

FANH / NASDAQ

Buy

Unchanged

\$41.00

Unchanged

CAPITALIZATION

Ordinary Shares Outstanding	1,342.2 ml.
ADR's Outstanding	27.6 ml.

Market Capitalization	\$1,771.7 ml.
+ Debt	-0- ml.
- Cash	22.4 ml.
Enterprise Value	\$1,749.3 ml.

Book Value	\$ 330.7 ml.
Working Capital	\$ 246.8 ml.
Dividend / ADS	\$1.20 / ADS

Balance sheet figures as of 9/30/19 in US\$

MARKET DATA

Recent ADS Price, US\$	\$26.40
52 Week High/Low	\$35.55 - \$19.39

Inside Ownership	21.4%
Institutional Ownership	15.0%
Flotation, Ordinary Shares	855.9 ml.
Flotation, ADS	13.7 ml.

Average Daily Volume, ADS	175 K
Short Interest	8.6%
Beta	1.28

Source: Bloomberg LP

INVESTMENT RETURNS

	FANH	Sector
Return on Equity	23.8%	13.0%
Return on Assets	15.1%	1.5%
Return on Capital	22.5%	4.5%

Source: Crystal Equity Research

FINANCIAL PROFILE

US\$	FY18	TTM
Sales	\$504.9 ml.	\$517.7 ml.
EBITDA	\$ 65.8 ml.	\$ 67.3 ml.
EPS / ADS	\$1.43	\$1.38

Source: Company Reports

INVESTMENT SUMMARY

Quarter Profits. Fanhua reported an operating profit margin of 18.4% in the quarter ending September 2019, well improved over the 15.9% margin in the same quarter in the prior year.

Sales Force Quality over Quantity. While the total number of agents rose steadily through the end of 2018, the force has decline significantly in 2019. Performing agents increased to 16.9% of the total in the September period compared to 14.6% in the previous quarter.

Agent Recruiting Plan. 1000 Reserve Entrepreneurial Campaign underway to shift from a 'come one come all' approach to systematic qualification and recruiting of professional insurance industry personnel.

Market Penetration Strategy. Over the next five years Fanhua plans to increase the number of provincial branches by 100 through its *Shenzhou 100* strategy.

Projected Growth. We believe that if Fanhua is successful in reaching its goal of new reserve sales teams and additional territories, it could achieve 30% top-line growth in 2020.

Undervaluation. The shares are now trading at 19.6 times trailing earnings per share, well below the earnings multiple near 29 times for its peer group of China-based financial services companies. Current dividend yield of 4.5% provides a return boost.

Debra Fiakas, CFA
Security Analyst
212-400-7519
dfiakas@crystalequityresearch.com

INDUSTRY: INSURANCE SERVICES

FANH: NASDAQ

SUMMARY

The third quarter 2019 financial report by insurance distributor Fanhua, Inc. revealed important developments at the Company as it navigates regulatory and competitive changes in China’s life, property and casualty insurance industry. The turnover in Fanhua’s sales force has slowed and productivity appears to have improved as the Company completes registration of its sales agents with the PRC insurance regulator. Management is well along with programs to expand and professionalize the sales force by recruiting insurance industry professionals and placing them in new territories in medium- and large-size cities in China. Their accomplishments bode well for growth in the coming years.

RECOMMENDATION

We continue to rate FANH shares at Buy with the view that the stock remains undervalued against its peer group. As noted in the Valuation section of this report, a peer group of China-based financial services firms are trading at 29 times trailing earnings, well above the 19.6 trailing multiple at which FANH currently trades. In our view, investors should take advantage of the current undervaluation to take long positions in FANH shares. We expect earnings reports in the coming year to provide strong comparisons in sales and earnings as the Company’s expansion plans take hold. We also expect news of that expansion to lead a favorable change in sentiment toward Fanhua’s prospects.

