

# Tatts Group (TTS.AX / TTS AU)

**DECREASE TARGET PRICE** 

#### 4 02 (from 4.50) 4.20 Target price ESG risk (%) NA 5,903.4 402.2

**NEUTRAL** 

Yr avg. mthly trading (A\$mn) Projected return: Capital gain (%) 4.5 Dividend yield (net %) 5.9 Total return (%) 10.3

Target price is for 12 months.

Rating

Price (16-Feb,A\$)

Target Price (A\$)

Market cap (A\$mn)

### Research Analysts

**Larry Gandler** 61 3 9280 1855

larry.gandler@credit-suisse.com

Ben Levin 61 3 9280 1766

ben.levin@credit-suisse.com

# 1H17: Wagering weighs on result

- Lotteries: exceeded previous TTS guidance, issued mid-December with a slightly better run-of-jackpots as TTS closed the period. Overall, the business was managed well, against some very bad-luck and the lowest jackpot run in about five years. The outlook appears more favourable and challenging comps should diminish as 2H17 progresses. We expect 8% EBIT growth in FY18, restoring lottery earnings above the previous FY16 base.
- Wagering: still no green shoots. Spring carnival revenue may have been down 5%+, a sharp deterioration from the 4%+ revenue run-rate that TTS revealed in August 2016. TTS began to optimise its book yield, with reductions in free bets/promotions and improved risk management, but this came with a reduction in betting volume (turnover). This is an important case study in the context of Tabcorp's (TAH) revenue synergy target which assumes it can maintain turnover and improve book yields. We are skeptical.
- We have downgraded EPS 3-7% reflecting an A\$15mn wagering EBITDA reduction that ultimately needs to be recovered by TAH. Without recovery, about A\$150mn in value erosion represents further over-payment by TAH.
- M&A: The TAH and Pacific Consortium proposals are close in value. Based on TAH's closing share price, TTS shareholders would accrue A\$4.00 vs. A\$3.91 under a Pacific consortium proposal (A\$3.40 cash + A\$0.51/share CS valuation for a wagering/gaming business). We believe the difference is that TAH has a strategy to restore value to the wagering business while the Pacific Consortium merely hopes for a takeover of the wagering business. We therefore consider the TAH offer superior. We also wonder whether the Pacific Consortium will alter its proposal despite lower TTS earnings.
- The ACCC, 9 March 2017 releases findings on TAH/TTS proposed merger.
- NEUTRAL rating retained. Our A\$4.20 target price (previously A\$4.50) for TTS is set using the TAH Scheme and our A\$5.00/share valuation for TAH (down from A\$5.35 at last update).



Source: Company data, Thomson Reuters, IBES, Credit

Calcoo Collinatoo			
Performance	1M	3M	12M
Absolute (%)	-8.43	3.88	1.01
Relative (%)	-10.48	-4.65	-18.13

Financial and valuation metrics				
Year	6/16A	6/17E	6/18E	6/19E
Revenue (A\$ mn)	2,928	2,813	2,945	2,331
EBITDA (A\$ mn)	495	452	478	435
EBIT (A\$ mn)	420	372	395	351
Net Income (Adj.) (A\$ mn)	263	228	233	198
EPS (Adj.) (Ac)	18.00	15.57	15.91	13.50
Change from previous EPS (%)	n.a.	(2.7)	(4.8)	(6.6)
EPS growth (%)	1.8	(13.5)	2.2	(15.1)
Consensus EPS (Ac)	18.30	16.80	17.80	18.30
P/E (x)	22.3	25.8	25.3	29.8
Dividends (Ac)	17.50	37.50	15.50	13.00
Dividend yield (%)	4.4	9.3	3.9	3.2
Price/Book (x)	2.0	2.0	2.2	2.2
Net debt/EBITDA (x)	2.1	2.6	3.2	3.3

Source: Company data, Thomson Reuters, Credit Suisse estimates

DISCLOSURE APPENDIX AT THE BACK OF THIS REPORT CONTAINS IMPORTANT DISCLOSURES, ANALYST CERTIFICATIONS, LEGAL ENTITY DISCLOSURE AND THE STATUS OF NON-US ANALYSTS. US Disclosure: Credit Suisse does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.



