



HOLT Korea Market Insights

Taking a Thematic View

February 2017

Jungwoo Kim, CFA HOLT Sector Specialist Hong Kong + 852 2101 7046 jungwoo.kim@credit-suisse.com

www.credit-suisse.com/holtmethodology

Market Commentary

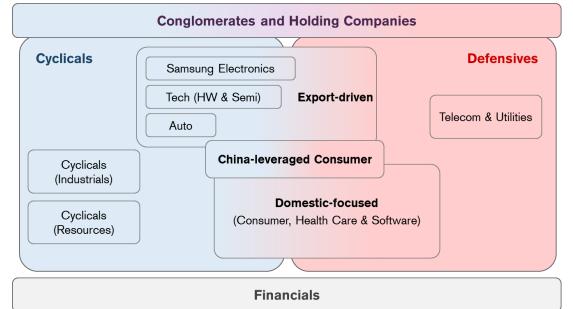
THIS REPORT IS MARKET COMMENTARY AND NOT A RESEARCH DOCUMENT

Summary

- The Korean equity market is highly exposed to export-driven industries and is also heavily weighted by Samsung Electronics and several other Chaebol group affiliates. Given such characteristics, viewing the market from thematic perspective could provide investors with an added insight into the market.
- To better understand the CFROI® profiles and implied expectations, HOLT[®] identifies and regroups the market into ten different themes: Samsung Electronics (as a standalone theme), two Cyclical groups, Defensives, two Export groups, Domestic, China-leveraged Consumer, Conglomerates, and Financials.
- Cyclicals (Resources), Export (Tech), Financials, and Samsung Electronics appear to be current leading themes with cheaper valuation *and* relatively strong momentum. On the other hand, China-leveraged Consumer, Cyclicals (Industrials), Defensives, Domestic, and Export (Auto), appear to be suffering from weaker momentum *or* show less attractive valuation.
- Given this, HOLT provides two screens (links to HOLT Lens):
 - <u>Leading themes</u> (page 9): Positive and improving CFROI[®] momentum coupled with HOLT upside. Attractive ideas from the screen includes <u>Samsung Electronics</u>, <u>SK Hynix</u>, <u>Lotte Chem</u>, <u>LG Innotek</u>, <u>LG Chem</u>, and <u>KB FG</u>.
 - <u>Lagging themes</u> (page 10): Laggards with sustained CFROI trend after continued price corrections, e.g., <u>LG</u>
 <u>H&H</u>, <u>Hyundai Development</u>, <u>Coway</u>, and <u>Hanmi Pharm</u>. This screen potentially provides Contrarian-type stocks.
- Pages 11 and 12 of this note show the HOLT Investment Style Theme matrix for both large and mid-small cap stocks in Korea.



- The Korean equity market is highly exposed to export-driven industries and is also heavily weighted by Samsung Electronics and several other Chaebol group affiliates.
- Given such characteristics, viewing the market from thematic perspective could provide investors with an added insight into the market.
- Through some adjustments to the incumbent GICS industry classifications, HOLT regroups the market into ten different themes as illustrated to the right.
- Appendix charts on pages 14-16 display overall strong relationships between CFROI and Valuation within each major theme.



Adjustments to GICS classification

- China-leveraged Consumer: Cosmetics, Casinos, Food & Beverages, and Tourism industries
- Conglomerates & Holding Companies: <u>Industrial Conglomerates</u> (from Industrials), e.g., SK, LG, Samsung C&T, plus manually chosen <u>holding companies</u> from all sectors
- Cyclicals (Industrials): Industrials ex-Conglomerates
- Cyclicals (Resources): Energy and Materials
- Defensives: <u>Telecom</u> and <u>Utilities</u>
- Domestic: Rest of the <u>Consumer</u> sectors, <u>Health Care</u>, and <u>Software</u> (from Tech)
- Export (Auto): <u>Automobiles & Components</u> (from Consumer Discretionary)
- Export (Tech): <u>Tech Hardware</u> and <u>Semiconductor</u> (from Tech)
- Financials: Same as GICS Financials sector

Better dispersion across the thematic groups, potentially providing clearer observation of the market

GICS classification

	% Total No. of Firms	% Total Market Cap Base	% Total Invested Capital Base
CONSUMER DISCRETIONARY	19%	15%	16%
CONSUMER STAPLES	12%	9%	5%
ENERGY	1%	3%	2%
FINANCIALS	10%	10%	10%
HEALTH CARE	13%	4%	1%
INDUSTRIALS	17%	12%	20%
INFORMATION TECHNOLOGY	13%	32%	20%
MATERIALS	13%	10%	12%
TELECOMMUNICATION SERVICES	1%	2%	4%
UTILITIES	2%	3%	10%
Total	100%	100%	100%
Max-Min	19%	29%	19%
Top 3 - Bottom 3	46%	51%	49%

heavily weighted by IT and Industrials

Thematic groups

	% Total No. of Firms	% Total Market Cap Base	% Total Invested Capital Base
CHINA-LEVERAGED CONSUMER	12%	7%	3%
CONGLOMERATES & HOLDCOS	6%	6%	11%
CYCLICALS (INDUSTRIALS)	17%	8%	11%
CYCLICALS (RESOURCES)	16%	12%	14%
DEFENSIVES	3%	5%	14%
DOMESTIC	34%	15%	7%
EXPORT (AUTO)	5%	9%	10%
EXPORT (TECH)	9%	7%	7%
FINANCIALS	11%	10%	10%
SAMSUNG ELECTRONICS	0%	22%	13%
Total	100%	93%	97%
Max-Min	34%	17%	7%
Top 3 - Bottom 3	59%	33%	24%