VALUATION

Price/Sales	3.6 X
Price/Cash Flow	52.0 X
Price/EPS	19.6 X
Price/Book Value	5.4 X
Consensus EPS 2019	NA
Forward PE	NA

TTM ending 9/30/19

OPERATING PROJECTIONS

	2018A	1Q19A	2Q19A	3Q19E	4Q19E	2019E
Sales	\$504.9	\$144.8	\$130.9	\$115.2	\$118.9	\$509.7
Operating Income	\$ 61.9	\$ 18.8	\$ 11.3	\$ 21.2	\$ 18.7	\$ 70.0
Net Inc	\$ 88.7	\$ 21.9	\$ 14.2	\$ 23.8	\$ 19.1	\$ 79.0
CFO	\$ 76.2	\$ 7.0	(\$17.7)	na	na	\$ 66.6
EP/ADS	\$1.43	\$0.39	\$0.26	\$0.44	\$0.34	\$1.44

US Dollars in millions except per share earnings

Company Reports and Crystal Equity Research Estimates



KEY POINTS IN QUARTER REPORT

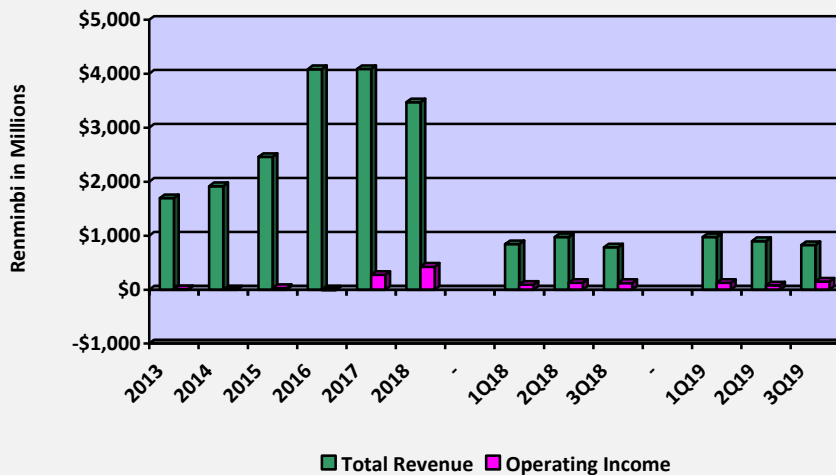
Fanhua, Inc. reported RMB 823.4 million (US\$115.2 million) in total sales in the third quarter ending September 2019. The top-line gained 5.0% year-over-year, largely on increases in life insurance sales and claims adjusting fees. Operating income of RMB 83.3 million (US\$21.2 million) represented an operating profit margin of 18.4%. This compares to an operating profit margin of 15.9% in the same period of the previous year.

The transformation of the Company’s property and casualty business model to a digital platform continues to bear fruit. The property and casualty segment delivered 4.0% of total sales, but delivered a gross profit margin of 30.4% in the third quarter 2019, compared to a 10.6% gross profit margin in the full year 2017 when the segment was following a higher-cost sales agent model. That said, we note a slip in the gross profit margin in the third quarter 2019 compared to the same period in the previous year, when the margin from the property and casualty segment was 34.3%.

Comparison of operating profit in the third quarter also requires a closer look. In the aggregate selling expenses declined 31.1% year over year, to RMB 39.3 million (US\$5.5 million). However the decrease was largely due to adjustments to the fair value of share-based compensation given to sales team supervisors through the Company’s 521 Plan. Excluding share based compensation, selling expenses actually increased 19.0% year-over-year to RMB 67.7 million. During the earnings conference call management detailed efforts to recruit experienced insurance industry personnel for the life insurance segment, an effort that has required upfront investment in marketing, recruiting and training.

General and administrative expenses reflected a similar impact from fair value accounting for share-based compensation. However, in this category management was able to accomplish some cost savings. General and administrative expenses excluding share-based compensation expenses were RMB 113.2 million (US\$15.8 million) in the third quarter, representing a 6.5% year-over-year decrease.

