has demonstrated its strength in the development phase of its technology. We also believe that the Iron Mountain agreement demonstrates management's capability to transition to a commercialization phase. However, investors should consider the risks inherent in this transition.

## Licensing Risk

Crossroads is currently involved as plaintiff in two separate patent lawsuits regarding the 972 Patent Family. A negative judgment in these lawsuits may diminish its ability to further secure licensing revenues and impair the planned sale of the 972 Patent Family.

## Risk Factors

## Key Customer Risk

A significant portion of Crossroads' current revenue comes from HP. However, these revenues are from the Company's legacy products. The fact that the focus of Crossroads' business going forward will be on StrongBox mitigates this risk significantly.

## Disruptive Technology Risk

The storage industry is a place of significant innovation, which means there is always a risk that new technologies might disrupt the way we think about storage altogether. This is a risk to Crossroads, much as it would be to any enterprise storage provider.

| Crossroads Systems, Inc.: Historical Balance Sheet |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (\$ in thousands) | 1 Q09 | 2 Q09 | 3 Q09 | 4009 | 1 Q10 | 2 Q10 | 3 Q10 | 4 Q 10 | 1 Q11 | 2 Q11 | 3Q11 | 4 Q11 | 1 Q12 | 2 Q12 |
| Assets |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cash \& Near Cash Items | 5,888 | 5,285 | 5,623 | 5,297 | 5,851 | 6,568 | 6,152 | 13,811 | 14,703 | 8,513 | 4,591 | 7,336 | 7,227 | 9,544 |
| Short term Investments | - | - | - | - | - | - | - | - | - | 4,200 | 4,864 | 3,385 | 1,992 | 350 |
| Accounts \& Notes Receivable | 4,173 | 3,758 | 3,480 | 5,124 | 2,124 | 2,452 | 2,817 | 5,607 | 2,953 | 2,840 | 2,599 | 2,659 | 2,943 | 2,343 |
| Net Inventories | 252 | 155 | 147 | 111 | 91 | 106 | 68 | 93 | 167 | 164 | 287 | 188 | 350 | 284 |
| Other Current Assets | 257 | 350 | 262 | 423 | 424 | 299 | 304 | 293 | 227 | 1,286 | 872 | 297 | 272 | 310 |
| Total Current Assets | 10,570 | 9,548 | 9,512 | 10,955 | 8,490 | 9,425 | 9,341 | 19,804 | 18,050 | 17,003 | 13,213 | 13,865 | 12,784 | 12,831 |