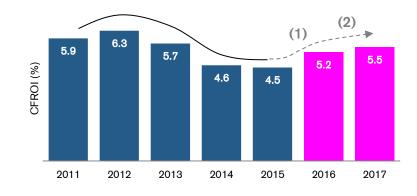
better balance across the groups

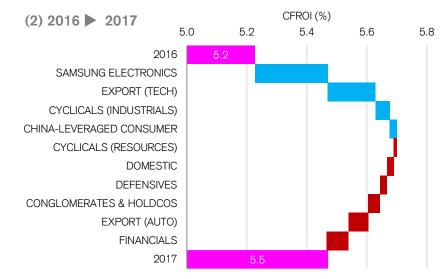


Consensus points to overall continued recovery in aggregate CFROI in 2017, but with fewer sectors contributing than in 2016; Samsung and Tech Exporters main drivers of this year's improvements

Korea's aggregate CFROI: Analysts forecast recovery over 2016-17

Korea has experienced declining returns since 2012 yet is forecast to see improvements over 2016-17.



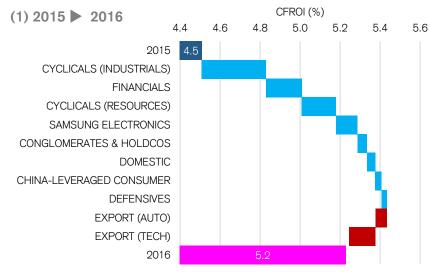


Although Samsung and Export (Tech) are forecast to continue to

the year appears cautious than 2015-16.

improve their returns in 2017, analysts' outlook for other sectors for

YoY CFROI change contribution forecast (IBES)



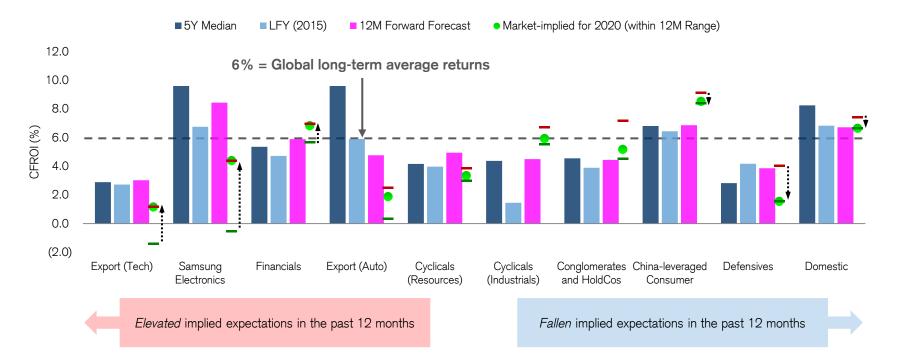
For the year 2016, IBES consensus suggested stronger CFROI contribution from Cyclicals, Financials, and Samsung, while other sectors in general deliver CFROI improvements as well.

Source: Credit Suisse HOLT.



CFROI Forecasts vs Expectations: Elevated expectations for exporters and cyclicals of late

CFROI: Near-term consensus and long-term implied expectations



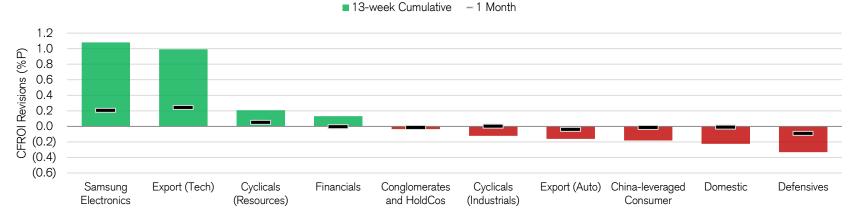
- Sectors to the left (Export (Tech), Samsung, and Financials) are the ones that saw elevated market-implied CFROI over the past one year, while sectors to the right (China-leveraged Consumer, Defensives, and Domestic) saw fall in implied expectations during the same period.
- 6% CFROI (7.5% CFROE for Financials) indicates a global long-term average economic returns Samsung is forecast to earn returns above this level yet is priced for 4% returns over the long-term. All Export and Cyclical groups earn sub-6% CFROI, but only Industrials are priced for improving returns.
- China-leveraged Consumers and Domestics, both delivering stable returns above 6%, have traded at par or premium levels in terms of implied CFROI but such expectations have subsided throughout 2016. Expectations for Defensives appear depressed mainly due to KEPCO.