Chart I: Historic Sales and Operating Income



Source: Company Reports

Investment Income

Historically, investment income has represented a significant portion of Fanhua's bottom line. In 2018, when investment income totaled RMB 195.5 million (US\$28.4 million) represented 29.3% of taxable income. However, the first nine months of 2019, investment income has dropped to 15.9% of taxable income. Several factors have led to the dramatic decline in investment income, including a reduction in invested financial assets due to the use of cash for common stock repurchases and a shift in asset mix to lower-yielding bank securities.

Sales Agent Network Metrics

Also evident in the quarter was the continued impact of regulatory action vis-à-vis insurance sales agents. In 2018, the China Banking and Insurance Regulatory Commission (CBIRC) of the People's Republic of China mandated registration of all sales agents, an action that has impacted Fanhua's life insurance sales network. The registration rule is aimed at encouraging higher professional and ethical practices among sale agents and eliminating fake sales and illegal fund raising. During the conference call to discuss third quarter financial results, Fanhua management suggested that the Company is well along in its efforts to register its sales force in compliance with CBIRC requirements.

One consequence of the agent registration requirement has been a steady reduction in force as less committed sales agents drop off insurance company rolls. Fanhua has been no exception. While the number of agents in Fanhua's network rose steadily through the end of 2018, the force has decline significantly in 2019. Fanhua reported 658,145 sales agents at the end of September 2019, compared to 860,550 at the end of December 2018. Fanhua may be faring better than some insurance companies. First year, drop-out rates as high as 50% have been reported by the Insurance Intermediary Supervision Department of the CBIRC.

Sales agent performance showed improvement in the quarter. The number of performing sales agents, defined by an agent selling at least one life insurance policy, declined sequentially to 111,486 from 118,738 three months earlier. Importantly, performing agents as a percentage of total agents increased to 16.9% in the September quarter compared to 14.6% in the June quarter. The increase suggests that those agents who remain on Fanhua's team are taking the position more seriously and are more engaged in winning and serving clients.

The *CNpad* platform for sales agents also provides some insight into Fanhua's agent network. Activations continued in the third quarter, reaching 613,027 by the end of the September 2019. However, the number of active accounts

shrank to 34,188, compared to 129,871 at the end of December 2018. Despite the decline in active users the value of auto premiums transmitted across the platform rose to RMB 335.6 million (US\$47 million) during the quarter. This represents a sequential increase of 2.1% and a reversal in a downward trend that had begun in 2018. Notably, the uptick in *CNpad* metrics was concomitant with a decline in commissions in its auto insurance business in the September 2019 quarter.



泛华金控
Fanhua Inc.

On the other hand the *Lan Zhanggui* platform experienced an increase in registered users to 820,880 by the end of September 2019, representing 1.1% increase during the three months. Mirroring a trend observed in other sales agent metrics, the number of active sales agents using the *Lan Zhanggui* platform declined to 50,248 in the September 2019 quarter compared to 56,993 in the previous three months. The sequential comparison is expected given seasonal trends in insurance sales. However, we also note that active users in the recent quarter are also lower than the same quarter in the previous year when active users totaled 53,713.

Consumer Platform Metrics

Additionally, Fanhua provided details on the activity on its insurance sales and service platforms for consumers. The *Baowang* platform continued to gain consumer interest, with registered members increasing to 2.6 million. Active users increased to 158,275 during the quarter ending September 2019, compared to 115,251 in the previous three months. The increase in 'eyeballs' on the site helped drive premiums transmitted across the platform to RMB 86.6 million (US\$12.1 million) in the quarter. This compares favorably to the year-ago period when the *Baowang* platform originated RMB 72.4 million in total premiums.

The mutual aid platform *eHuzhu* also experienced continued interest. Registered members rose to 3.8 million at the end of September 2019, which compares favorably to 3.7 million registered users three months earlier.

SALES AGENT CAMPAIGNS

During the earnings conference call Fanhua disclosed details on a new initiative to recruit more professional sales agents. With its *1000 Reserve Entrepreneurial Sales Team Campaign*, the Company is making a concerted effort to shift from the 'come one come all' approach to enlisting individuals as sales agents to more systematic qualification and recruiting of professional insurance industry personnel. Management reports the successful on-boarding of 600 new sales team leaders by end of September 2019, putting the Company well on the way to achieving management's stated goal of having 1,000 teams by the end of March 2020.

