



Rating
Buy

Asia
China

Technology
Hardware & Equipment

Company
Hongfa Technology

Reuters 600885.SS Bloomberg 600885.CH Exchange SHH Ticker 600885

Date
11 June 2018

Initiation of Coverage

Price at 8 Jun 2018 (CNY)	42.54
Price target - 12mth (CNY)	53.20
52-week range (CNY)	47.00 - 36.71
HANG SENG INDEX	30,958

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Re-rating on the auto electrification/EV trend

Accelerating automotive relay content increase is boosting 2018-21E growth

Hongfa is the second largest relay maker globally with a 13% market share. We expect it to deliver a 28% EPS CAGR in 2018-21 on 1) strong automotive growth due to EV/ADAS proliferation, 2) organic home appliance/power relay orders on smart home/overseas expansion, and 3) a continuing margin expansion (given mild price competition and a lengthy verification process). Hongfa is sampling several new EV orders (e.g. Tesla, Geely, Ford, GM) by leveraging its high HVDC relay and long-term partnerships with these OEMs in traditional automotive relays. We believe structural growth in EVs represents upside potential to the current consensus estimate. Initiating with Buy.

Rising smart car and ADAS/EV order gains from tier-1 auto OEMs

We expect Hongfa to generate 25-40% of its profit from automotive/EVs in 2018-21 at a 25-30% revenue CAGR, driven by ASP hikes, thanks to strong high-voltage direct current (HVDC) EV relay demand (ASP per car is 10x higher than conventional relays) and continuing auto relay content growth. By offering high-precision HVDC EV relays, Hongfa is qualified by CATL, BAIC Motor, and Volkswagen. The company is also sampling several new EV orders (GM, Ford, Geely). Due to a lengthy/strict qualification process on safety requirements, Hongfa enjoys an early mover advantage over peers. We believe that mild competition and production scale/enhanced efficiency will help Hongfa post a continuing 0.5-1pt. auto margin expansion in the next few years.

Smart home theme + power replacement cycle ensure stable growth ahead

Hongfa is the largest home appliance relay maker globally. Thanks to continuing relay content increases on the smart home trend and mild price competition (with peers like TE and Panasonic exiting the market), we expect Hongfa will sustain a 5-10% revenue CAGR and 36-37% GPM in 2018-21. As a leading power relay maker, it benefits from China's smart meter replacement cycle starting in 2019. The company is expanding its overseas market share by cooperating with major grids in Asia, the EU, and the US. We assume Hongfa will achieve a 10%+ revenue CAGR from power relays in the next 3 years.

Valuation and risks

We base our target price of RMB53.2 on 28x 2019E P/E or 1.0x PEG (in line with the Asian peer average of 20-30x P/E or 1.0-1.2x PEG). We think its valuation is justified by a promising EV sector outlook and its technology leadership. Risks: slower EV growth and unfavorable FX. (See page 4).

Price/price relative



Performance (%)	1m	3m	12m
Absolute	5.1	-2.0	13.2
HANG SENG INDEX	1.8	1.0	18.8

Source: Deutsche Bank

Key indicators (FY1)

ROE (%)	17.7
Net debt/equity (%)	4.4
Book value/share (CNY)	8.63
Price/book (x)	4.93
Net interest cover (x)	37.3
Operating profit margin (%)	18.1

Source: Deutsche Bank

Forecasts And Ratios

Year End Dec 31	2016A	2017A	2018E	2019E	2020E
Sales (CNYm)	5,034	5,958	6,745	7,656	8,765
Reported NPAT (CNYm)	582	686	757	996	1,236
Reported EPS FD(CNY)	1.09	1.29	1.42	1.87	2.32
DB EPS growth (%)	23.2	17.9	10.4	31.6	24.1
BV/Shares (x)	6.4	7.4	8.6	10.3	12.3
ROE (%)	18.4	18.7	17.7	19.8	20.6
PER (x)	26.2	30.1	29.9	22.7	18.3

Source: Deutsche Bank estimates, company data

¹ DB EPS is fully diluted and excludes non-recurring items

Deutsche Bank AG/Hong Kong

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Model updated: 11 June 2018

Running the numbers

Asia
 China
 Hardware & Equipment

Hongfa Technology

Reuters: 600885.SS Bloomberg: 600885.CH

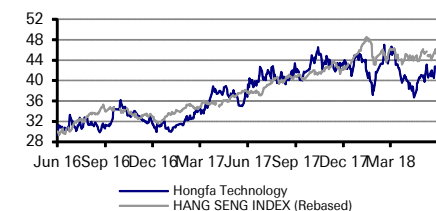
Buy

Price (8 Jun 18) CNY 42.54
 Target Price CNY 53.20
 52 Week range CNY 36.71 - 47.00
 Market Cap (m) CNYm 22,629
 USDm 3,531

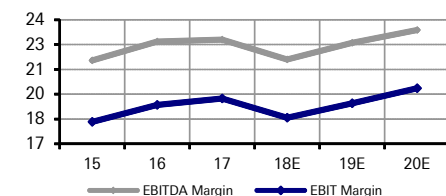
Company Profile

Hongfa is primarily engaged in research on, and manufacture and sale of relays. In addition, the company supplies low-voltage electrical appliances, complete sets of high- and low-voltage equipment, precision spare parts, sensors, capacitors and automation equipment.

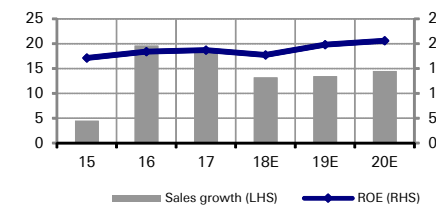
Price Performance



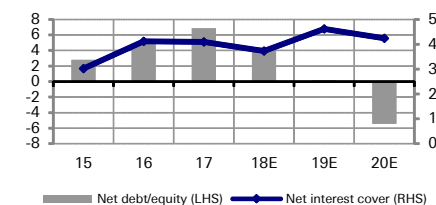
Margin Trends



Growth & Profitability



Solvency



Fiscal year end 31-Dec

Financial Summary

	2015	2016	2017	2018E	2019E	2020E
DB EPS (CNY)	0.89	1.09	1.29	1.42	1.87	2.32
Reported EPS (CNY)	0.89	1.09	1.29	1.42	1.87	2.32
DPS (CNY)	0.30	0.12	0.20	0.15	0.19	0.23
BVPS (CNY)	5.5	6.4	7.4	8.6	10.3	12.3
Weighted average shares (m)	532	532	532	532	532	532
Average market cap (CNYm)	15,880	15,220	20,621	22,629	22,629	22,629
Enterprise value (CNYm)	16,934	16,337	22,043	23,975	23,755	23,342