Source: Credit Suisse HOLT.

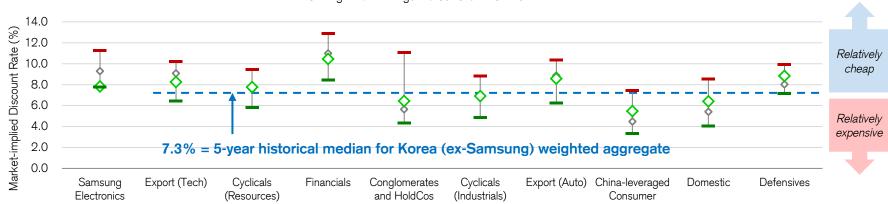


Recent cash flow momentum (CFROI revisions) is largely in line with market sentiments; valuation neither close to five-year peaks or troughs as yet

Momentum: CFROI revisions



Valuation: Market-implied discount rate (five-year range)



-5Y High ♦12M Ago ♦Current -5Y Low

Source: Credit Suisse HOLT.

CLARITY IS CONFIDENCE

Cyclicals (Resources), Export (Tech), Financials, and Samsung show better Momentum and Valuation profile on HOLT Scorecard

Sector	HOLT Score							
Sector	Quality	N	lomentum	Valuation				
China-Leveraged Consumer		33	34	44				
Cyclicals (Industrials)		27	61	46				
Cyclicals (Resources)		51	54	73				
Defensives		38	40	81				
Domestic		30	41	62				
Export (Auto)		18	38	84				
Export (Tech)		9	60	67				
Financials		14	73	64				
Samsung Electronics		15	89	84				
Median		27	54	67				

HOLT scorecard by theme (weighted)

*Conglomerates & Holding Companies theme was not included as a portfolio given that each stock has idiosyncratic risk, more correlated to their operating companies than the group peers.

- Overall weak Operational Quality, divergent Momentum, cheap valuation across different themes.
- Leading themes with cheaper Valuation and relatively better Momentum are Cyclicals (Resources), Export (Tech), Financials, and Samsung Electronics.
- Lagging themes with expensive Valuation or weak Momentum include China-leveraged Consumer, Cyclicals (Industrials), Defensives, Domestic, and Export (Auto).



Screen #1. Leading themes: Positive and improving CFROI momentum, coupled with warranted upside

Themes: Export (Tech), Cyclicals (Resources), Financials, Samsung Electronics Criteria: Market Cap > \$0.3 bn, positive & improving cash flow revisions (1M > 2M Ago), warranted upside > 0

▼ Sort									
Theme	Symbol	Name	Market Cap (\$bn)	GICS Sector	CFROI Revisions (1M)	CFROI Revisions (2M Ago)	HOLT Upside	HOLT Score	HOLT Investment Style
Samsung Electronics	005930	SAMSUNG ELECTRONICS	228.4	Information Technology	0.42	0.36	37	72	Restructuring
Cyclicals (Resources)	051910	LG CHEM	16.5	Materials	0.32	0.08	24	89	Style Neutral
Cyclicals (Resources)	011170	LOTTE CHEMICAL	11.1	Materials	0.88	0.55	69	100	Best in Class
Cyclicals (Resources)	004020	HYUNDAI STEEL	6.8	Materials	0.02	0.01	18	61	Style Neutral
Cyclicals (Resources)	004800	HYOSUNG	4.0	Materials	0.07	0.03	4	81	Style Neutral
Cyclicals (Resources)	120110	KOLON INDUSTRIES	1.8	Materials	0.04	-0.03	0	41	Style Neutral
Cyclicals (Resources)	006650	KOREA PETRO CHEMICAL	1.4	Materials	0.10	0.06	96	99	Best in Class
Cyclicals (Resources)	003410	SSANGYONG CEMENT IND.	1.1	Materials	0.04	-0.12	77	41	Value Trap
Cyclicals (Resources)	069260	HUCHEMS FINE CHEMICAL	0.7	Materials	1.12	0.00	14	85	Style Neutral
Cyclicals (Resources)	003030	SEAH STEEL	0.5	Materials	0.54	0.00	81	93	Restructuring
Cyclicals (Resources)	025900	DONGWHA ENTERPRISE	0.3	Materials	0.02	-0.01	24	82	Style Neutral
Export (Tech)	000660	SK HYNIX	31.2	Information Technology	1.34	0.94	6	50	Style Neutral
Export (Tech)	034220	LG DISPLAY	9.7	Information Technology	0.25	0.20	133	75	Restructuring
Export (Tech)	006400	SAMSUNG SDI	6.6	Information Technology	0.09	0.01	29	25	Momentum Trap
Export (Tech)	011070	LG INNOTEK	1.9	Information Technology	0.12	-0.02	36	39	Style Neutral
Export (Tech)	058470	LEENO INDUSTRIAL	0.5	Information Technology	0.32	0.12	19	90	Best in Class
Export (Tech)	054620	ADVANCED PROCESS SYSTEMS	0.5	Information Technology	1.28	0.10	39	87	Style Neutral
Export (Tech)	095610	TES	0.4	Information Technology	0.84	0.44	43	91	Style Neutral
Export (Tech)	051370	INTERFLEX	0.4	Information Technology	2.62	0.94	37	73	Restructuring
Financials	032830	SAMSUNG LIFE INSURANCE	17.1	Financials	0.27	0.01	41	62	Style Neutral
Financials	105560	KB FINANCIAL GROUP	14.9	Financials	0.51	0.00	22	80	Restructuring
Financials	086790	HANA FINANCIAL GROUP	8.4	Financials	0.16	0.00	50	83	Restructuring
Financials	139130	DGB FINANCIAL GROUP	1.4	Financials	0.17	0.00	53	72	Restructuring
Financials	175330	JB FINANCIAL GROUP	0.7	Financials	0.05	0.00	51	74	Restructuring
Financials	021960	KB CAPITAL	0.4	Financials	0.15	0.00	22	70	Restructuring