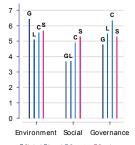
# Tatts Group (TTS.AX / TTS AU)

# Price (16 Feb 2017): A\$4.02; Rating: NEUTRAL; Target Price: (from A\$4.5) A\$4.2; Analyst: Larry Gandler

Preferred capital         -	Income Statement	6/16A	6/17E	6/18E	6/19E
Depr. & Amort.   (75)   (80)   (83)   (84)   (84)   (81)	Revenue	2,928	2,813	2,945	2,331
Ball	EBITDA	495	452	478	435
Ball	Depr. & Amort.	(75)	(80)	(83)	(84)
Net interest exp.   (41)			372		
Other         0         0         0         0           Profit before tax         378         324         336         285           Income tax         (115)         (95)         (102)         (87)           Profit after tax         263         228         233         198           Minorities         -0         -0         -0         -0         -0           Preferred dividends         -0         -0         -0         -0         -0         -0           Associates & Other         0         0         0         0         0         0           Normalised NPAT         263         228         233         198           Unusal item after tax         (30)         (1)         0         0           Net profit (Reported)         234         227         233         198           Balance Sheet         6/16A         6/17E         6/18E         6/19E           Cash & equivalents         70         69         75         74           Inventories         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2	Associates	-	-	-	-
Profit before tax	Net interest exp.	(41)	(48)	(59)	(66)
Income tax	Other	0	0	0	0
Profit after tax   263   228   233   198   Minorities   -0   -0   -0   -0   -0   -0   -0   -	Profit before tax	378	324	336	285
Minoritities	Income tax	(115)	(95)	(102)	(87)
Preferred dividends	Profit after tax	263	228	233	198
Associates & Other Normalised NPAT 263 228 233 198 Unusal item after tax (30) (11) 0 0 Net profit (Reported) 234 227 233 198 Balance Sheet 6/16A 6/17E 6/18E 6/19E Cash & equivalents 70 69 75 74 Inventories 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Minorities	-0	-0	-0	-0
Normalised NPAT	Preferred dividends	-0	-0	-0	-0
Unusal item after tax	Associates & Other	0	0	0	0
Net profit (Reported)   234   227   233   198   234   227   233   198   234   227   233   198   234   237   233   198   234   237   238   238   6/19E   6/19	Normalised NPAT	263	228	233	198
Balance Sheet         6/16A         6/17E         6/18E         6/19E           Cash & equivalents         70         69         75         74           Inventories         2	Unusal item after tax	(30)	(1)	0	0
Balance Sheet         6/16A         6/17E         6/18E         6/19E           Cash & equivalents         70         69         75         74           Inventories         2	Net profit (Reported)	234	227	233	198
Inventories		6/16A	6/17E	6/18E	6/19E
Receivables	Cash & equivalents	70	69	75	74
Receivables	Inventories	2	2	2	2
Current assets         393         334         348         311           Property, plant & equip.         157         303         389         397           Intangibles         4,462         4,421         4,380         4,339           Other non-current assets         222         222         222         222         222           Non-current assets         4,841         4,946         4,991         4,958         1,5340         5,269           Payables         594         571         581         591         Interest bearing debt         1,130         1,250         1,590         1,520           Other liabilities         536         511         512         6262         6262         2622		82	80	81	82
Current assets         393         334         348         311           Property, plant & equip.         157         303         389         397           Intangibles         4,462         4,421         4,380         4,339           Other non-current assets         222         222         222         222         222           Non-current assets         4,841         4,946         4,991         4,958         1,5340         5,269           Payables         594         571         581         591         Interest bearing debt         1,130         1,250         1,590         1,520           Other liabilities         536         511         512         6262         6262         2622	Other current assets	238	183	190	153
Property, plant & equip.         157         303         389         397           Intangibles         4,462         4,421         4,380         4,330           Other non-current assets         222         222         222         222           Non-current assets         4,841         4,946         4,991         4,958           Total assets         5,233         5,281         5,340         5,269           Payables         594         571         581         591           Interest bearing debt         1,130         1,250         1,590         1,520           Other liabilities         536         511         511         511           Total shares         2,973         2,948         2,657         2,646           Ordinary equity         2,973         2,948         2,657         2,646           Net assets         2,973         2,948         2,657         2,646           Net both         1,060<		393	334	348	
