Issuer Free Writing Prospectus Filed Pursuant to Rule 433 Registration No. 333-232259 June 27, 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. The Registration Statement was declared effective by the SEC on June 26, 2019.

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

On June 27, 2019, the registered follow-on public offering of an aggregate of 9,609,000 American depositary shares ("ADSs"), each representing two class A ordinary shares of the Company, by several selling shareholders was priced at US\$10.00 per ADS.

The selling shareholders will sell an aggregate of 9,609,000 ADSs, and they have granted the underwriters a 30-day option to purchase up to 1,441,220 additional ADSs. The Company will not sell any ADSs in this offering and will not receive any proceeds from the sale of ADSs by the selling shareholders.

QuickLinks

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