

Supplement dated October 19, 2017 to Prospectus dated May 1, 2017

This supplement contains information which amends, supplements or modifies certain information contained in the Prospectus of HMS Income Fund, Inc. (the "Company") dated May 1, 2017 (as supplemented and amended, 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 herein.

You should carefully consider the "Risk Factors" beginning on page 28 of the Prospectus before you decide to invest.

This supplement updates the Prospectus to reflect (i) the Company's entry into an amendment to the amended and restated credit agreement with HMS Equity Holding LLC, a Delaware limited liability company, and HMS Equity Holding II, Inc., a Delaware corporation, each a wholly owned subsidiary of the Company, and EverBank Commercial Finance, Inc. and certain other financial institutions as lenders, (ii) the Company's entry into a conditional income incentive fee waiver agreement with the Advisers, (iii) an amendment to the waiver of administrative expenses with the Advisers and (iv) the approval by the Company's board of directors of an amendment and restatement of the Company's distribution reinvestment plan.

This supplement amends the Prospectus as follows:

PROSPECTUS SUMMARY

This supplement replaces in its entirety the second sentence in the first paragraph in the section entitled "Prospectus Summary-Credit Facilities" on page 9 of the Prospectus with the following:

On March 6, 2017, we, together with our wholly owned subsidiaries, HMS Equity Holding, LLC ("HMS Equity Holding") and HMS Equity Holding II, Inc. ("HMS Equity Holding II"), EverBank Commercial Finance, Inc. ("EverBank") and other banks as participants (together with EverBank, the "Lenders"), amended and restated the Capital One Credit Facility (as amended and restated, the "EverBank Credit Facility") to, among other things, (i) extend the maturity date to March 6, 2020 with two, one-year extension options thereafter, subject to Lender approval, (ii) reduce revolver commitments to \$95.0 million, and (iii) assign Capital One's role as administrative agent to EverBank. The EverBank Credit Facility was subsequently amended on October 19, 2017, increasing revolver commitments to \$120.0 million.

This supplement adds the following to the beginning of the sixth paragraph in the section entitled "Prospectus Summary-Credit Facilities" beginning on page 9 of the Prospectus with the following:

Following the amendment to our EverBank Credit Facility on October 19, 2017, we had \$95.0 million outstanding and \$25.0 available under our EverBank Credit Facility, which we estimated approximate fair value, and subject to certain limitations and the asset coverage restrictions under the 1940 Act.

This supplement replaces the third paragraph of the section entitled "Prospectus Summary-Management and Incentive Fee Waiver" beginning on page 12 of the Prospectus with the following:

We and our Advisers have entered into six conditional income incentive fee waiver agreements (the "2016-2017 Conditional Income Incentive Fee Waiver Agreements") between May 9, 2016 and October 19, 2017, pursuant to which, for the period from January 1, 2016 through September 30, 2017, our Advisers waived the "subordinated incentive fee on income," as such term is defined in the Investment Advisory Agreement, upon the occurrence of any event that, in our Advisers' sole discretion, caused such waiver to be deemed necessary. The 2016-2017 Conditional Income Incentive Fee Waiver Agreements may require us to repay our Advisers for previously waived reimbursement of Expense Support Payments or waived base management fees or incentive fees under certain circumstances. The previously waived fees are potentially subject to repayment by us, if at all, within a period not to exceed three years from the date of the relevant fee waiver. Thus, in any quarter where a surplus exists, that surplus will be available, subject to approval of the board of directors, to reimburse waived fees and Expense Support Payments as follows:

- 1. First, to reimburse Expense Support Payments, beginning with the earliest year eligible for reimbursement;
- Second, to reimburse all waived fees, beginning with the earliest year eligible for reimbursement.

This supplement replaces the third and fourth sentences of the section entitled "Prospectus Summary-Distribution Reinvestment Plan" on page 15 of the Prospectus with the following:

Your reinvested distributions will purchase shares at the "Reinvestment Purchase Price," which equals (a) the current price that shares are sold in the Offering on such date, minus the sales load if, at the time of the distribution, we are issuing common stock to new investors in connection with the Offering, or (b) at all other times, a price determined by the board of directors, or a committee thereof, that is (i) not less than the NAV per share (determined within forty-eight hours prior to the payment of the distribution) and (ii) not more than 2.5% greater than such NAV per share.

FEES AND EXPENSES

This supplement replaces the seventh sentence of the second paragraph under the Example in the section entitled "Fees and Expenses" beginning on page 16 of the Prospectus with the following:

In addition, while the example assumes reinvestment of all distributions at NAV per share of common stock, a participant in our distribution reinvestment plan will receive that number of shares of our common stock determined by dividing the total dollar amount of the distribution payable to such participant by the Reinvestment Purchase Price.

This supplement replaces the third sentence of footnote (8) of the section entitled "Fees and Expenses" beginning on page 16 of the Prospectus with the following:

The reimbursement of administrative services expenses has been waived through December 31, 2017.