Intangibles	Property, plant & equip.	157	303	389	397
Other non-current assets         222         222         222         222           Non-current assets         4,841         4,946         4,991         4,958           Total assets         5,233         5,281         5,340         5,269           Payables         594         571         581         591           Interest bearing debt         1,130         1,250         1,590         1,520           Other liabilities         536         511         511         511           Total liabilities         2,261         2,332         2,682         2,622           Net assets         2,973         2,948         2,657         2,646           Ordinary equity         2,973         2,948         2,657         2,646           Minority interests         0         0         0         0         0         0           Preferred capital         -		4.462	4.421	4.380	4.339
Non-current assets         4,841         4,946         4,991         4,958           Total assets         5,233         5,281         5,340         5,269           Payables         594         571         581         591           Interest bearing debt         1,130         1,250         1,590         1,520           Other liabilities         536         511         511         511           Total liabilities         2,261         2,332         2,682         2,622           Net assets         2,973         2,948         2,657         2,646           Ordinary equity         2,973         2,948         2,657         2,646           Minority interests         0         0         0         0           Ordinary equity         2,973         2,948         2,657         2,646           Minority interests         0         0         0         0         0           Preferred capital         -					
Total assets         5,233         5,281         5,340         5,269           Payables         594         571         581         591           Interest bearing debt         1,130         1,250         1,590         1,520           Other liabilities         536         511         511         511           Total liabilities         2,261         2,332         2,682         2,622           Net assets         2,973         2,948         2,657         2,646           Minority interests         0         0         0         0         0           Ordinary equity         2,973         2,948         2,657         2,646           Minority interests         0         0         0         0         0           Minority interests         0         0         0         0         0         0           Preferred capital         -		4,841	4,946	4,991	
Payables         594         571         581         591           Interest bearing debt         1,130         1,250         1,590         1,520           Other liabilities         536         511         511         511           Total liabilities         2,261         2,332         2,682         2,622           Net assets         2,973         2,948         2,657         2,646           Ordinary equity         2,973         2,948         2,657         2,646           Minority interests         0         0         0         0         0           Preferred capital         - <td></td> <td></td> <td></td> <td></td> <td></td>					
Interest bearing debt					
Other liabilities         536         511         511         511           Total liabilities         2,261         2,332         2,682         2,622           Net assets         2,973         2,948         2,657         2,646           Ordinary equity         2,973         2,948         2,657         2,646           Minority interests         0         0         0         0         0           Preferred capital         - <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
Total liabilities         2,261         2,332         2,682         2,622           Net assets         2,973         2,948         2,657         2,646           Ordinary equity         2,973         2,948         2,657         2,646           Minority interests         0         0         0         0           Preferred capital         -         -         -         -           Total shareholder funds         2,973         2,948         2,657         2,646           Net Debt         1,060         1,181         1,515         1,446           Cash Flow         6/16A         6/17E         6/18E         6/19E           EBIT         420         372         395         351           Net Interest         (38)         (48)         (59)         (66)           Depr & Amort         75         80         83         84           Tax Paid         (124)         (70)         (102)         (87)           Change in Working capital         23         (11)         0         (17)           Other cash and non-cash items         (92)         (5)         2         2           Operating cashflow         263         317         319					