Valuation Metrics

P/E (DB) (x)	33.6	26.2	30.1	29.9	22.7	18.3
P/E (Reported) (x)	33.6	26.2	30.1	29.9	22.7	18.3
P/BV (x)	5.38	4.97	5.58	4.93	4.14	3.46
FCF Yield (%)	nm	0.6	nm	0.8	1.5	2.4
Dividend Yield (%)	1.0	0.4	0.5	0.3	0.4	0.5
EV/Sales (x)	4.0	3.2	3.7	3.6	3.1	2.7
EV/EBITDA (x)	18.7	14.3	16.2	16.5	13.7	11.4
EV/EBIT (x)	22.6	17.2	19.2	19.7	16.4	13.4

Income Statement (CNYm)

Sales revenue	4,209	5,034	5,958	6,745	7,656	8,765
Gross profit	1,761	2,153	2,337	2,791	3,231	3,733
EBITDA	907	1,142	1,359	1,457	1,731	2,050
Depreciation	145	173	192	216	258	287
Amortisation	12	19	20	21	22	23
EBIT	750	949	1,147	1,220	1,451	1,740
Net interest income/(expense)	-25	-23	-28	-33	-31	-41
Associates/affiliates	-17	0	0	0	0	0
Exceptionals/extraordinary	0	0	0	0	0	0
Other pre-tax income/(expense)	93	62	33	35	38	41
Profit before tax	801	989	1,151	1,222	1,458	1,740
Income tax expense	140	178	193	202	239	281
Minorities	188	229	273	263	223	223
Other post-tax income/(expense)	0	0	0	0	0	0
Net profit	472	582	686	757	996	1,236
DB adjustments (including dilution)	0	0	0	0	0	0
DB Net profit	472	582	686	757	996	1,236

Cash Flow (CNYm)

Cash flow from operations	543	615	192	853	1,033	1,264
Net Capex	-647	-530	-668	-682	-695	-709
Free cash flow	-104	85	-476	171	337	554
Equity raised/(bought back)	400	0	0	0	0	0
Dividends paid	-158	-61	-109	-79	-100	-124
Net inc/(dec) in borrowings	189	126	222	11	11	11
Other investing/financing cash flows	-488	-135	444	10	10	10
Net cash flow	-160	15	82	113	259	452
Change in working capital	-104	-159	-493	-141	-244	-295

Balance Sheet (CNYm)

Cash and other liquid assets	623	638	720	833	1,092	1,544
Tangible fixed assets	1,867	2,204	2,646	3,090	3,505	3,891
Goodwill/intangible assets	0	0	0	0	0	0
Associates/investments	48	244	273	273	273	273
Other assets	2,858	3,412	4,006	4,394	4,839	5,383
Total assets	5,396	6,498	7,644	8,589	9,708	11,090
Interest bearing debt	733	859	1,081	1,092	1,103	1,114
Other liabilities	754	1,103	1,288	1,545	1,756	2,015
Total liabilities	1,487	1,962	2,369	2,637	2,859	3,129
Shareholders' equity	2,917	3,396	3,942	4,593	5,462	6,547
Minorities	991	1,140	1,333	1,360	1,387	1,414
Total shareholders' equity	3,909	4,536	5,275	5,952	6,849	7,961
Net debt	110	221	362	259	11	-429

Key Company Metrics

Sales growth (%)	4.5	19.6	18.3	13.2	13.5	14.5
DB EPS growth (%)	9.9	23.2	17.9	10.4	31.6	24.1
EBITDA Margin (%)	21.6	22.7	22.8	21.6	22.6	23.4
EBIT Margin (%)	17.8	18.9	19.2	18.1	19.0	19.9
Payout ratio (%)	33.5	10.5	15.9	10.4	10.0	10.0
ROE (%)	17.1	18.4	18.7	17.7	19.8	20.6
Capex/sales (%)	15.4	10.5	11.2	10.1	9.1	8.1
Capex/depreciation (x)	4.1	2.8	3.1	2.9	2.5	2.3
Net debt/equity (%)	2.8	4.9	6.9	4.4	0.2	-5.4
Net interest cover (x)	30.3	41.2	40.9	37.3	46.2	42.5

Source: Company data, Deutsche Bank estimates

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Investment thesis

Outlook

Hongfa is the world's second largest relay manufacturer with a 13% global market share. It manufactures high-powered relays with superior customization capability and offers instant R&D support to clients, which help it secure a dominant market share in tier-1 home appliance brands/auto OEMs. We expect the company to deliver a 28% EPS CAGR in 18-21E, stimulated by strong EV and smart car/auto electrification proliferation, and stable home appliance/power relay growth.

Strong growth on the EV/smart car and ADAS theme

Hongfa is a leading automotive and HVDC EV relay manufacturer with solid partnerships with global tier-1 auto OEMs (BMW, Ford, Geely, Audi, etc). Propelled by accelerating smart car/ADAS proliferation and the rising implementation of driver protection functions, the automotive relay adoption rate could lift to 30-35 units starting in 2018 (premium cars may even adopt 50-70 relays) vs. 22-25 units in 2015. We believe continuing automotive relay content increases will help Hongfa deliver a 20-30% automotive relay CAGR in 18-21E. In EVs, large power HVDC relays feature 10x higher content per car than conventional auto relays and have a strict verification process due to safety concerns. Hongfa is an early mover in HVDC EV relays and has established solid partnerships with CATL and BAIC Motor. The company is expanding its customer base and received qualification from Volkswagen recently. We believe ASP hikes and the continuing winning of new customers (Geely, Tesla, Ford, GM) will help Hongfa achieve a 35% revenue CAGR in its HVDC EV relays in 18-21E.

