

Supplement dated January 5, 2016 to
Prospectus dated January 5, 2016

This supplement contains information which amends, supplements or modifies certain information contained in the Prospectus of HMS Income Fund, Inc. dated January 5, 2016 (the "Prospectus"). This supplement is part of, and should be read in conjunction with, the Prospectus. The Prospectus has been filed with the Securities and Exchange Commission and is available at www.sec.gov or by calling (888) 446-3773. Capitalized terms used in this supplement have the same meanings as in the Prospectus, unless otherwise stated in this supplement.

You should carefully consider the "Risk Factors" beginning on page 30 of the Prospectus before you decide to invest.

This supplement amends the Prospectus as follows:

COVER PAGE

This supplement replaces in its entirety the third item in the list included within the third paragraph of the Cover Page of the Prospectus with the following:

The Company may, for the foreseeable future, pay a portion of distributions from sources other than net realized income from operations, which may include proceeds of the Offering, borrowings, fee and expense waivers from our Advisers and support payments from the Adviser.

PROSPECTUS SUMMARY

This supplement replaces in its entirety the header to the section entitled "Prospectus Summary - Our Competitive Strengths" on page 5 of the Prospectus with the following: "Prospectus Summary - Potential Competitive Strengths."

This supplement adds the following sentence to the end of the fifth paragraph in the section entitled "Prospectus Summary - Distributions" on page 17 of the Prospectus:

We may, for the foreseeable future, pay a portion of our distributions from sources other than net realized income from operations, which may include proceeds of the Offering, borrowings, fee and expense waivers from our Advisers and support payments from the Adviser.

RISK FACTORS

This supplement adds the following sentence after the third sentence in the second paragraph of the risk factor entitled "The amount of our distributions to our stockholders is uncertain. Portions of the distributions that we pay may represent a return of

capital to you for U.S. federal income tax purposes which will lower your tax basis in your shares and reduce the amount of funds we have for investment in targeted assets. We may not be able to pay you distributions, and our distributions may not grow over time." on page 30 of the Prospectus:

We may, for the foreseeable future, pay a portion of our distributions from sources other than net realized income from operations, which may include proceeds of the Offering, borrowings, fee and expense waivers from our Advisers and support payments from the Adviser.

DISTRIBUTIONS

This supplement adds the following sentence after the eighth sentence in the seventh paragraph of the section entitled "Distributions" on page 48 of the Prospectus:

We may, for the foreseeable future, pay a portion of our distributions from sources other than net realized income from operations, which may include proceeds of the Offering, borrowings, fee and expense waivers from our Advisers and support payments from the Adviser.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This supplement adds the following sentence after the second sentence in the tenth paragraph of the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations - Discussion and Analysis of Results of Operations - Results Comparisons for the years ended December 31, 2014, 2013 and 2012 - Distributions" on page 71 of the Prospectus:

We may, for the foreseeable future, pay a portion of our distributions from sources other than net realized income from operations, which may include proceeds of the Offering, borrowings, fee and expense waivers from our Advisers and support payments from the Adviser.

INVESTMENT OBJECTIVE AND STRATEGIES

This supplement replaces the title of the third strategy listed in the section entitled "Investment Objective and Strategies - Business Strategy" on page 83 of the Prospectus with the following:

Emphasize discipline in our underwriting policies and rigor in our portfolio management.

DECREASE IN OFFERING PRICE

On December 17, 2015, we decreased our public offering price from \$9.55 per share to \$9.00 per share. This decrease in our public offering price was effective as of our January 1, 2016 issuance of shares under our distribution reinvestment plan and will be effective as of our January 7, 2016 closing. In accordance with our share pricing policy, our board of directors determined that a reduction in the public offering price per share was warranted following a decline in our estimated net asset value per share that was deemed to be non-temporary and that resulted in an amount more than 2.5% below our then-current net offering price. As a result of the decrease in our public offering price per share, our maximum combined sales commission and dealer manager fee per share and the net proceeds per share will correspondingly decrease from \$0.95 to \$0.90 and \$8.60 to \$8.10, respectively.