Ordinary equity         2,973         2,948         2,657         2,646           Minority interests         0         0         0         0           Preferred capital         -         -         -         -           Total shareholder funds         2,973         2,948         2,657         2,646           Net Debt         1,060         1,181         1,515         1,446           Cash Flow         6/16A         6/17E         6/18E         6/19E           EBIT         420         372         395         351           Net Interest         (38)         (48)         (59)         (66)           Depr & Amort         75         80         83         84           Tax Paid         (124)         (70)         (102)         (87)           Change in Working capital         23         (11)         0         (17)           Change in Working capital         23         (11)         0         (17)           Other cash and non-cash items         (92)         (5)         2         2         2           Operating cashflow         263         317         319         268           Capex         expansionary         - <t< td=""><td>Total liabilities</td><td></td><td></td><td>2.682</td><td>2,622</td></t<>	Total liabilities			2.682	2,622
Ordinary equity         2,973         2,948         2,657         2,646           Minority interests         0         0         0         0           Preferred capital         -         -         -         -           Total shareholder funds         2,973         2,948         2,657         2,646           Net Debt         1,060         1,181         1,515         1,446           Cash Flow         6/16A         6/17E         6/18E         6/19E           EBIT         420         372         395         351           Net Interest         (38)         (48)         (59)         (66)           Depr & Amort         75         80         83         84           Tax Paid         (124)         (70)         (102)         (87)           Change in Working capital         23         (11)         0         (17)           Other cash and non-cash items         (92)         (5)         2         2         2           Operating cashflow         263         317         319         268         Capex         (98)         (118)         (59)         (51)           Capex - expansionary         -         -         -         -	Net assets	2.973	2,948	2.657	2,646
Minority interests         0         0         0         0           Preferred capital         -         -         -         -           Total shareholder funds         2,973         2,948         2,657         2,646           Net Debt         1,060         1,181         1,515         1,446           Cash Flow         6/16A         6/17E         6/18E         6/19E           EBIT         420         372         395         351           Net Interest         (38)         (48)         (59)         (66)           Depr & Amort         75         80         83         84           Tax Paid         (124)         (70)         (102)         (87)           Change in Working capital         23         (11)         0         (17)           Other cash and non-cash items         (92)         (5)         2         2           Operating cashflow         263         317         319         268           Capex         (98)         (118)         (59)         (51)           Capex - expansionary         -         -         -         -           Capex - Maintenance         -         -         -         -	Ordinary equity				
Preferred capital					0
Total shareholder funds         2,973         2,948         2,657         2,646           Net Debt         1,060         1,181         1,515         1,446           Cash Flow         6/16A         6/17E         6/18E         6/19E           EBIT         420         372         395         351           Net Interest         (38)         (48)         (59)         (66)           Depr & Amort         75         80         83         84           Tax Paid         (124)         (70)         (102)         (87)           Change in Working capital         23         (11)         0         (17)           Other cash and non-cash items         (92)         (5)         2         2         2           Operating cashflow         263         317         319         268         Capex         (98)         (118)         (59)         (51)           Capex - expansionary         -		-	-	-	-
Cash Flow         6/16A         6/17E         6/18E         6/19E           EBIT         420         372         395         351           Net Interest         (38)         (48)         (59)         (66)           Depr & Amort         75         80         83         84           Tax Paid         (124)         (70)         (102)         (87)           Change in Working capital         23         (11)         0         (17)           Other cash and non-cash items         (92)         (5)         2         2         2           Operating cashflow         263         317         319         268         268         2	Total shareholder funds	2,973	2,948	2,657	2,646