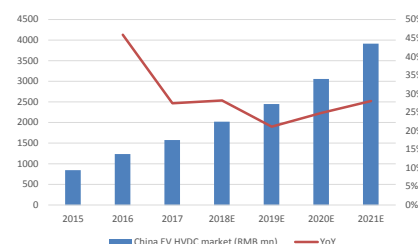
Home appliances: riding on the smart home trend

Hongfa is the largest home appliance relay maker globally with a 25% worldwide market share. We expect the company to post 5-10% home appliance revenue growth in 18-21E despite slower demand in China (0-5% industry CAGR in 18-19, based on our consumer team's estimates), given the smart home theme. We believe the rising electrical function embedded in white goods and centralized air conditioner system proliferation will boost persistent home appliance relay content increases. Due to the lack of new entrants and mild price competition, we expect Hongfa to secure a 36-37% GPM in home appliances in the long run.

Power relays: organic replacement demand + overseas expansion

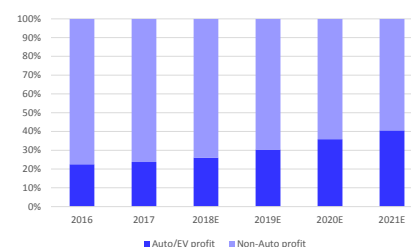
Hongfa is the dominant power relay supplier to leading players in China (Southern grid and State Grid). Off a slow 2017, we expect Hongfa to resume its momentum in power relays, thanks to rising smart meter replacement demand starting in 2019. Besides organic replacement needs, Hongfa is expanding overseas aggressively by cooperating with major local grids in Asia, the EU, and the US. We assume the company will post double-digit power revenue growth in the next three years, given the recovery in domestic replacement orders and a strong overseas market share expansion.

Figure 1: Accelerating HVDC EV relay growth in China



Source: Deutsche Bank, company data

Figure 2: Stronger auto profit growth on auto electrification/EV trend



Source: company data, Deutsche Bank estimate



Valuation and risks

Buy rating with a 12-month target price of RMB53.2

Target price of RMB53.2, based on 28x 2019E P/E

We initiate coverage of Hongfa with a Buy rating and set our target price at RMB53.2, which we base on 28x 2019E P/E or 1.0x PEG. We estimate that Hongfa will deliver a 28% earnings CAGR in 2018-2021E, driven by: 1) rising profit contributions from high-margin automotive relay/HVDC EV businesses, 2) organic home appliance/power market share gains, and 3) disciplined opex control, thanks to enhanced operating efficiency. 28x P/E and 1.0x PEG are in line with the Asian EV/auto part peer averages of 20-30x P/E and 1.0-1.2x PEG.

We believe that Hongfa's valuation is justified by its promising long-term automotive growth outlook, propelled by the smart car/EV theme and a more favorable product mix ahead. Given its dominant market share and production scale advantage in home appliances and power relays, we expect Hongfa will sustain a double-digit profit CAGR from non-auto businesses in 18-21.

Investment risks

Slower automotive relay spec upgrades: We anticipate continuing automotive relay ASP growth, driven by stronger smart car and EV proliferation. Slower-than-expected EV and auto electrification growth poses a downside risk to our optimistic ASP estimate. Also, the policy risk related to lower subsidies from the government may trim the EV growth momentum and trim Hongfa's HVDC relay growth.

Weaker home appliance demand and slower penetration of smart home appliances: Hongfa has 50% revenue exposure to general relays in home appliances. Slower home appliance demand in China and a lack of spec upgrades resulting from slower smart home appliance proliferation would pose a downside risk to our positive forecasts.

Unfavorable FX: Hong's overseas revenue growth ramped up significantly recently, given its overseas smart meter sales growth. Rising sales exposure to the USD and EUR, and ongoing RMB appreciation should trim its margin expansion and offset growth resulting from product mix improvements.



Figure 3: Forward P/E band



Source: TEJ, Deutsche Bank estimates



Major beneficiary of accelerating EV/driving safety protection penetration

Driving toward the right direction

Hongfa is one of the world's top two relay manufacturers with a ~13% market share globally (major competitors include Omron, TE, Panasonic). It supplies high precision relays for a wide variety of applications, such as home appliances, smart grids, vehicles/EVs. We expect the company to post a 28% earnings CAGR in 2018-2021E on a 15% revenue CAGR, thanks to continuing product mix improvements, propelled by strong automotive relay/high voltage direct current (HVDC) growth resulting from accelerating smart car/EV proliferation.

Figure 4: Product/customer profile

	2017 sales exposure	Key customers
General relays	48%	GE, Sharp, Midea, Gree, Siemens, Hitachi, LG, Samsung, Sony
Power relays	21%	GE, IUSA, Enel, ABB
Automotive relays	17%	Geely, Great Wall, BYD, GM, Ford, Benz, Dongfeng, Jiangling Motor
Telecom relays	4%	Hikivision, Emerson, Dahua, EMC, Alcatel

Source: Company data, Deutsche Bank

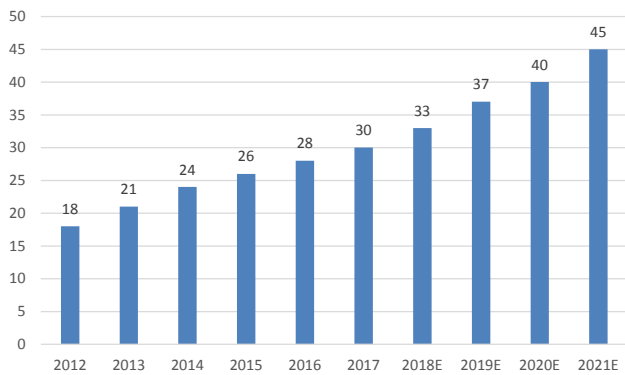
Strong automotive relay growth on driving protection need/auto electrification

Automotive relays are important safety protection electronic parts that are widely adopted in systems that involve starting, preheating, cooling, air-conditioning, lighting, electronic injection, oil pump, and other controls. Propelled by worldwide government promotion, rising automotive safety protection implementation (e.g. air bags, back-up sensing systems, energy absorbing steering systems, seat belts, heads up displays, head restraints, and passenger sensing systems) has gradually driven relay adoption per car (essentially the device turns on or off the protection function).

In witnessing accelerating ADAS penetration and the smart car trend, automotive semiconductors content has increased at almost twice the rate of vehicle production. Given the more complicated ECUs, relay adoption per car has lifted to 30-35 units in 2018 vs. 22-25 units in 2015. We also expect relay adoption in premium cars to lift to 50-70 units with more complicated calculation needs resulting from advanced ADAS feature equipment (e.g. forward collision warning).

