

FIFTH STREET FINANCE CORP.

Supplement dated March 22, 2012
to
Prospectus dated February 10, 2012

This supplement contains information which amends, supplements or modifies certain information contained in the Prospectus of Fifth Street Finance Corp. ("Fifth Street") dated February 10, 2012, as previously supplemented.

You should carefully consider the "Risk Factors" beginning on page 14 of the Prospectus before you decide to invest.

On March 18, 2012, Fifth Street released its monthly newsletter, the body of which is reprinted below.

Buyers + Sellers + Lenders = M&A

Although mergers and acquisitions activity started slowly in 2012, we continue to expect a surge to build as the year progresses. We believe the current year election cycle will prevent 2012 action on any significant federal tax legislation and this should provide a wave of tax-driven transactions in the second half of this year. Fifth Street's previous record quarter for originations was the fourth quarter of 2010, the last time business owners faced a potential tax increase on the sale of their businesses, and we have once again positioned ourselves to take advantage of another such opportunity.

We anticipate that additional demand for capital this year will exceed supply as most of the world's big banks work to reduce their risk-weighted assets to comply with the tighter capital regulations under Basel III. While we enjoy substantial available debt capacity through our recently extended ING-led syndicated facility along with our Wells Fargo and Sumitomo Mitsui facilities, we have also experienced firsthand that the world's big banks have limited to no appetite to expand bank provided debt capacity. For this reason, we took advantage of the opportunity in January to raise over \$100 million of additional equity at a premium to our book value per share. We now have ample financing capacity and the flexibility to pursue attractive opportunities to put capital to work throughout the year.

Challenges and Opportunities

We expect gross originations for the quarter ending March 31, 2012 to be near the lower end of our previously announced guidance of \$100 million to \$300 million per quarter. We have also benefited in 2012 from an increase in repayment activity. As some of our late 2008 and 2009 assets begin approaching maturity, these well-performing vintages are producing an earnings benefit associated with early repayments. We have already received a record dollar amount of early repayments during our 2012 second fiscal quarter. This level of repayments is abnormally high and we expect early repayments to return to historical levels for the balance of the year.

The current interest rate environment represents both a challenge and an opportunity. It is difficult for CEOs and financial managers to make risk-based decisions in what we view today as a world of manipulated interest rates. Nominal interest rates currently reflect the effect of central bank money printing and not free market capitalism. The extent of government monetary policy intervention makes it very difficult to predict where interest rates are heading. Our view is that they must eventually rise and we believe that Fifth Street is well-positioned to benefit from rising rates. Approximately 69% of assets in our portfolio are floating while much of our debt has a fixed rate component. In general, this means as interest rates rise, we should make more money.

Acknowledgement and Expansion

Our people are our most important asset and we are pleased to announce that Brian Finkelstein will be promoted to become a Managing Director and will join our Investment Committee. Brian joined Fifth Street in 2006 and is currently one of our underwriting team leaders. Brian has also worked extensively in our Finance and Risk areas and is uniquely qualified to serve in this capacity. Our decision to have Brian dedicate more of his efforts to portfolio management reflects the growth in our platform and the importance that we place on prudent risk management.

As we previously announced, we are expanding our Chicago office under the leadership of Sunny Khorana, the Head of our Midwest efforts. We signed a new lease beginning April 1, 2012 and will be adding a new underwriting team to enhance our Midwest presence. We anticipate that the new office, at 311 South Wacker Drive, will eventually expand to up to eight more employees as we continue to plant firmer roots in this strategic location for supporting our valued private equity sponsor relationships.

As always, please contact Investor Relations, at (914) 286-6855, or email us at ir@fifthstreetfinance.com.

Sincerely,

The Fifth Street Team