EBIT   420   372   395   351     Net Interest   (38)   (48)   (59)   (66)     Depr & Amort   75   80   83   84     Tax Paid   (124)   (70)   (102)   (87)     Change in Working capital   23   (11)   0   (17)     Other cash and non-cash items   (92)   (5)   2   2     Operating cashflow   263   317   319   268     Capex   (98)   (118)   (59)   (51)     Capex - expansionary       Capex - expansionary       Acquistions & Invest   0   (68)   (69)   0     Asset sale proceeds   190   0   0   0   0     Other       Investing cashflow   92   (186)   (128)   (51)     Investing cashflow   92   (186)   (128)   (51)     Dividends paid   (237)   (256)   (524)   (209)     Equity raised   0   4   0   0     Net borrowings   197   120   340   (10)     Other financing cash in/(outflows)   (540)   0   0   0     Other financing cash in/(outflows)   (540)   0   0   0     Other financing cash in/(outflows)   (581)   (133)   (184)   (219)     Total cashflow   (226)   (1)   6   (22)     Adjustments   (1)   0   0   0	Net Debt	1,060	1,181	1,515	1,446
Net Interest         (38)         (48)         (59)         (66)           Depr & Amort         75         80         83         84           Tax Paid         (124)         (70)         (102)         (87)           Change in Working capital         23         (11)         0         (17)           Other cash and non-cash items         (92)         (5)         2         2           Operating cashflow         263         317         319         268           Capex         (98)         (118)         (59)         (51)           Capex - expansionary         -         -         -         -           Capex - Maintenance         -         -         -         -           Capex - Maintenance         -         -         -         -           Acquistions & Invest         0         (68)         (69)         0           Other         -         -         -         -         -           Investing cashflow         92         (186)         (128)         (51)           Dividends paid         (237)         (256)         (524)         (209)           Equity raised         0         4         0         0 </td <td>Cash Flow</td> <td>6/16A</td> <td>6/17E</td> <td>6/18E</td> <td>6/19E</td>	Cash Flow	6/16A	6/17E	6/18E	6/19E
Depr & Amort         75         80         83         84           Tax Paid         (124)         (70)         (102)         (87)           Change in Working capital         23         (11)         0         (17)           Other cash and non-cash items         (92)         (5)         2         2           Operating cashflow         263         317         319         268           Capex         (98)         (118)         (59)         (51)           Capex - expansionary         -         -         -         -         -           Capex - Maintenance         -	EBIT	420	372	395	351
Tax Paid         (124)         (70)         (102)         (87)           Change in Working capital         23         (11)         0         (17)           Other cash and non-cash items         (92)         (5)         2         2           Operating cashflow         263         317         319         268           Capex         (98)         (118)         (59)         (51)           Capex - expansionary         -         -         -         -           Capex - Maintenance         -         -         -         -         -           Acquistions & Invest         0         (68)         (69)         0         0           Asset sale proceeds         190         0         0         0         0         0           Other         - <td>Net Interest</td> <td>(38)</td> <td>(48)</td> <td>(59)</td> <td>(66)</td>	Net Interest	(38)	(48)	(59)	(66)
Change in Working capital         23         (11)         0         (17)           Other cash and non-cash items         (92)         (5)         2         2           Operating cashflow         263         317         319         268           Capex         (98)         (118)         (59)         (51)           Capex - expansionary         -         -         -         -         -         -           Capex - Maintenance         - <td< td=""><td>Depr &amp; Amort</td><td>75</td><td>80</td><td>83</td><td>84</td></td<>	Depr & Amort	75	80	83	84
Other cash and non-cash items         (92)         (5)         2         2           Operating cashflow         263         317         319         268           Capex         (98)         (118)         (59)         (51)           Capex - expansionary         -         -         -         -           Capex - Maintenance         -         -         -         -         -           Acquistions & Invest         0         (68)         (69)         0           Asset sale proceeds         190         0         0         0           Other         -         -         -         -         -           Investing cashflow         92         (186)         (128)         (51)           Dividends paid         (237)         (256)         (524)         (209)           Equity raised         0         4         0         0           Net borrowings         197         120         340         (10)           Other financing cash in/(outflows)         (540)         0         0         0           Financing cash flow         (581)         (133)         (184)         (219)           Total cashflow         (581)         (133)	Tax Paid	(124)	(70)	(102)	(87)