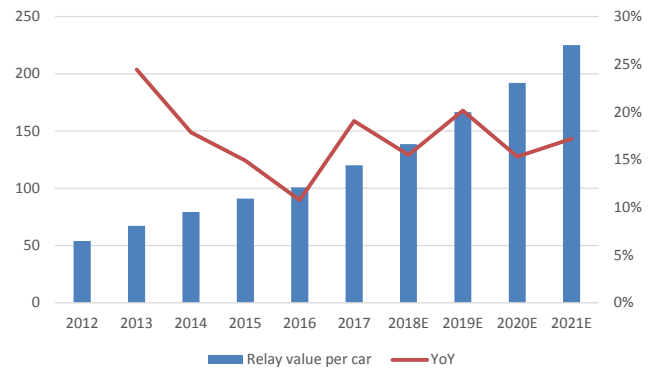


Figure 5: Relay adoption per car (units)



Source: Company data, Deutsche Bank, Market and Market

Figure 6: Relay content per car (RMB)

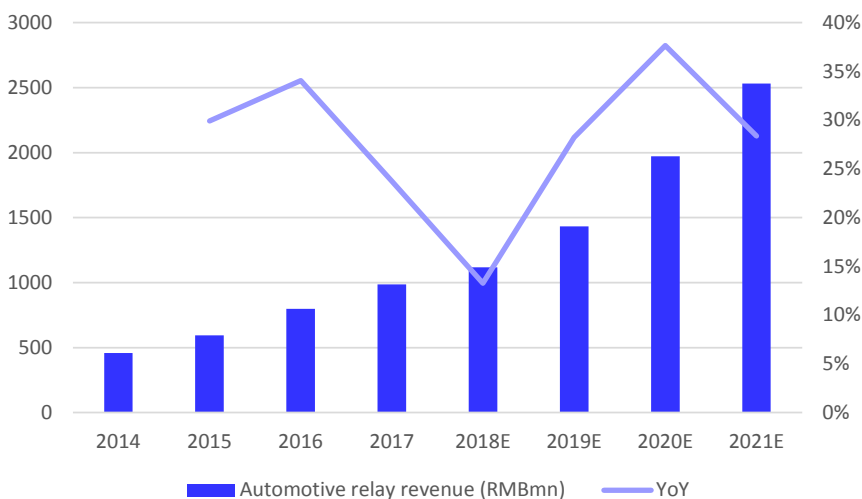


Source: Company data, Deutsche Bank, Market and Market

We view Hongfa as a major beneficiary of this trend. The company delivered a ~28% automotive relay revenue CAGR in 2014-17, stimulated by strong market growth and continual new customer/allocation gains. By offering high quality/precision relays at discounts to international competitors (e.g. TE, Panasonic), Hongfa has become the sole automotive relay supplier to leading PRC OEMs (Geely, Chang An). The company also has a well-diversified customer mix in the automotive field and taps into the international OEMs supply chain (such as BMW, Benz, Audi, Ford, GM).

Due to the strictly customized, technology driven, and integrated nature of these devices, which forced manufacturers to invest heavily in certification and to ensure proper functioning of the systems, entry barriers to the relay market have stayed high. We believe Hongfa's first mover advantage (evidenced by its early qualification by leading auto OEMs globally), high cost/performance relays and experienced competence will help the company post a 20-30% automotive relay revenue CAGR in 18-21. We also anticipate a continuing 0.5-1 pt. automotive GPM expansion in the next three years, thanks to its enlarged production scale and enhanced factory automation.

Figure 7: Hongfa's strong automotive relay growth



Source: Company data, Deutsche Bank estimates

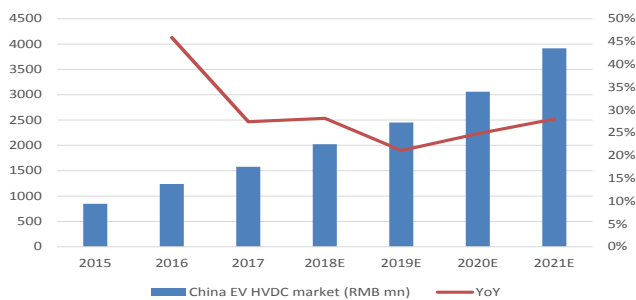


HVDC: mega growth trend on accelerating EV proliferation

EVs require customized high-voltage direct current (HVDC) relays (200-600V) to dissipate the massive heat produced by the arc vs. a traditional vehicle’s low voltage relay (12/24V). Owing to meaningful ASP hikes (HVDC features ASPs of RMB200-500 per unit vs. low-voltage ones at ~RMB4) and accelerating EV penetration (propelled by government promotion), we expect China’s EV relay market value to show a 26% CAGR in 18-21E.

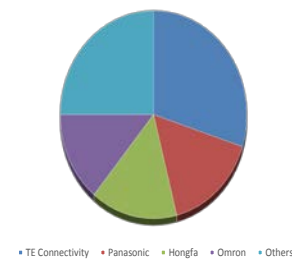
An EV usually adopts 5-8 HVDC relays (for the powertrain system, pre-charging, fast charging, normal charging, air conditioner, etc.), which implies a relay value of RMB1,500-2,000/3,000-4,000 for an EV/E-bus over the traditional vehicle’s RMB120-150.

Figure 8: Strong China EV HVDC growth



Source: Market and Market, Company data, Deutsche Bank

Figure 9: 2017 China EV HVDC market share split



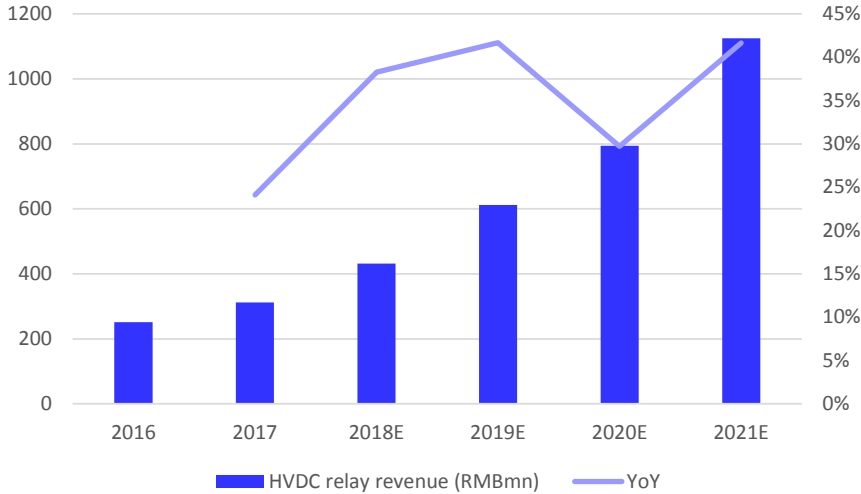
Source: Market and Market, Company data, Deutsche Bank