| Net Fixed Assets | 1,283 | 1,107 | 986 | 830 | 723 | 653 | 596 | 575 | 610 | 1,188 | 1,262 | 1,320 | 1,274 | 1,474 |
| Net Intangible Assets | 2,297 | 2,032 | 1,767 | 1,502 | 1,237 | 972 | 707 | 739 | 427 | 204 | 157 | 110 | 63 | 16 |
| Investment in Subsidiaries | 968 | 968 | 940 | 940 | 940 | 940 | 940 | - | - | - | - | - | - | - |
| Other Long-Term Assets | 75 | 69 | 69 | 69 | 57 | 56 | 57 | 60 | 55 | 57 | 64 | 56 | 34 | 38 |
| Total Long-Term Assets | 4,623 | 4,176 | 3,762 | 3,341 | 2,957 | 2,621 | 2,300 | 1,374 | 1,092 | 1,449 | 1,483 | 1,486 | 1,371 | 1,528 |
| Total Assets | 15,193 | 13,724 | 13,274 | 14,296 | 11,447 | 12,046 | 11,641 | 21,178 | 19,142 | 18,452 | 14,696 | 15,351 | 14,155 | 14,359 |
| Liabilities \& Shareholders' Equity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accounts Payable | 889 | 864 | 1,030 | 1,036 | 550 | 1,073 | 884 | 990 | 663 | 1,803 | 1,128 | 2,228 | 821 | 1,060 |
| Accrued Expenses | 1,381 | 1,264 | 1,629 | 1,877 | 1,209 | 1,436 | 1,459 | 2,271 | 1,617 | 1,524 | 1,612 | 2,156 | 1,675 | 2,579 |
| Accrued Warranty Costs | 30 | 28 | 22 | 18 | 16 | 19 | 28 | - | - | - | - | - | - | - |
| Deferred Revenue | 261 | 362 | 333 | 199 | 185 | 307 | 1,510 | 1,517 | 1,250 | 2,315 | 1,567 | 1,009 | 1,528 | 1,437 |
| Other Short-Term Liabilities | 2,024 | 2,024 | 1,973 | 1,973 | 1,973 | 1,973 | 1,973 | 1,973 | 1,973 | 1,973 | 1,973 | 1,973 | 2,597 | 2,927 |
| Total Current Liabilities | 4,585 | 4,542 | 4,987 | 5,103 | 3,933 | 4,808 | 5,854 | 6,751 | 5,503 | 7,615 | 6,280 | 7,366 | 6,621 | 8,003 |
| Long-Term Liabilities | - | 43 | 81 | 59 | 110 | 105 | 88 | 103 | 112 | 35 | 127 | 126 | 1,629 | 2,134 |
| Total Long-Term Liabilities | 45 | 43 | 81 | 59 | 110 | 105 | 88 | 103 | 112 | 35 | 127 | 126 | 1,629 | 2,134 |
| Total Liabilities | 4,630 | 4,585 | 5,068 | 5,162 | 4,043 | 4,913 | 5,942 | 6,854 | 5,615 | 7,650 | 6,407 | 7,492 | 8,250 | 10,137 |
| Total Equity | 10,563 | 9,139 | 8,206 | 9,134 | 7,404 | 7,133 | 5,699 | 14,324 | 13,527 | 10,802 | 8,289 | 7,859 | 5,905 | 4,222 |
| Total Liabilities \& Equity | 15,193 | 13,724 | 13,274 | 14,296 | 11,447 | 12,046 | 11,641 | 21,178 | 19,142 | 18,452 | 14,696 | 15,351 | 14,155 | 14,359 |