The effect of bringing on experienced sales agents is likely to staunch the agent churn that has been in evidence since the Company began compliance with the CBIRC's sales agent registration requirement. Management has set a goal for its sales teams of RMB 50,000 (approximately US\$7,000) in annualized premiums equivalent (APE) in the first three months. Accordingly, we should also see continued increase in active agents and sales commissions per agent.

The Company has also continued with its *Shenzhou 100* strategy to expand Fanhua's market presence in large- and medium-sized metropolitan areas in China. Over the next five years the Company intends to increase the number of provincial branches by 100. For example, the Shandong area has been divided into three regions led by managerial talent from the insurance industry. A coastal province, Shandong has a gross domestic product of RMB 7.7 trillion (US\$1.2 trillion). Its three largest cities are Qingdao, Jinan and Zibo. (Qingdao skyline shown at right.)



UPDATED PROJECTIONS

Our earnings model has been updated to reflect third quarter 2019 financial results. We also made adjustments to our sales, cost and expense assumptions for the fourth quarter 2019 and the year 2020. First and foremost in our revision we noted that despite a moderation in the pace of growth in China's insurance market in recent quarters, it is an industry that is still growing faster than China's overall pace of GDP growth. For example, Standard and Poor estimated that China's property and casualty segment is growing in the low double digits in 2019 compared to the previous year. Second, we view the agent recruiting and sales office initiatives as critical in capturing market share for Fanhua. The programs may drag on profit margins initially, but we expect the programs to bear fruit beginning in 2020.

Accordingly, we have reduced our revenue estimates in the fourth quarter 2019 and increased cost and expenses assumptions. The result is a reduction in operating income to RMB 135.3 million (US\$16.9 million). Despite the reduction our estimate of operating income in the fourth quarter 2019, is well above management's guidance for operating income of at least RMB 100 million.

While revenue in 2019 is expected to be only modestly higher than in 2018, we expect resumption in the pace of top-line growth in 2020. We believe that if Fanhua is successful in reaching its goal of 1,000 new sales teams, the Company could achieve 30% top-line growth in 2020. Accordingly, we continue to have confidence in our 2020 sales projection. It is also our view that the Company can maintain gross and operating profit margins near current levels. Consequently, our model reflects both top- and bottom-line growth in the coming year. We anticipate adjusting our 2020 estimates again when the Company reports fourth quarter and year-end financial results, a report that typically reveals more details on segment profitability than provided in quarter financial results.

Notably shares outstanding have been reduced by the Company's ongoing share repurchase program. The program has reduced shares outstanding to 1.1 billion regular shares. A total of 3.9 million ADS or 78.0 million regular shares have been purchased as a part of the program for a total of US\$107.3 million, representing just over half of the board of director's authorization to repurchase up to 6.5 million ADS or 130.0 million regular shares. As a consequence, earnings per share increase. Indeed, our estimate of 2020 earnings per ADS in renminbi has increased by 4.0% to RMB 11.23 (from CNY 10.80).

Table I: Summary Historical and Projected Sales and Earnings

RMB	2017 Actual	2018 Actual	2019 Estimate	2020 Estimate
Sales	4,099.5 mln.	3,471.3 mln.	3,525.4 mln.	4,636.0 mln.
Operating Income	273.1 mln.	425.7 mln.	473.6 mln.	617.6 mln.
Earnings / ADS	CNY 1.13	CNY 9.83	CNY 9.82	CNY 11.23
Cash flow from operations	152.1 mln.	523.8 mln.	476.0 mln.	692.0 mln.