Hongfa is the leading HVDC EV relay manufacturer in China with a 20-25% domestic market share. It is the dominant HVDC relay supplier to BAIC Motor (50%+ order allocation), Zotye Motor and CATL (claims 30%+ of Hongfa’s current HVDC shipments) and is sampling for Geely and GAC Group. Beside domestic market share gains, Hongfa is aggressive in overseas expansion. The company will tap into Volkswagen’s HVDC supply chain with shipments starting in 2019. In the US, it is sampling its HVDC relays with Ford and GM by leveraging solid partnerships with these OEMs from supplying conventional automotive relays. The company is also making inroads into Tesla Model 3 sampling, which should fuel its EV growth from 2019 onward.

Owing to high entry barriers in high-powered HVDC relays (given strict safety requirements in EVs), Hongfa enjoys a 45%+ GPM from HVDC relays. We anticipate the company will deliver a 35% HVDC relay revenue CAGR in 18-21, thanks to continuing market share wins in China and gains in new customers overseas.



Figure 10: Encouraging HVDC relay growth on strong EV share gains



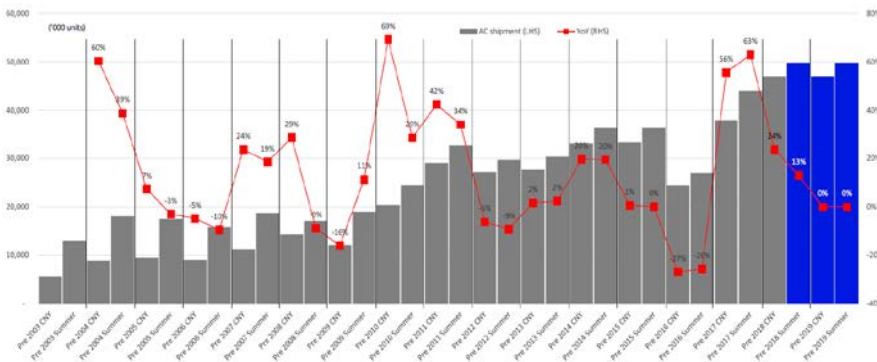
Source: Company data, Deutsche Bank estimates

Home appliances: organic growth resulting from the smart home trend

Hongfa is the largest home appliance relay manufacturer with a 25% market share globally. As most of its international competitors are placing less focus on home appliance relays (TE/Omron) or terminating small power relay production (Panasonic), Hongfa is enjoying continuing home appliance relay market share gains, thanks to its production scale advantage and solid partnerships with leading Chinese brands (Gree, Midea, Haier).

Our consumer team expects slower China home appliance growth in 2018-2019 (only 0-5% shipment CAGRs) off the high base in 2017. However, propelled by continuing home appliance relay adoption rate increases (stimulated by the smart home trend), we expect Hongfa to post 5-10% home appliance revenue CAGRs in 18-21.

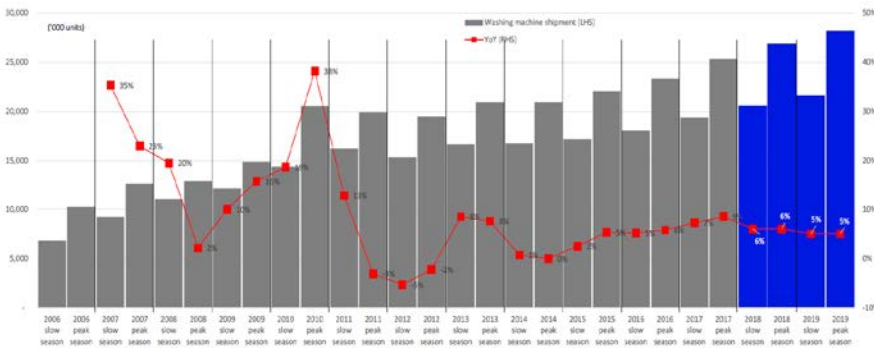
Figure 11: China air conditioner domestic sell-in volume



Source: China IOL, Deutsche Bank consumer team

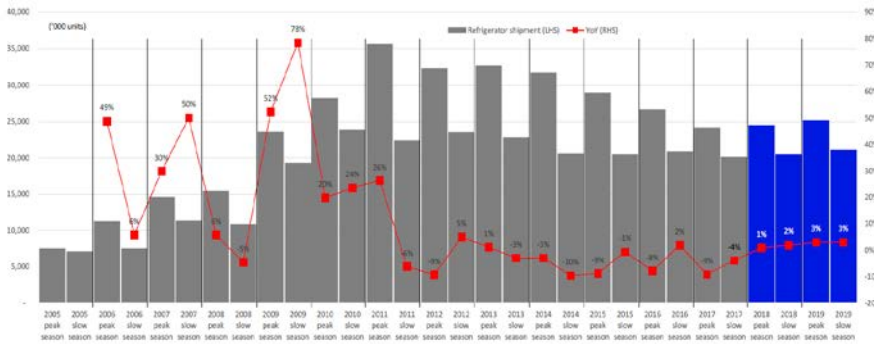


Figure 12: China washing machine domestic sell-in volume



Source: China IOL, Deutsche Bank consumer team

Figure 13: China refrigerator domestic sell-in volume



Source: China IOL, Deutsche Bank consumer team

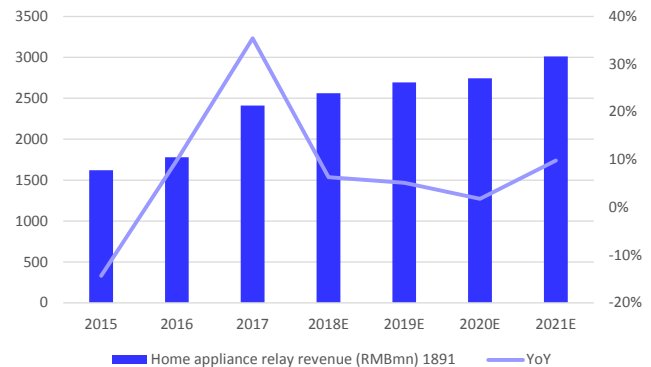
Driven by the smart home theme with more new embedded functions and the rising proliferation of centralized air conditioner systems, we expect relay adoption rates to increase consistently (we assume the new electrical function design will trigger the adoption of 1-2 additional relays). Due to the enlarged operating scale advantage and limited competition ahead, Hongfa feels comfortable about sustaining a 36-37% GPM from home appliance relays in the long run.