Link to the list above on HOLT Lens



Screen #2. Lagging themes: Laggards with sustained CFROI trend after continued price correction

Themes: China-leveraged Consumer, Cyclicals (Industrials), Defensive, Domestic, Export (Auto) Criteria: Market Cap > \$0.3bn, 52W Relative Returns < 0, Forecast CFROI > 3-year & LT median*, current implied WACC* > 3-year median, HOLT Score > 20

▼ Sort							CFROI		Implied WACC (MIDR*)				
Theme	Symbol	Name	Market Cap (\$bn)	GICS Sector	52W Rel. Returns	Forecast	3Y	LT Median*	5Y	Current	5Y Low (Peak Valuation)	HOLT Score	HOLT Investment Style
China-Leveraged Consumer	051900	LG H&H	12.4	Consumer Staples	-22	16.9	15.6	14.8	3.6	4.9	2.3	57	Style Neutral
China-Leveraged Consumer	145990	SAMYANG CORPORATION	0.8	Consumer Staples	-25	6.1	2.7	2.7	8.3	8.5	6.5	52	Value Trap
China-Leveraged Consumer	005740	CROWN CONFECTIONERY	0.4	Consumer Staples	-55	6.8	6.4	6.6	5.7	6.3	3.2	64	Style Neutral
Cyclicals (Industrials)	012630	HYUNDAI DEVELOPMENT	2.8	Industrials	-12	9.6	3.3	3.9	5.7	7.4	3.7	61	Style Neutral
Cyclicals (Industrials)	002020	KOLON	0.6	Industrials	-35	8.9	3.8	4.0	7.4	7.8	4.5	52	Style Neutral
Defensives	015760	KEPCO	24.0	Utilities	-26	5.5	4.2	2.9	8.8	9.7	7.6	47	Style Neutral
Domestic	021240	COWAY	5.6	Consumer Discretionary	-20	20.0	18.7	17.4	2.7	4.2	1.4	33	Quality Trap
Domestic	128940	HANMI PHARM	2.6	Health Care	-68	12.0	8.9	8.1	3.7	6.0	0.6	45	Contrarian
Domestic	086900	MEDY-TOX INC.	1.9	Health Care	-29	23.6	20.5	18.9	2.7	3.7	-3.8	29	Quality Trap
Domestic	185750	CHONG KUN DANG PHARMA	0.8	Health Care	-41	8.7	8.1	7.7	5.8	6.6	3.5	54	Restructuring
Domestic	048260	OSSTEM IMPLANT	0.7	Health Care	-39	11.8	8.1	5.9	3.8	4.4	2.3	34	Style Neutral
Domestic	023590	DAOU TECHNOLOGY	0.6	Information Technology	-24	11.2	6.8	6.8	7.1	9.9	4.1	83	Contrarian
Domestic	025980	EMERSON PACIFIC INC.	0.4	Consumer Discretionary	-15	5.6	0.7	-2.3	3.8	5.7	1.6	30	Style Neutral
Domestic	086450	DONGKOOK PHARM	0.4	Health Care	-23	11.8	8.8	8.8	6.0	7.2	3.9	73	Contrarian
Domestic	069080	WEBZEN	0.4	Information Technology	-42	20.4	18.6	6.6	2.7	8.1	-6.3	71	Contrarian
Cyclicals (Industrials)	047810	KOREA AEROSPACE IND	5.2	Industrials	-21	10.3	8.8	7.4	3.2	4.5	0.0	38	Quality Trap
Domestic	119610	INTEROJO	0.4	Health Care	-19	17.3	13.9	14.4	5.0	5.9	2.3	86	Quality at any Price
Domestic	003850	BORYUNG PHARM.	0.4	Health Care	-26	12.0	7.8	7.1	7.3	9.7	5.7	90	Restructuring
Domestic	008490	SU-HEUNG	0.3	Health Care	-14	5.9	5.3	4.7	4.7	5.5	3.7	48	Style Neutral
Domestic	099190	I-SENS	0.3	Health Care	-34	12.5	11.3	9.4	4.6	6.2	3.0	52	Style Neutral
Export (Auto)	064960	S&T MOTIV	0.6	Consumer Discretionary	-55	9.00	7.1	5.6	5.3	8.2	3.5	58	Contrarian