Source: Company Reports and Crystal Equity Research Estimates

VALUATION AND OUTLOOK

Earnings reports remain the single most important catalyst for sentiment and valuation of Fanhua's shares. Additionally, earnings per share are impacted by the Company's ongoing share repurchase program. Unfortunately, for Fanhua there is a whiff of slowing growth in its reports on sales and earnings from insurance product representation and sales agent activity. The prospect has weighed on FANH stock price, which remains suppressed since the stock reached historic highs in July 2019. The stock is now trading at 19.6 times trailing earnings per share, well below the earnings multiple near 29 times for its peer group of China-based financial services companies. Applying the Company's peer group multiple to our earnings estimate of US\$1.41 per ADS for the year 2019, the ADS are valued at US\$40.89 per share. Current dividend yield of 4.5% provides a compelling return boost.

Looking ahead we do not expect fourth quarter and year-end 2019 financial results for Fanhua to disappoint. However, management's own outlook for fourth quarter operating income, suggests the report might not turn up the flames under investor sentiment. It will remain for subsequent reports in during the year 2020 to put fuel on the fire. Given management's timetable to reach its goal for the *1000 Reserve Entrepreneurial Sales Team Campaign*, in those reports there should be tangible acceleration in the pace of sales and improved metrics on sales agent participation and performance.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST.

Table II: Historic and Projected Sales and Earnings

US Dollars in Thousands	2016	2017	2018	2019	2020
Agency, life insurance	142,668	372,630	417,537	437,787	613,433
Agency, property & casualty insurance	396,936	208,378	39,720	21,319	30,448
Claims adjusting	48,454	47,378	47,617	50,593	48,060
Total revenue	588,058	628,386	504,874	509,699	691,940
Agency, life insurance	96,965	251,501	282,605	293,362	423,269
Agency, property & casualty insurance	321,700	188,823	30,369	14,274	19,487
Claims adjusting	28,779	29,898	28,239	30,449	27,394
Cost of sales	447,444	470,222	341,214	338,085	470,149
Gross profit	140,614	158,164	163,661	171,613	221,791
Operating expenses:					
Selling expenses	72,419	34,088	33,608	38,181	44,996
General and administrative expenses	69,415	82,096	68,130	65,232	84,637
Total operating expenses	141,833	116,183	101,739	103,413	129,613
Operating income (loss)	(1,219)	41,980	61,922	68,201	92,178
Other income (expense)					
Investment income	16,603	29,477	28,428	12,606	18,209
Interest income	994	3,979	4,975	375	-
Other, net	1,489	2,195	1,717	1,594	-
Total other income (expense)	19,086	35,651	35,120	14,575	18,209
Income (loss) before income taxes	17,867	77,632	97,042	82,776	110,387
Provision for income taxes (benefit from)	3,925	25,791	32,665	21,788	33,116
Share on profits (losses) in affiliates	6,956	16,744	25,375	16,832	14,925
Net income (loss) from cont. oper.	20,898	68,585	89,753	77,820	92,196
Discontinued operations, net of taxes	3,247	842	-	-	-
Net income of non-controlling interests	(1,635)	(382)	(1,044)	(73)	(400)
Net inc. (loss) available to shareholders	22,510	69,045	88,708	77,747	91,796
Net EPS (loss), available to shareholders	\$0.02	\$0.06	\$0.07	\$0.07	\$0.08
Net EPS (loss), ADS	\$0.37	\$1.13	\$1.43	\$1.41	\$1.67
Weighted shares outstanding, diluted	1,208,821	1,261,223	1,240,854	1,099,832	1,100,000
Exchange rate	6.943	6.5063	6.8755	7.0000	6.7000
SELECTED MEASURES:					
Sales growth, yr/yr	188.9%	6.9%	12.1%	4.8%	35.8%
Net income from cont. oper. growth, yr/yr	-21.0%	228.2%	30.9%	-13.3%	18.5%
EPS cont. oper. growth, yr/yr	-19.4%	135.9%	12.4%	-2.2%	18.5%
Gross margin	23.9%	25.2%	32.4%	33.7%	32.1%
Operating margin	-0.2%	6.7%	12.3%	13.4%	13.3%
Net margin	3.6%	10.9%	17.8%	15.3%	13.3%
Cost as % of sales	76.1%	74.8%	67.6%	66.3%	67.9%
Selling expenses as % of sales	12.3%	5.4%	6.7%	7.5%	6.5%
General & admin. expenses as % of sales	11.8%	13.1%	13.5%	12.8%	12.2%
Effective tax rate	22.0%	33.2%	33.7%	26.3%	30.0%