| Crossroads Systems, Inc: Historical Income Statement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (\$ in thousands, except per share data) | 1909A | 2009A | 3 O 09 | 4Q09 | FYO9 | 1 Q10 | 2 Q 10 | 3 Q10 | 4 Q 10 | FY10 | 1011 | 2 Q11 | 3 Q11 | 4 Q 11 | FY11 | 1 Q12 | 2 Q 12 |
| Total Revenue | 3,246 | 3,737 | 3,861 | 6,004 | 16,848 | 2,722 | 5,043 | 3,159 | 5,444 | 16,368 | 3,601 | 2,577 | 2,577 | 6,232 | 14,987 | 2,579 | 3,453 |
| Cost of Revenue | 653 | 572 | 594 | 848 | 2,667 | 265 | 1,071 | 429 | 727 | 2,492 | 503 | 367 | 297 | 1,498 | 2,665 | 317 | 392 |
| Gross Profit | 2,593 | 3,165 | 3,267 | 5,156 | 14,181 | 2,457 | 3,972 | 2,730 | 4,717 | 13,876 | 3,098 | 2,210 | 2,280 | 4,734 | 12,322 | 2,262 | 3,061 |
| Sales and marketing | 1,564 | 1,453 | 1,164 | 1,210 | 5,391 | 1,323 | 1,322 | 1,217 | 1,409 | 5,271 | 1,215 | 1,175 | 1,295 | 1,533 | 5,218 | 1,409 | 1,534 |
| Research and development | 2,487 | 2,267 | 2,320 | 2,309 | 9,383 | 2,280 | 2,185 | 2,129 | 2,312 | 8,906 | 2,117 | 2,820 | 2,917 | 2,847 | 10,701 | 2,757 | 2,662 |
| General and administrative | 233 | 559 | 460 | 572 | 1,824 | 662 | 570 | 579 | 812 | 2,623 | 647 | 835 | 665 | 1,010 | 3,157 | 762 | 833 |
| FAS 123R and stock based compensation | 283 | 118 | 191 | - | 592 | - | - | - | - | - | - | - | - | - |  | - | - |
| Business restructuring expense | 217 | - | - | - | 217 | - | - | - | - | - | - | - | - | - | - | - | - |
| Amortization of intangibles | 284 | 265 | 265 | 265 | 1,079 | 312 | 312 | 312 | 312 | 1,248 | 312 | 224 | 47 | 48 | 631 | 47 | 47 |
| Total Operating Expenses | 5,068 | 4,662 | 4,400 | 4,356 | 18,486 | 4,577 | 4,389 | 4,237 | 4,845 | 18,048 | 4,291 | 5,054 | 4,924 | 5,438 | 19,707 | 4,975 | 5,076 |
| Operating Income (Loss) | $(2,475)$ | $(1,497)$ | $(1,133)$ | 800 | $(4,305)$ | $(2,120)$ | (417) | $(1,507)$ | (128) | $(4,172)$ | $(1,193)$ | $(2,844)$ | $(2,644)$ | (704) | $(7,385)$ | $(2,713)$ | $(2,015)$ |
| Interest income (expense), net | (22) | (48) | (7) | (25) | (102) | (24) | (23) | (24) | (42) | (113) | (31) | (24) | (29) | (20) | (104) | (50) | (53) |
| Other income (expense) | - | - | - | (0) | (0) | - | - | - | (1) | (1) | (7) | - | - | 1 | (6) | 14 | 1 |
| Income (Loss) before income taxes | $(2,497)$ | $(1,545)$ | $(1,140)$ | 775 | $(4,407)$ | $(2,144)$ | (440) | $(1,531)$ | (171) | $(4,286)$ | $(1,231)$ | $(2,868)$ | $(2,673)$ | (723) | $(7,495)$ | $(2,749)$ | $(2,067)$ |
| Provision for (benefit from) income taxes | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Net Income (Loss) | $(2,497)$ | $(1,545)$ | $(1,140)$ | 775 | $(4,407)$ | $(2,144)$ | (440) | $(1,531)$ | (171) | $(4,286)$ | $(1,231)$ | $(2,868)$ | $(2,673)$ | (723) | $(7,495)$ | $(2,749)$ | $(2,067)$ |
| EPS diluted | (\$0.35) | (\$0.21) | (\$0.16) | \$0.11 | (\$0.61) | (\$0.29) | (\$0.06) | (\$0.20) | (\$0.02) | ( $\$ 0.56$ ) | (\$0.12) | (\$0.27) | (\$0.25) | (\$0.07) | (\$0.69) | (\$0.25) | (\$0.19) |
| Weighted Average Shares fully diluted | 7,198 | 7,242 | 7,276 | 7,349 | 7,258 | 7,300 | 7,533 | 7,607 | 7,834 | 7,586 | 10,669 | 10,711 | 10,868 | 10,908 | 10,820 | 10,974 | 11,048 |