Link to the list above on HOLT Lens

*LT CFROI Median is the longest available figure of five-, seven-, and ten-year historical median CFROI

*Implied WACC (HOLT Market-Implied Discount Rate) is the WACC which equates market value of a firm to its future free cash flows projected by HOLT model's long-term fade model. The lower the discount rate, the higher the market valuation

HOLT Style x Theme Matrix (Large Caps > \$3bn)

*Good and bad Quality/Momentum/Valuation division are based on top and bottom 40% HOLT Scorecard Percentile for each factor. See Appendix on page 17 for details

Operational Quality	High Quality	Low Quality	High Quality	Low Quality	High Quality	Low Quality	High Quality	Low Quality	
Momentum	Strong M	omentum	Weak M	omentum	Strong Mo	omentum	Weak Mo	mentum	
Valuation		Attractive	Valuation			Unattracti	ve Valuation		
					HOLT Investment	t Styles			
	Best in Class	Restructuring	Contrarian	Value Trap	Quality at Any Price	Momentum Trap	Quality Trap	Worst in Class	Style Neutral (HOLT Score)
China-Leveraged Consumer							Amorepacific		LG H&H (63) Kangwon Land (36) CJCJ (10)
Conglomerates & Holdcos				LG			Amorepacific Group	SK Holdings	Samsung C&T (7) CJ (30)
Cyclicals (Industrials)					Doosan Bobcat		Korea Aerospace Ind		Hyundai Heavy (23) Hyundai Glovis (58) Hyundai E&C (75)
Cyclicals (Resources)	SK Innovation Lotte Chem		Korea Zinc						POSCO (69) LG Chem (86) S-Oil (38)
Defensives		LG Uplus				SK Telecom			KEPCO (49) KT (91) Korea Gas (40)
Domestic				Lotte Shopping	NCSoft		Naver Coway Hanssem	Celltrion Samsung SDS Kakao	KT&G (88) E-Mart (53) BGF Retail (28)
Export (Auto)		Hankook Tire		Hyundai Mobis Kia Motors Hanon Systems					Hyundai Motor (41)
Export (Tech)		LG Display		LG Electronics		Samsung SDI		SEMCO	SK Hynix (49)
Financials		KB FG Samsung F&M Hana FG							Shinhan FG (34) Samsung Life (67) Woori Bank (40)
Samsung Electronics		Samsung Elec							

Source: Credit Suisse HOLT.



HOLT Style x Theme Matrix (Mid-Small Caps < \$3bn)

*Good and bad Quality/Momentum/Valuation division are based on top and bottom 40% HOLT Scorecard Percentile for each factor. See Appendix on page 17 for details

Operational Quality	High Quality	Low Quality	High Quality	Low Quality	High Quality	Low Quality	High Quality	Low Quality	
Momentum	Strong M	omentum		omentum	Strong Mo	omentum	Weak Mo	omentum	
Valuation		Attractive	Valuation			Unattracti	ve Valuation		
					HOLT Investmen	nt Styles			
	Best in Class	Restructuring	Contrarian	Value Trap	Quality at Any Price	Momentum Trap	Quality Trap	Worst in Class	Style Neutral (HOLT Score)
China-Leveraged Consumer		Binggrae	GKL Its Skin Muhak	Orion Lotte Food Nam Yang Dairy	Modetour Leaders Cosmetic	Dongwon Ind. Easy Bio	Korea Kolmar Hana Tour Nutribiotech	Lotte Confectionery Lotte Chilsung Hitejinro	Ottogi (61) Nong Shim (41) SPC Samlip (8)
Conglomerates & Holdcos	Nongshim Holdings	HanjinKAL	Dong-A Socio Wonik Holdings Interpark Holdings	Samyang Holdings Halla Holdings		LS			Hanwha (28) Doosan (7) Youngone Holdings (72)
Cyclicals (Industrials)	IS Dongseo Dongkuk Structures Seo Han		Korea Electric Term Jejuair IMarketKorea	KCC Hanwha Techwin LS Indusrial		Doosan Heavy Doosan Infracore SK Networks	Sewon Cellontech	CJ Korea Express Samsung Eng. Samsung Heavy	Daelim Ind. (48) Hyundai Develop (60) POSCO Daewoo (25)
Cyclicals (Resources)	Korea Petro Chem Hansol Chem ENF Technology	Poongsan Seah Steel	Kukdo Chemical Daehan Steel Sam Hwa Paints	Ssangyong Cement Hanil Cement Unid	SK Materials DNF	SK Chemical SK Gas Foosung	Dongwha Enterprise	Samkwang Glass Duk San Neolux	Soulbrain (94) Kumho Petro Chem (21) Kolon Ind (45)
Defensives				Korea District Heat					Samchully (72)
Domestic	CJ E&M Hugel Samjin Pharm	GS Home Shop Chung Kun Dang Ph Daekyo	Hanmi Pharm Innocean Worldwide Com2Us	Yuhan Shinsegae Green Cross	Loen Entertainment Vieworks Interojo	LG Life Science II-Yang Pharm Wemade Ent.	Medy-Tox Fila Korea Duzonbizon	Hotel Shilla Seegene Donga ST	Hyundai Dept. Store (53) Cheil Worldwide (45) CJ CGV (3)
Export (Auto)	Hyundai Eng. Plas.	Nexen Tire SL Hwa Shin	S&T Motiv Korea Autoglass	Hyundai Wia Pyeong Hwa Auto					Mando (39) Ssangyong Motor (41) Sebang Global (86)
Export (Tech)	Wonik IPS Leeno Industrial PSK	LG Innotek AP Systems Dae Duk Electronics	KCTech Spigen Korea Sekonix	Dongbu Hitek		SFA Engineering EO Technics Jusung Engineering	Hyvision System	Hansol Technics	Seoul Semi (30) Koh Young Tech (79) Silicon Works (91)
Financials	Meritz Securities NICE Info. Service Aju Capital	Hyundai M&F DGB FG JB FG		BNK FG KB Insurance Tong Yang Life		NH Inv. & Sec.	Kiwoom Securities	Mirae Asset Daewoo Samsung Sec.	Korea Inv. Holdings (7) Meritz F&M (42) Korean Re (89)
Samsung Electronics									

