Issuer Free Writing Prospectus Filed Pursuant to Rule 433 Registration No. 333-232259 June 26, 2019

360 Finance, Inc.

360 Finance, Inc., or the Company, has filed a registration statement on Form F-1 (including a prospectus) with the Securities and Exchange Commission, or the SEC, for the offering to which this free writing prospectus relates.

Before you invest, you should read the prospectus in that registration statement and other documents the Company has filed with the SEC for more complete information about the Company and this offering. Investors should rely upon the prospectus and any relevant free writing prospectus for complete details. You may obtain these documents and other documents the Company has filed for free by visiting EDGAR on the SEC web site at www.sec.gov. Alternatively, the Company, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by calling Citigroup Global Markets Inc.at +1-800-831-9146, Morgan Stanley & Co. LLC at +1-866-718-1649, Haitong International Securities Company Limited at +1-212-351-6040, or China Renaissance Securities (Hong Kong) Limited at +852-2287-1600.. You may also access the Company's most recent preliminary prospectus dated June 26, 2019, which is included in the amendment no. 2 to the Company's registration statement on Form F-1, as filed with the SEC on the same date by visiting EDGAR on the SEC website at: https://www.sec.gov/Archives/edgar/data/1741530/000104746919003879/a2239150zf-1a.htm.

A total of 43,550,978 ordinary shares currently beneficially owned by the Selling Shareholders, minus the shares sold in this offering by such Selling Shareholders, will be subject to lock-up restrictions after the completion of this offering. Additionally, 59,829,992 ordinary shares beneficially owned by our directors and executive officers will also be subject to lock-up restrictions upon the completion of this offering.

QuickLinks

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