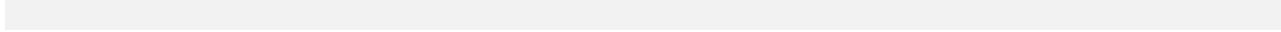


Table III: Historic and Projected Financial Results by Quarter

Dollars in Thousands	1Q	2Q	3Q	4Q	2018	1Q	2Q	3Q	4Q	2019
Agency, life insurance	107,287	122,154	95,299	106,900	417,537	128,023	112,395	97,370	100,000	437,787
Agency, property & casualty insurance	14,740	13,871	7,213	5,718	39,720	5,680	6,084	4,555	5,000	21,319
Claims adjusting	12,409	10,885	11,633	14,200	47,617	11,078	12,390	13,267	13,857	50,593
Total revenue	134,436	146,910	114,145	126,818	504,874	144,781	130,869	115,191	118,857	509,699
Agency, life insurance	74,651	83,635	58,928	75,145	282,605	89,624	74,918	62,820	66,000	293,362
Agency, property & casualty insurance	12,781	11,036	4,739	3,354	30,369	3,668	3,988	3,169	3,450	14,274
Claims adjusting	7,813	6,830	6,424	8,122	28,239	6,347	7,103	8,269	8,730	30,449
Cost of sales	95,245	101,502	70,091	86,620	341,214	99,639	86,009	74,257	78,180	338,085
Gross profit	39,191	45,408	44,054	40,197	163,661	45,142	44,860	40,934	40,677	171,613
Operating expenses:										
Selling expenses	7,764	8,145	8,293	10,402	33,608	9,632	14,135	5,500	8,914	38,181
General & administrative expenses	17,051	17,980	17,623	17,666	68,130	16,673	19,456	14,246	14,857	65,232
Total operating expenses	24,815	26,125	25,916	28,069	101,739	26,305	33,591	19,745	23,771	103,413
Operating income (loss)	14,376	19,283	18,138	12,129	61,922	18,838	11,269	21,188	16,906	68,201
Income (loss) before income taxes	21,191	27,274	31,271	20,223	97,042	24,603	15,361	23,477	19,334	82,776
Income available to shareholders	20,758	25,969	28,429	16,378	88,708	21,944	14,277	17,720	17,720	77,747
Net EPS (loss), available to shareholders	\$0.02	\$0.02	\$0.02	\$0.01	\$0.07	\$0.02	\$0.01	\$0.01	\$0.02	\$0.07
Net EPS (loss), ADS	\$0.32	\$0.40	\$0.44	\$0.29	\$1.43	\$0.39	\$0.26	\$0.27	\$0.32	\$1.41
Weighted shares outstanding, diluted	1,302,989	1,301,504	1,300,948	1,132,884	1,240,854	1,123,330	1,098,215	1,077,781	1,100,000	1,099,832
Exchange rate	6.2726	6.6171	6.868	6.8755	6.8755	6.7112	6.8650	7.1477	6.7000	6.7000
SELECTED MEASURES:										
Gross margin	29.2%	30.9%	38.6%	31.7%	32.4%	31.2%	34.3%	35.5%	34.2%	33.7%
Operating margin	10.7%	13.1%	15.9%	9.6%	12.3%	13.0%	8.6%	18.4%	14.2%	13.4%
Net margin	15.4%	17.8%	25.1%	13.5%	17.8%	15.2%	10.8%	20.7%	15.0%	15.3%
Cost as % of sales	70.8%	69.1%	61.4%	68.3%	67.6%	68.8%	65.7%	64.5%	65.8%	66.3%
Selling expenses as % of sales	5.8%	5.5%	7.3%	8.2%	6.7%	6.7%	6.3%	4.8%	7.5%	7.5%
General & admin. expenses as % of sales	12.7%	12.2%	15.4%	13.9%	13.5%	11.5%	11.3%	12.4%	12.5%	12.8%