Source: Credit Suisse HOLT.







Appendices

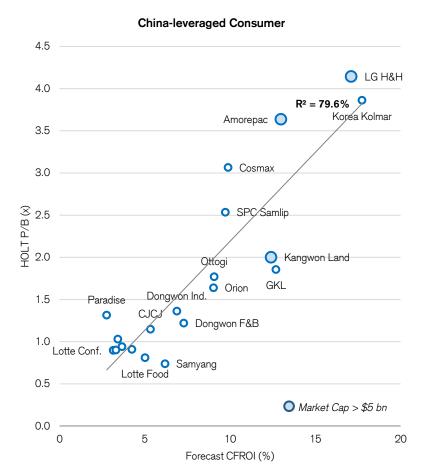
www.credit-suisse.com/holtmethodology

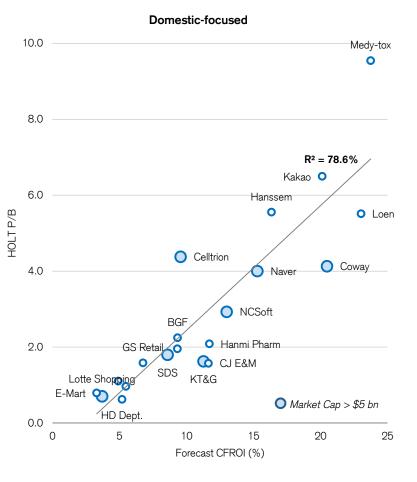
Market Commentary

THIS REPORT IS MARKET COMMENTARY AND NOT A RESEARCH DOCUMENT

Appendix: HOLT P/B-CFROI relationship by sector

China-leveraged Consumer and domestic-focused industries (Largest 20)

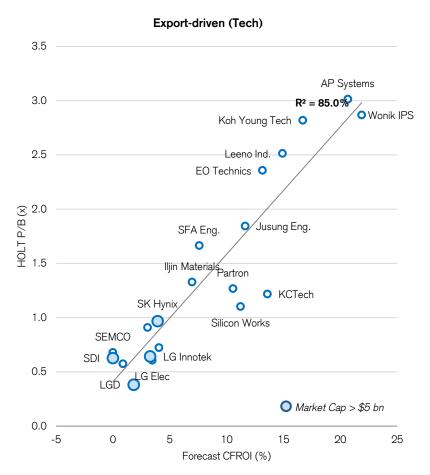




Source: Credit Suisse HOLT.

CLARITY IS CONFIDENCE

Exporters – Tech and Auto (largest 20)



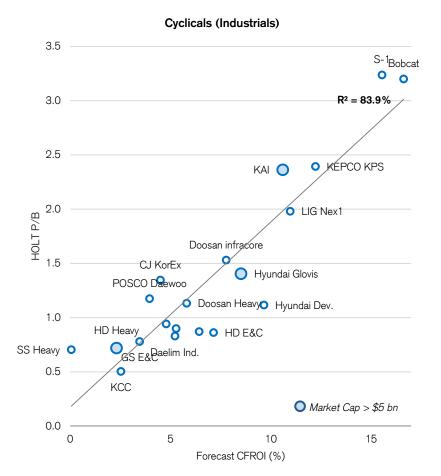


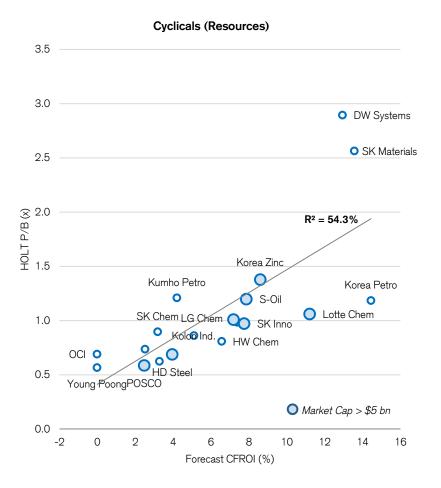
Source: Credit Suisse HOLT.