Figure 14: China home appliance relay adoption rate

	Air conditioner	Smart air conditioner	Home audio	Microwave	Refrigerator	Washing machine
Relay adoption per device (units)	7.0	9.0	6.0	4.0	5.0	1.0
Relay ASP (RMB)	3.0	3.1	3.2	2.9	3.1	3.0
Relay content per device (RMB)	20.7	27.9	19.2	11.6	15.5	3.0

Source: China IOL, Deutsche Bank, company data

Figure 15: Stable home appliance revenue growth



Source: Company data, Deutsche Bank estimates



Power relays: resuming momentum on the upcoming replacement cycle

Power relay growth is mainly driven by the implementation of smart grid infrastructure. In China, the leading power utility State Grid started implementing a smart grid in 2009 and finished the first batch of its smart grid build-up in 2016 by installing 500mn smart meters in 7 years. However, a slowdown in 2017 kept Hongfa's power relay revenue relatively flat in 2017 (as Hongfa secures 60% of State Grid power relay orders).

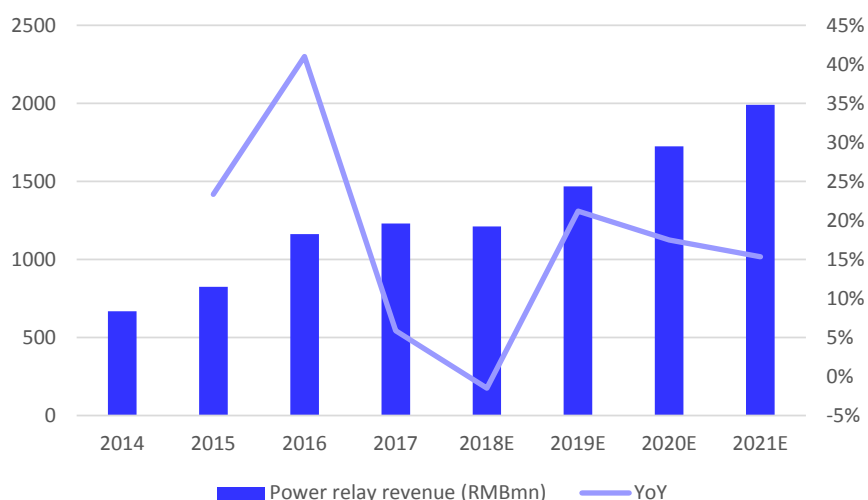
The replacement cycle of a smart meter is usually 8-10 years, so we assume the first batch of replacement demand will kick in in 2019. As the dominant power relay maker with a 50% global market share, Hongfa is set to benefit from strong replacement orders. In addition to organic replacement demand, it is making aggressive inroads overseas. Hongfa is cooperating with major grids in the US, the EU, and Asia. We assume the company will achieve 10-15% revenue CAGRs from power relays in 18-21.

Figure 16: Hongfa's taking off in overseas power relay market

	Smart grid demand	Hongfa's action
Italy	Will replace 35mn smart meter in 3-5 years	Cooperate with local grid (Enel)
France	Target to implement 35mn smart meter and lift household smart meter penetration rate to 80% by 2020	Tap into the market
UK	Target to build smart grid for 53mn residents and enterprises	Cooperate with EDM
Japan	Target to lift household smart meter implementation rate to 80% by 2020	Tap into Japan market in 2015 and is the dominant supplier to Toshiba
Korea	Target to implement 17mn smart meter by 2020	Cooperate with LG
India	Target to replace 60-70mn smart meter by 2020	Cooperate with GE
Brazil	Target to implement 63-64mn smart meter in 2015-2025	Cooperate with Landis+Gyr

Source: Chinaelc, Deutsche Bank

Figure 17: Resuming power relay momentum starting 2019



Source: Company data, Deutsche Bank estimates



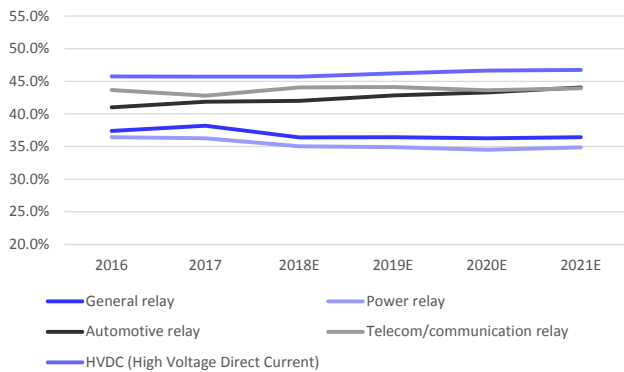
Financial analysis

Strong EV/automotive growth ahead

We expect Hongfa to post a 15% revenue CAGR in 18-21E, but anticipate a 27% EPS CAGR due to continuing product mix improvements, propelled by its take-off in new high-margin catalysts (HVDC EV/automotive relays) and enhanced operating efficiency.

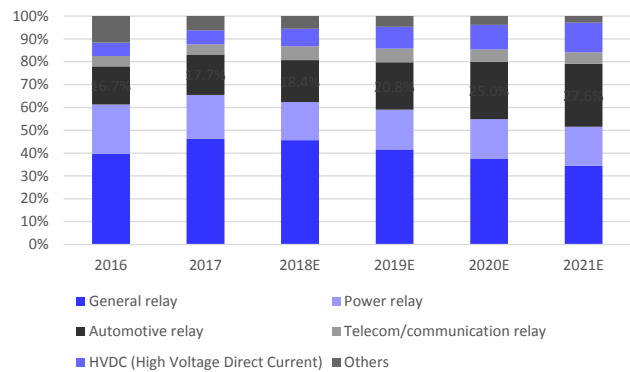
Hongfa has a well-diversified product mix in home appliance, automotive and power (smart meter) applications, which ensures a 3-5 years' order visibility and stable margin improvements. We view its home appliance/power divisions as cash cows, given encouraging long-term content increases (smart home trend)/replacement demand. We also view HVDC EV relay/automotive relays as strong catalysts with a 25-35% revenue CAGR in 18/21 propelled by accelerating EV/smart car penetration globally.