RISK FACTORS

This supplement replaces the second sentence of the first paragraph in the risk factor entitled "We may have limited ability to fund new investments if we are unable to expand, extend or refinance our EverBank Credit Facility or the Deutsche Bank Credit Facility (combined, the "Credit Facilities")" in the section entitled "Risk Factors" beginning on page 39 of the Prospectus with the following:

The EverBank Credit Facility has revolver commitments of \$120.0 million, with an accordion provision allowing borrowing capacity to increase to up to \$150.0 million, subject to satisfaction of certain conditions.

This supplement adds the following to the beginning of the third paragraph in the risk factor entitled "We may have limited ability to fund new investments if we are unable to expand, extend or refinance our EverBank Credit Facility or the Deutsche Bank Credit Facility (combined, the "Credit Facilities")" in the section entitled "Risk Factors" beginning on page 39 of the Prospectus with the following:

Following the amendment to our EverBank Credit Facility on October 19, 2017, we had borrowings of \$95.0 million outstanding on our EverBank Credit Facility.

DISTRIBUTIONS

This supplement replaces the sixth sentence of the second paragraph of the section entitled "Distributions" beginning on page 49 of the Prospectus with the following:

Our Advisers agreed to waive subordinated incentive fees on income through September 30, 2017.

SENIOR SECURITIES

This supplement replaces the first sentence in the second paragraph in the section entitled "Senior Securities" beginning on page 51 of the Prospectus with the following:

On March 6, 2017, we, together with HMS Equity Holding, HMS Equity Holding II and the Lenders, entered into the EverBank Credit Facility, which amended and restated the Capital One Credit Facility and, among other things, (i) extended the maturity date to March 6, 2020 with two, one-year extension options thereafter, subject to Lender approval, (ii) reduced revolver commitments to \$95.0 million, and (iii) assigned Capital One's role as administrative agent to EverBank. The EverBank Credit Facility was subsequently amended on October 19, 2017, increasing revolver commitments to \$120.0 million.

This supplement adds the following to the beginning of the seventh paragraph in the section entitled "Senior Securities" beginning on page 51 of the Prospectus with the following:

Following the amendment to our EverBank Credit Facility on October 19, 2017, we had borrowings of \$95.0 million outstanding on our EverBank Credit Facility, which we estimated approximate fair value, and subject to certain limitations and the asset coverage restrictions under the 1940 Act.

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

This supplement replaces the third sentence of the third paragraph in the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations-Financial Condition, Liquidity and Capital Resources-Financing Arrangements" on page 68 of the Prospectus with the following:

The EverBank Credit Facility has revolver commitments of \$120.0 million, with an accordion provision allowing borrowing capacity to increase to up to \$150.0 million, subject to satisfaction of certain conditions.

INVESTMENT ADVISORY AND ADMINISTRATIVE SERVICES AGREEMENT

This supplement replaces the fourth paragraph of the section entitled "Investment Advisory and Administrative Services Agreement-Management and Incentive Fee Waiver" beginning on page 107 of the Prospectus with the following:

We and our Advisers have entered into the 2016-2017 Conditional Income Incentive Fee Waiver Agreements, pursuant to which, for the period from January 1, 2016 through September 30, 2017, our Advisers waived the "subordinated incentive fee on income," as such term is defined in the Investment Advisory Agreement, upon the occurrence of any event that, in our Advisers' sole discretion, caused such waiver to be deemed necessary. The 2016-2017 Conditional Income Incentive Fee Waiver Agreements may require us to repay our Advisers for previously waived reimbursement of Expense Support Payments or waived base management fees or incentive fees under certain circumstances. The previously waived fees are potentially subject to repayment by us, if at all, within a period not to exceed three years from the date of the relevant fee waiver. Thus, in any quarter where a surplus exists, that surplus will be available, subject to approval of the board of directors, to reimburse waived fees and Expense Support Payments as follows:

- First, to reimburse Expense Support Payments, beginning with the earliest year eligible for reimbursement; and
- Second, to reimburse all waived fees, beginning with the earliest year eligible for reimbursement.

This supplement replaces the fourth sentence of the ninth paragraph of the section entitled "Investment Advisory and Administrative Services Agreement-Management and Incentive Fee Waiver" beginning on page 107 of the Prospectus with the following:

Between May 9, 2016 and October 19, 2017, we and the Advisers agreed to four amendments to an expense support and conditional reimbursement agreement (the "2014 Expense Reimbursement Agreement"), which collectively extended the period for waiver

of reimbursement of administrative expenses accrued pursuant to the Investment Advisory Agreement and the Sub-Advisory Agreement from January 1, 2016 through December 31, 2017.

This supplement replaces the first sentence of footnote (3) to the table on page 109 of the Prospectus with the following:

The Advisers have agreed to permanently waive reimbursement by the Company of administrative expenses through December 31, 2017.

DISTRIBUTION REINVESTMENT PLAN

This supplement replaces the seventh and eighth sentences of the first paragraph in the section entitled "Distribution Reinvestment Plan" beginning on page 116 of the Prospectus with the following:

Your reinvested distributions will purchase shares at the Reinvestment Purchase Price.

This supplement replaces the second and third sentences of the third paragraph in the section entitled "Distribution Reinvestment Plan" beginning on page 116 of the Prospectus with the following:

The number of shares we will issue to you is determined by dividing the total dollar amount of the distribution payable to you by the Reinvestment Purchase Price.