CLARITY IS CONFIDENCE

Appendix: HOLT P/B-CFROI relationship by sector (continued)

Cyclicals – Industrials and Resources (largest 20)





Source: Credit Suisse HOLT.

CLARITY IS CONFIDENCE

	Quality	Momentum	Valuation
Best in Class			
Contrarian			
Restructuring			
Value Trap			
Quality at Any Price			
Quality Trap			
Momentum Trap			
Worst in Class			
	top 40% bottom 40%		

Operational Quality

CFROI®

Cash Flow Return on Investment for the last reported year. The ratio of gross cash flow to gross investments translated into an internal rate of return recognizing the finite economic life of depreciating assets and the residual value of non-depreciating assets. This screening item is the CFROI calculated for the last reported fiscal year The better the Return on Investment, the higher the score.

Managing for Value

Managing For Value comprises the CFROI® – Discount Rate spread multiplied by the Real asset growth (inflation adjusted gross investments). The aim is to identify whether the company's growth is 'good' or sustainable growth. Companies score highly that are either growing real assets if the spread is positive, or shrinking assets if the spread is negative.

Change in Value Creation

Change in Value Creation measures the improvement in 'economic profit' in the last reported year compared with the previous year. A positive trend with low variation will get a higher score.

<u>Momentum</u>

CFROI® Key Momentum, 13-wk

The CFROI® key momentum measures the improvement in CFROI® that follow any changes in underlying consensus earnings revisions. Higher percentage points receive a higher score.

Price Momentum (52-week)

Price Momentum (1 year) measures the percentage change in market value over past 52 weeks. Share price outperformance gets a higher score.

Daily Liquidity Average

Daily Liquidity Average measures the number of shares traded for the last quarter divided by 63 trading days multiplied by the current week-end price, divided by market cap. Increased trading volume can be an indicator of increased interest in the stock. The higher the number, the better the score.

Valuation

% Change to Best Price

The percentage difference between the HOLT Default Forecast Warranted Value and the past week's closing share price. A high percentage upside improves the score.

Economic P/E

Enterprise Value over Net Assets, divided by CFROI®. A lower multiple achieves a higher score. Negative multiples receive a score of 1.

Value/Cost

Enterprise Value over Net Assets. A lower multiple achieves a higher score.

Dividend Yield (FY1E Div / Current Price)

Consensus mean dividend for the first forecast year, divided by the latest share price. The higher the yield, the higher the score.

Global Market Commentary Disclaimer

References to Credit Suisse include all of the subsidiaries and affiliates of Credit Suisse AG operating under its Global Markets division. For more information on our structure, please follow the attached link: <u>https://www.credit-suisse.com/us/en/about-us/our-company.html</u>.

This material has been prepared by individual traders or sales personnel of Credit Suisse identified in this material as "Authors" and not by Credit Suisse's research department. The information contained in this document has been provided as general market commentary only and does not constitute any form of regulated financial advice, legal, tax or other regulated financial service. It is intended only to provide observations and views of these traders or sales personnel, which may be different from, or inconsistent with, the observations and views of Credit Suisse research department analysts, other Credit Suisse traders or sales personnel, or the proprietary positions of Credit Suisse. Observations and views expressed herein may be changed by the trader or sales personnel at any time without notice. Credit Suisse accepts no liability for losses arising from the use of this material.

This material does not purport to contain all of the information that an interested party may desire and, in fact, provides only a limited view of a particular market. It is not investment research, or a research recommendation for regulatory purposes, as it does not constitute substantive research or analysis. The information provided is not intended to provide a sufficient basis on which to make an investment decision and is not a personal recommendation or investment advice. While it has been obtained from or based upon sources believed by the trader or sales personnel to be reliable, each of the trader or sales personnel and Credit Suisse does not represent or warrant its accuracy or completeness and is not responsible for losses or damages arising from the use of this material.

This material is provided for informational purposes and does not constitute an invitation or offer to subscribe for or purchase any of the products or services mentioned. It is directed exclusively at Credit Suisse's market professional and institutional investor clients (e.g. QIBs) as defined by the rules of the relevant regulatory authority, and must not be forwarded or shared with retail customers or the public. It is not intended for private customers and such persons should not rely on this material. Moreover, any investment or service to which this material may relate will not be made available by Credit Suisse to such private customers.

This material may have previously been communicated to the Credit Suisse trading desk or other Credit Suisse clients. You should assume that the trading desk makes markets and/or currently maintains positions in any of the securities mentioned above. Credit Suisse may, from time to time, participate or invest in transactions with issuers of securities that participate in the markets referred to herein, perform services for or solicit business from such issuers, and/or have a position or effect transactions in the securities or derivatives thereof. Information provided on any trades executed with Credit Suisse will not constitute an official confirmation of the trade details, and all preliminary trade report information is subject to our formal written confirmation.