| Crossroads Systems, Inc.: Historical Statement of Cash Flows |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (\$ in thousands, except per share data) | 1Q09 | 2 Q09 | 3Q09 | 4909 | FY09 | 1 Q10 | 2Q10 | 3Q10 | 4Q10 | FY10 | 1 Q11 | 2 Q 11 | 3 Q11 | 4 Q 11 | FY11 | 1 Q12 | 2 Q 12 |
| Cash From Operating Activities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Income | $(2,497)$ | $(1,545)$ | $(1,140)$ | 775 | $(4,407)$ | $(2,144)$ | (440) | $(1,531)$ | (171) | $(4,286)$ | $(1,231)$ | $(2,868)$ | $(2,673)$ | (724) | $(7,496)$ | $(2,749)$ | $(2,067)$ |
| Depreciation \& Amortization | 232 | 224 | 202 | 181 | 839 | 163 | 148 | 127 | 115 | 553 | 100 | 127 | 149 | 159 | 535 | 161 | 175 |
| Business restructuring expenses | 217 | - | - | (217) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Amortization of intangible assets | 284 | 265 | 265 | 265 | 1,079 | 312 | 312 | 312 | 312 | 1,248 | 312 | 224 | 46 | 48 | 630 | 47 | 47 |
| Loss (gain) on disposal of fixed assets | - | - | 1 | - | 1 | - |  | - | - | - | 6 | - | - | - | 6 | (15) | - |
| Stock based compensation | 283 | 119 | 190 | 124 | 716 | 392 | 124 | 55 | 193 | 764 | 82 | 83 | 137 | 575 | 877 | 763 | 416 |
| Provision for doubtful accounts receivable | 1 | 1 | - | (72) | (70) | (12) | (2) | (2) | - | (16) | - | 1 | - | (9) | (8) | 33 | (3) |
| Provision for excess and obsolete inventory | 24 | 32 | 51 | 1 | 108 | (2) | (4) | 28 | (2) | 20 | - | (3) | 4 | 4 | 5 | - | - |
| Changes in Non Cash Capital | 380 | 250 | 704 | $(1,569)$ | (235) | 2,174 | 748 | 729 | $(2,113)$ | 1,538 | 1,856 | 707 | (558) | 1,564 | 3,569 | $(1,480)$ | 1,539 |
| Cash From Operations | $(1,076)$ | (654) | 273 | (512) | $(1,969)$ | 883 | 886 | (282) | $(1,666)$ | (179) | 1,125 | $(1,729)$ | $(2,895)$ | 1,617 | $(1,882)$ | $(3,240)$ | 107 |
| Cash From Investing Activities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Purchase of Property and Equipment | (71) | (53) | (79) | (13) | (216) | (85) | (78) | (69) | (88) | (320) | (142) | (702) | (223) | (222) | $(1,289)$ | (119) | (371) |
| Purchase of held-to-maturity investments | - | - | - | - | - | - | - | - | - | - | - | $(4,511)$ | $(2,159)$ | - | $(6,670)$ | (185) | - |
| Maturity of held-to-maturity investments | - | - | - | - | - | - | - | - | - | - | - | 311 | 1,495 | 1,478 | 3,284 | 1,578 | 1,642 |
| Cash From Investing Activities | (71) | (53) | (79) | (13) | (216) | (85) | (78) | (69) | (88) | (320) | (142) | $(4,902)$ | (887) | 1,256 | $(4,675)$ | 1,274 | 1,271 |
| Cash from Financing Activities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proceeds from issuance of common stock | 1 | - | - | - | 1 | - | - | - | 9,178 | 9,178 | 1 | 58 | 3 | 82 | 144 | 34 | 107 |
| Proceeds from borrowing on tem loan | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2,000 | 1,000 |
| Paydown of Line of Credit | - | - | (51) | - | (51) | - | - | - | - | - | - | - | - | - | - | - | - |
| Cash from Financing Activities | 1 | - | (51) | - | (50) | - | - | - | 9,178 | 9,178 | 1 | 58 | 3 | 82 | 144 | 2,034 | 910 |
| Effect of exchange rate on cash | (52) | 104 | 195 | 198 | 445 | (244) | (92) | (64) | 235 | (165) | (92) | 383 | (144) | (210) | (63) | (177) | 29 |
| Net Changes in Cash | $(1,198)$ | (603) | 338 | (327) | $(1,790)$ | 554 | 716 | (415) | 7,659 | 8,514 | 892 | $(6,190)$ | $(3,923)$ | 2,745 | $(6,476)$ | (109) | 2,317 |

## Disclosures

## Analyst Certification

The analyst whose name appears on page 1 of this report certifies that the views expressed herein accurately reflect the analyst's personal views as to the subject securities and issuers, and further certifies that no part of such analyst's compensation was, is, or will be, directly or indirectly, related to the specific views expressed by the analyst in the report.

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| :---: | :---: | :---: |
| Headquarters | New York | Managua |
| 401 Wilshire Boulevard | 1350 Avenue of the Americas | Embajada de Mexico, |
| Suite 1020 | 2nd Floor | una cuadra arriba, |
| Santa Monica, CA 90401 | New York, NY 10019 | a la esquina, casa \#100 |
| 310.526 .5000 | 310.526 .5000 | Managua, Nicaragua |
|  |  |  |

## MDB <br> CAPITAL GROUP

The IP Investment Bank