Figure 18: GPM from most of its product lines



Source: Deutsche Bank estimates, company data

Figure 19: Faster automotive/EV profit growth

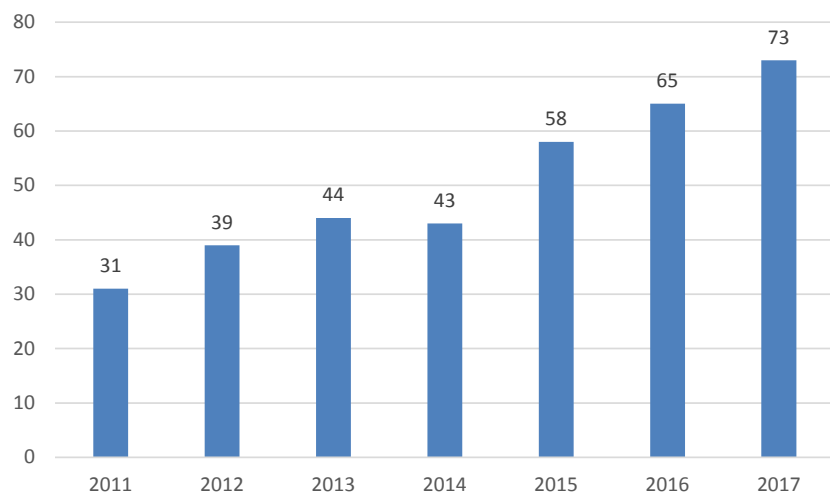


Source: Deutsche Bank estimates, company data

Due to a more favorable revenue mix and enhanced factory automation, we forecast Hongfa's overall OPM to ramp up to 20-21% in 18-21 vs. 18-19% in 16-17. Hongfa keeps lifting its factory automation level, which helps enhance long-term operating efficiency. The company's per employee annual output ramped up to RMB73K in 2017 vs. RMB60-65K in 15-16, and is tracking ahead of the industry average of RMB30-35K.



Figure 20: Per employee annual output (RMB K)



Source: Deutsche Bank, company data

Figure 21: P&L highlights

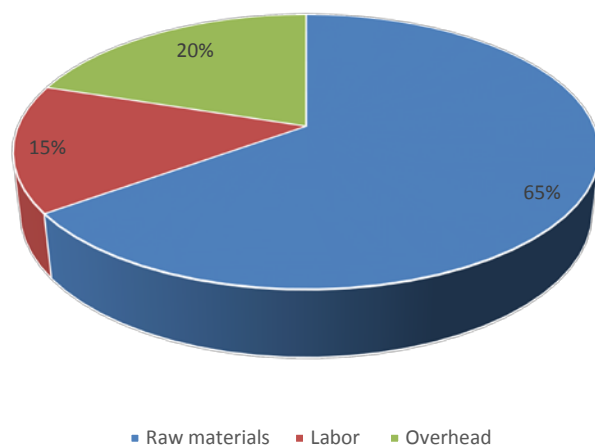
(RMB mn)	2016	2017	2018E	2019E	2020E	2021E
Sales	5,034	5,958	6,745	7,656	8,765	10,212
Gross profit	1,960	2,337	2,554	2,951	3,409	4,042
Operating profit	949	1,146	1,219	1,451	1,726	2,102
Non-operating items	39	5	2	7	13	48
Pre-tax income	989	1,151	1,221	1,458	1,740	2,150
Net profit	582	685	756	996	1,236	1,570
EPS (RMB)	1.09	1.29	1.42	1.87	2.32	2.95
Margin Analysis (%)						
Gross margin	39.2	37.9	38.5	38.9	39.6	39.2
Operating margin	19.2	18.1	19.0	19.7	20.6	19.2
Pre-tax margin	19.3	18.1	19.0	19.8	21.1	19.3
Sales breakdown						
General relay	41%	48%	48%	45%	42%	38%
Power relay	23%	21%	17%	19%	19%	19%
Automotive relay	16%	17%	18%	20%	22%	25%
Communication relay	4%	4%	5%	5%	5%	4%
HVDC	5%	5%	5%	7%	8%	10%
Others	11%	6%	6%	5%	4%	3%
Total	100%	100%	100%	100%	100%	100%

Source: Deutsche Bank estimates, company data

Hongfa focuses on the production of relays. Management states that raw materials claim 65% of its COGS (the majority of raw material costs come from steel, copper, and silver, which account for 70-75% of raw material costs). Labor / overhead costs account for 15%/20% of total COGS, respectively.



Figure 22: 2017 ccompany COGS



Source: Deutsche Bank, company data

Solid fundamental support

Hongfa completed capacity expansion in Fujian, Sichuan, Zhejiang in 16-17, sufficient to meet 3 years of orders. Management expects capex in 18-19 to stay relatively flat. We believe this implies limited fund raising needs despite strong end demand. The company has a good balance sheet with a stable net debt/equity ratio of 5-8%.

Decent conversion cycle

Owing to continuing top-line expansion and rising new customer wins, Hongfa will slightly increase its inventory level to avoid risking an insufficient product supply. However, given its scalable procurement, the company will also extend payment terms to key suppliers that help keep its cash conversion cycle at 160-170 days in the long run.

Figure 23: Improving working capital management

	2011	2012	2013	2014	2015	2016	2017	2018E	2019E	2020E	2021E
Inventory turnover	5.8	3.6	4.1	3.9	3.4	3.6	3.2	3.0	2.9	3.0	3.0
AR turnover	6.9	3.3	3.1	3.0	2.9	3.1	3.0	3.1	3.1	3.2	3.3
AP turnover	8.4	5.3	6.2	6.1	5.9	5.6	5.3	5.2	5.0	4.9	4.9
Inventory days	63.2	101.8	90.1	93.5	105.9	102.1	113.3	122.4	124.1	123.3	122.6
AR days	53.3	112.1	118.7	120.1	124.1	119.2	121.6	119.2	116.1	112.8	109.1
AP days	43.7	68.9	58.7	59.9	62.0	64.7	69.5	70.1	73.3	73.8	74.3
CCC	72.8	145.1	150.1	153.7	168.0	156.7	165.4	171.5	166.9	162.3	157.4