FOR IMPORTANT DISCLOSURES on companies covered in Credit Suisse Investment Banking Division research reports, please see <u>www.credit-suisse.com/researchdisclosures</u>. To obtain a copy of the most recent Credit Suisse research on any company mentioned please contact your sales representative or go to <u>http://www.credit-suisse.com/researchandanalytics</u>.

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, expressed or implied is made regarding future performance. Backtested, hypothetical or simulated performance results have inherent limitations. Simulated results are achieved by the retroactive application of a backtested model itself designed with the benefit of hindsight. The backtesting of performance differs from the actual account performance because the investment strategy may be adjusted at any time, for any reason and can continue to be changed until desired or better performance results are achieved. Alternative modeling techniques or assumptions might produce significantly different results and prove to be more appropriate. Past hypothetical backtest results are neither an indicator nor a guarantee of future returns. Actual results will vary from the analysis.

Investment principal on securities can be eroded depending on sale price or market price. In addition, there are securities on which investment principal may be eroded due to changes in redemption amounts. Care is required when investing in such instruments.

HOLT Disclaimer

The HOLT methodology does not assign ratings or a target price to a security. It is an analytical tool that involves use of a set of proprietary quantitative algorithms and warranted value calculations, collectively called the HOLT valuation model, that are consistently applied to all the companies included in its database. Third-party data (including consensus earnings estimates) are systematically translated into a number of default variables and incorporated into the algorithms available in the HOLT valuation model. The source financial statement, pricing, and earnings data provided by outside data vendors are subject to quality control and may also be adjusted to more closely measure the underlying economics of firm performance. These adjustments provide consistency when analyzing a single company across time, or analyzing multiple companies across industries or national borders. The default variables may also be adjusted to produce alternative warranted prices, any of which could occur. The warranted price is an algorithmic output applied systematically across all companies based on historical levels and volatility of returns. Additional information about the HOLT methodology is available on request

CFROI, CFROE, HOLT, HOLT Lens, HOLTfolio, "Clarity is Confidence" and "Powered by HOLT" are trademarks or registered trademarks of Credit Suisse Group AG or its affiliates in the United States and other countries.

HOLT is a corporate performance and valuation advisory service of Credit Suisse.

© 2016 Credit Suisse Group AG and its subsidiaries and affiliates. All rights reserved.

European Market Abuse Regulation (Securities Traded on EU-Regulated Markets)

The date and time published on the title page of this material (the "Published Date and Time") are the date and time of completion of production of this material and the date and time of its first dissemination.

The European Market Abuse Regulation (596/2014) and associated rules ("MAR") define "investment recommendations" as information recommending or suggesting an investment strategy, explicitly or implicitly, concerning one or several financial instruments or the issuers, including any opinion as to the present or future value or price of such instruments, intended for distribution channels or for the public. To the extent this material contains any "investment recommendation" as defined under MAR for a security traded on an EU-regulated market, the Published Date and Time are also the date and time of completion of production, and the date and time of first dissemination, of any such "investment recommendation" (unless otherwise expressly specified in this material).

This material is produced and distributed by Credit Suisse and its subsidiaries and affiliates. Such subsidiaries and affiliates may include: Credit Suisse Securities (Europe) Limited, Credit Suisse Securities (USA) LLC, Credit Suisse Management (Australia) Pty, Credit Suisse Securities (Japan) Limited, Credit Suisse Securities (Europe) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Hong Kong) Limited, Credit Suisse Securities (Japan) Limited, Credit Suisse Securities (Linope) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Hong Kong) Limited, Credit Suisse Securities (Japan) Limited, Credit Suisse Securities (Linope) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Hong Kong) Limited, Credit Suisse Securities (Japan) Limited, Credit Suisse Securities (Linope) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Hong Kong) Limited, Credit Suisse Securities (Linope) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Hong Kong) Limited, Credit Suisse Securities (Linope) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Hong Kong) Limited, Credit Suisse Securities (Linope) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Hong Kong) Limited, Credit Suisse Securities (Linope) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Hong Kong) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Linope) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Linope) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Linope) Limited, Seoul Branch, Credit Suisse (Linope) Limited, Seoul Branch, Credit Suisse AG, Singapore Branch, Credit Suisse (Linope) Limited, Seoul Branch, Credit Suisse (Lino

Please follow the attached hyperlink for important further information regarding conflicts of interest, disclosures, and a history of our "investment recommendations" as defined by MAR: <u>https://rave.credit-suisse.com/disclosures/view/nr</u>

For region specific disclosures, including information about applicable registrations and certain regulatory disclosures, please follow the links below:

Americas: https://www.credit-suisse.com/legal/en/ib/market_commentary.jsp

Europe: https://www.credit-suisse.com/legal/en/ib/europe.jsp (Credit Suisse Securities (Europe) Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority in the United Kingdom)

Asia: https://www.credit-suisse.com/legal/en/ib/market_commentary_disclaimer_asia.jsp

General investors in Japan should open the following link and read it: https://www.credit-suisse.com/ip/investment banking/ia/disclaimer/