

Supplement dated November 27, 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 the entry by the Company's structured subsidiary, HMS Funding I LLC, a Delaware limited liability company, into a fifth amendment to the amended and restated credit agreement with the Company, as equityholder and servicer, Deutsche Bank AG, New York Branch, as administrative agent, and U.S. Bank National Association, as collateral agent.

This supplement amends the Prospectus as follows:

PROSPECTUS SUMMARY

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

The Deutsche Bank Credit Facility was amended and restated on May 18, 2015 and subsequently has been amended on multiple occasions, most recently on November 20, 2017 to, among other things, (i) reduce the interest rate from the sum of the index plus an applicable margin of 2.50% to the sum of the index plus an applicable margin of 2.35%, (ii) extend the maturity date of such facility to November 20, 2022, (iii) increase revolver commitments thereunder by the amount of \$50 million (from \$400 million to \$450 million) and (iv) establish a maximum borrowing capacity thereunder of \$550.0 million. We contribute certain assets to HMS Funding from time to time, as permitted under our EverBank Credit Facility, as collateral to secure the Deutsche Bank Credit Facility. Under the Deutsche Bank Credit Facility, the interest rate is calculated as the sum of the index plus the applicable margin of 2.35%. The index will be equal to one-month LIBOR, or, in the event that LIBOR is not reasonably available, the higher of Deutsche Bank's base commercial lending rate and the interest rate equal to 0.5% above the federal funds rate. As of September 30, 2017, the one-month LIBOR was 1.24%. The Deutsche Bank Credit Facility provides for a revolving period until November 20, 2020, unless otherwise extended with the consent of the HMS Funding Lenders. The amortization period begins the day after the last day of the revolving period and ends on November 20, 2022, the maturity date. During the amortization period, the applicable margin will increase by 0.25%. During the revolving period, HMS Funding will pay a utilization fee equal to 2.50% of the undrawn amount of the required utilization, which is 75% of the loan commitment amount. HMS Funding will incur an undrawn fee equal to 0.40% of the difference between the aggregate commitments and the outstanding advances under the facility, provided that the undrawn fee relating to any utilization shortfall will not be payable to the extent that the utilization fee relating to such utilization shortfall is incurred. Additionally, per the terms of a fee letter executed on November 20, 2017, HMS Funding pays Deutsche Bank an administrative agent fee of 0.25% of the aggregate revolver commitments.

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:

Following the amendment to the Deutsche Bank Credit Facility on November 20, 2017, we had \$322.0 million outstanding and \$128.0 million available under the Deutsche Bank Credit Facility, which we estimated approximate fair value and subject to certain limitations and the asset coverage restrictions under the 1940 Act.

RISK FACTORS

This supplement replaces the second and third sentences of the second paragraph in the section 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")" beginning on page 39 of the Prospectus with the following:

The Deutsche Bank Credit Facility was amended and restated on May 18, 2015 and subsequently has been amended on multiple occasions, most recently on November 20, 2017 to, among other things, (i) reduce the interest rate from the sum of the index plus an applicable margin of 2.50% to the sum of the index plus an applicable margin of 2.35%, (ii) extend the maturity date of such facility to November 20, 2022, (iii) increase revolver commitments thereunder to \$450 million and (iv) establish a maximum borrowing capacity thereunder of \$550.0 million.

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:

Following the amendment to the Deutsche Bank Credit Facility on November 20, 2017, we had available borrowings of \$322.0 million outstanding on the Deutsche Bank Credit Facility.

SENIOR SECURITIES

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

The Deutsche Bank Credit Facility was amended and restated on May 18, 2015 and subsequently has been amended on multiple occasions, most recently on November 20, 2017 to, among other things, (i) reduce the interest rate from the sum of the index plus an applicable margin of 2.50% to the sum of the index plus an applicable margin of 2.35%, (ii) extend the maturity date of such facility to November 20, 2022, (iii) increase the revolver commitments thereunder to \$450 million and (iv) establish a maximum borrowing capacity thereunder of \$550.0 million.

This supplement replaces in its entirety the fifth paragraph in the section entitled "Senior Securities" beginning on page 51 of the Prospectus with the following:

Under the Deutsche Bank Credit Facility, the interest rate is calculated as the sum of the index plus the applicable margin of 2.35%. The index will be equal to one-month LIBOR, or, in the event that LIBOR is not reasonably available, the higher of Deutsche Bank's base commercial lending rate and the interest rate equal to 0.5% above the federal funds rate. As of September 30, 2017, the one-month LIBOR was 1.24%. The Deutsche Bank Credit Facility provides for a revolving period until November 20, 2020, unless otherwise extended with the consent of the HMS Funding Lenders. The amortization period begins the day after the last day of the revolving period and ends on November 20, 2022, the maturity date. During the amortization period, the applicable margin will increase by 0.25%. During the revolving period, HMS Funding will pay a utilization fee equal to 2.50% of the undrawn amount of the required utilization, which is 75% of the loan commitment amount. Additionally, HMS Funding will incur an undrawn fee equal to 0.40% of the difference between the aggregate commitments and the outstanding advances under the facility, provided that the undrawn fee relating to any utilization shortfall will not be payable to the extent that the utilization fee relating to such utilization shortfall is incurred.

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:

Following the amendment to the Deutsche Bank Credit Facility on November 20, 2017, we had borrowings of \$322.0 million outstanding on the Deutsche Bank 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 first sentence of the fourth 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:

On June 2, 2014, HMS Funding entered into the Deutsche Bank Credit Facility, which was most recently amended on November 20, 2017, increasing the revolver commitments to \$450.0 million.

This supplement adds the following to the beginning of the fifth 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:

Following the amendment to the Deutsche Bank Credit Facility on November 20, 2017, we had \$322.0 million outstanding and \$128.0 million available under the Deutsche Bank 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 second sentence of the first paragraph in the section entitled Management's Discussion and Analysis of Financial Condition and Results of Operations-Financial Condition, Liquidity and Capital Resources-Contractual Obligations" beginning on page 68 of the Prospectus with the following:

Unless extended, the Deutsche Bank Credit Facility will mature on November 20, 2022.