Source: Deutsche Bank estimates, company data



Figure 24: Cash flow statement

(RMBm)	2016	2017	2018E	2019E	2020E	2021E
Operating Cash Flow	615	192	853	1033	1264	615
Net Capex	-530	-668	-682	-695	-709	-530
Free cash flow	85	-476	171	338	555	85
Dividend paid	-158	-61	-109	-79	-100	-124
Net cash Flow	15	82	113	259	452	15
Change in working capital	-159	-493	-141	-244	-295	-159

Source: Deutsche Bank estimates, company data

Figure 25: Balance sheet

(RMBm)	2016	2017	2018E	2019E	2020E	2021E
Total Assets	6,498	7,644	8,589	9,708	11,090	12,838
Current Assets	3,608	4,310	4,801	5,494	6,480	7,862
Cash & ST investment	638	720	833	1,092	1,544	2,244
Inventories	944	1,304	1,508	1,693	1,927	2,219
Accounts Receivable	1,875	2,094	2,310	2,559	2,858	3,245
Others	151	191	150	151	152	153
Other Assets	2,890	3,335	3,788	4,214	4,610	4,976
LT Investments	244	273	273	273	273	273
Net fixed Assets	2,204	2,646	3,090	3,505	3,891	4,247
Others	442	416	426	436	446	456
Total Liabilities	1,962	2,369	2,637	2,859	3,129	3,464
Current Liabilities	1,875	2,227	2,474	2,676	2,926	3,240
Accounts Payable	652	726	884	1,005	1,159	1,352
ST Borrowings	838	1,062	1,072	1,083	1,094	1,105
Others	386	438	517	587	672	783
Long-term Liabilities	87	143	163	183	203	223
Long-term Debts	21	20	20	20	20	20
Others	65	123	143	163	183	203
Shareholders' Equity	4,536	5,275	5,952	6,849	7,961	9,374

Source: Deutsche Bank estimates



Company background

Established in 1984, Hongfa is the second largest relay manufacturer with a ~13% market share globally. Besides relays, the company engages in low-voltage electrical appliances, complete sets of high-and low-voltage equipment, precision spare parts, sensors, capacitors and automation equipment manufacturing. Hongfa’s relays are widely adopted in various applications, including home appliances, vehicles/EVs, and smart grids. In 2018, we expect it to generate 48% of total revenue from general relays, followed by smart grid (17%), automotive (18%), telecom (5%), EVs (5%) and others (6%).

Figure 26: Well diversified customer mix



Source: Deutsche Bank, company data

Figure 27: Top 10 shareholders

Institution Name	Investment Style	Shares	% S/O
1 Xiamen Youge Investment Co. Ltd.	Other	182,581,449	34.32
2 Xiamen C&D, Inc.	NA	67,037,581	12.60
3 China Life Insurance Asset Mgmt. Co., Ltd.	Growth	20,943,954	3.94
4 Guotai Asset Mgmt. Co., Ltd	Growth	16,977,607	3.19
5 China Investment Corp., Ltd (CIC)	Growth	9,680,700	1.82
6 Harvest Fund Mgmt. Co., Ltd	Growth	8,574,167	1.61
7 Ping An Asset Mgmt. Co., Ltd	Specialty	8,042,519	1.51
8 First State Investments (Hong Kong), Ltd	Growth	6,989,201	1.31
9 T. Rowe Price Hong Kong, Ltd	Growth	6,648,864	1.25
10 E Fund Mgmt. Co., Ltd	Growth	4,879,492	0.92

Source: Deutsche Bank, company data

Figure 28: Management profiles

Manjin Guo	Mr. Guo Manjin has been Chairman of the Board and General Manager in Hongfa Technology Co., Ltd. since November 20, 2012. He is also Chairman of the Board and President in another Xiamen-based company, as well as Chairman of a Xiamen-based investment company.
Zhentian Liu	Mr. Liu Zhentian has been Chief Financial Officer, Deputy General Manager and Director in Hongfa Technology Co., Ltd. since November 20, 2012. He is also Chief Financial Officer and Director in a Xiamen-based company, as well as Director in an investment company.
Dandan Lin	Mr. Lin Dandan has been Deputy General Manager and Secretary of the Board in Hongfa Technology Co., Ltd. since November 20, 2012. He is also Secretary of the Board in a Xiamen-based company.
Yunguang Ding	Mr. Ding Yunguang is Director of Hongfa Technology Co., Ltd. He is also Vice President, Chief Legal Affairs Officer and Director in Xiamen Hongfa Electroacoustic Co.,Ltd.,.
Wen Xiao	Mr. Xiao Wen is Director of Hongfa Technology Co., Ltd. He is also Chairman of the Board in JIANGXI LIANCHUANG OPTOELECTRONIC SCIENCE AND TECHNOLOGY CO.,LTD., as well as Chairman of the Board and General Manager in another Jiangxi-based group company.
Yunting Dong	Mr. Dong Yunting is Independent Director of Hongfa Technology Co., Ltd. He is also Independent Director of YUNNAN NANTIAN ELECTRONICS INFORMATION CO., LTD.

Source: Deutsche Bank, company data



Appendix 1

Important Disclosures

*Other information available upon request

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Company	Ticker	Recent price*	Disclosure
Hongfa Technology	600885.SS	42.54 (CNY) 8 Jun 18	NA

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Historical recommendations and target price: Hongfa Technology (600885.SS)

(as of 6/8/2018)



Previous Recommendations

- Strong Buy
- Buy
- Market Perform
- Underperform
- Not Rated
- Suspended Rating

Current Recommendations

- Buy
- Hold
- Sell
- Not Rated
- Suspended Rating

*New Recommendation Structure as of September 9,2002

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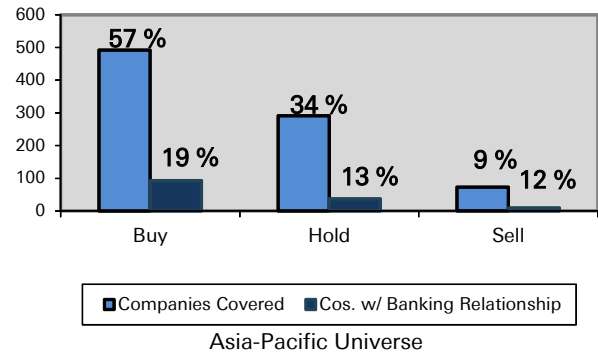
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