CRYSTAL EQUITY RESEARCH, LLC

Crystal Equity Research, LLC is an objective research resource, providing coverage of small capitalization companies in selected industries. The firm provides research reports by subscription to institutional investors, supplies research consulting services to financial professionals and offers an issuer sponsored research program for qualifying companies. Additional information is available at the firm's web site at www.crystalequityresearch.com.

ANALYST

Debra Fiakas, CFA is a seasoned, credentialed investment professional with a diversified and successful track record as a research analyst and as an investment banker. Her decade-plus career includes solid experience in all aspects of the equity capital markets with particular emphasis on emerging growth companies operating in the technology sectors. Ms. Fiakas is also the principal member of Crystal Equity Research, LLC.

ANALYST CERTIFICATION

The analyst who is primarily responsible for this research and whose name is listed first on this front cover certifies that: 1) all of the views expressed in this research accurately reflect his or her professional views about any and all of the subject securities or issuers, and 2) no part of any of the analyst's compensation was, is or will be directly or indirectly related to the specific rating expressed by analyst in this research.

RATING SYSTEM

Buy	Price appreciation expected 10% or more over a 12-month period.
Hold	Price appreciation/depreciation expected between 10% and -10% over 12 months.
Sell	Price depreciation expected 10% or more over a 12-month period.

CRYSTAL RESEARCH UNIVERSE

Buys	65%
Holds	10%
Sells	25%
Total	100%

HISTORICAL RECOMMENDATIONS AND TARGET PRICE: Fanhua, Inc. / FANH

<u>Report</u>	<u>Date</u>	<u>Price</u>	<u>Rating</u>	<u>Target Price</u>
Initial	7/19/19	\$33.48	Buy	\$41.00 (six-month)
Update	9/10/19	\$27.02	Buy	\$41.00 (six month)
Update	12/5/19	\$26.40	Buy	\$41.00 (six month)

DISCLOSURES

<u>Name</u>	<u>Symbol: Exchange</u>	<u>Disclosures</u>
Fanhua, Inc.	FANH: Nasdaq	D, F, G

Disclosure Key

- A A member or employee of Crystal Equity Research, LLC serves on the board of directors of the company.
- B A controlling member of Crystal Equity Research, LLC has a beneficial interest in the common stock of the company.
- C A person or persons preparing this report or an immediate family member of the preparer has a beneficial interest in the common stock of the company.
- D Crystal Equity Research, LLC received compensation for research coverage from the company or one of its agents. The fees are paid in advance in cash.
- E The company has a convertible issue outstanding.
- F The securities covered in this report can be optioned.
- G The securities covered in this report can be margined.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST

The information and opinions in this report were prepared by Crystal Equity Research, LLC. The information herein is believed to be reliable and has been obtained from public sources believed to be reliable. We make no representation as to the accuracy or completeness of such information. Opinions, estimates and projections in this report constitute the current judgment of the author as of the date of the report and are subject to change without notice. We have no obligation to update, modify or amend this report or to otherwise notify a reader thereof in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate, or if research on the subject company is withdrawn.

This report is provided for informational purposes only. It is not to be construed as an offer to buy or sell or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy in any jurisdiction. Opinions and recommendations in our reports do not take into account individual investor circumstances, objectives, or needs and are not intended as recommendations of particular securities or strategies to particular investors. The recipients of our reports must make their own independent decisions regarding any securities mentioned in our reports.

Crystal Equity Research, LLC may receive compensation from the company or companies mentioned in this report or agents acting on their behalf. Please review the important disclosures in this report.

This report may not be reproduced, distributed or published by any person for any purpose without the prior written consent of Crystal Equity Research. Please cite source when quoting.

Copyright © 2003-2019 Crystal Equity Research, LLC.