Operating cashflow         263         317         319         268           Capex         (98)         (118)         (59)         (51)           Capex - expansionary         -         -         -         -           Capex - Maintenance         -         -         -         -           Acquistions & Invest         0         (68)         (69)         0           Asset sale proceeds         190         0         0         0           Other         -         -         -         -         -           Investing cashflow         92         (186)         (128)         (51)           Dividends paid         (237)         (256)         (524)         (209)           Equity raised         0         4         0         0           Net borrowings         197         120         340         (10)           Other financing cash in/(outflows)         (540)         0         0         0           Financing cashflow         (581)         (133)         (184)         (219)           Total cashflow         (226)         (1)         6         (22)           Adjustments         (1)         0         0         0	Change in Working capital	23	(11)		(17)
Capex Capex         (98)         (118)         (59)         (51)           Capex - expansionary         - <td>Other cash and non-cash items</td> <td>(92)</td> <td>(5)</td> <td>2</td> <td>2</td>	Other cash and non-cash items	(92)	(5)	2	2
Capex - expansionary         -	Operating cashflow	263	317	319	268
Capex - Maintenance         -	Capex	(98)	(118)	(59)	(51)
Capex - Maintenance         -	Capex - expansionary	-	-	-	-
Asset sale proceeds     190     0     0     0       Other     -     -     -     -       Investing cashflow     92     (186)     (128)     (51)       Dividends paid     (237)     (256)     (524)     (209)       Equity raised     0     4     0     0       Net borrowings     197     120     340     (10)       Other financing cash in/(outflows)     (540)     0     0     0       Financing cashflow     (581)     (133)     (184)     (219)       Total cashflow     (226)     (1)     6     (2)       Adjustments     (1)     0     0     0	Capex - Maintenance	-	-	-	-
Other         -         -         -           Investing cashflow         92         (186)         (128)         (51)           Dividends paid         (237)         (256)         (524)         (209)           Equity raised         0         4         0         0           Net borrowings         197         120         340         (10)           Other financing cash in/(outflows)         (540)         0         0         0           Financing cashflow         (581)         (133)         (184)         (219)           Total cashflow         (226)         (1)         6         (2)           Adjustments         (1)         0         0         0	Acquistions & Invest	0	(68)	(69)	0
Investing cashflow         92         (186)         (128)         (51)           Dividends paid         (237)         (256)         (524)         (209)           Equity raised         0         4         0         0           Net borrowings         197         120         340         (10)           Other financing cash in/(outflows)         (540)         0         0         0           Financing cashflow         (581)         (133)         (184)         (219)           Total cashflow         (226)         (1)         6         (2)           Adjustments         (1)         0         0         0	Asset sale proceeds	190	0	0	0
Dividends paid         (237)         (256)         (524)         (209)           Equity raised         0         4         0         0           Net borrowings         197         120         340         (10)           Other financing cash in/(outflows)         (540)         0         0         0           Financing cashflow         (581)         (133)         (184)         (219)           Total cashflow         (226)         (1)         6         (2)           Adjustments         (1)         0         0         0	Other	-	-	-	-
Equity raised         0         4         0         0           Net borrowings         197         120         340         (10)           Other financing cash in/(outflows)         (540)         0         0         0         0           Financing cashflow         (581)         (133)         (184)         (219)           Total cashflow         (226)         (1)         6         (2)           Adjustments         (1)         0         0         0	Investing cashflow	92	(186)	(128)	(51)
Equity raised         0         4         0         0           Net borrowings         197         120         340         (10)           Other financing cash in/(outflows)         (540)         0         0         0         0           Financing cashflow         (581)         (133)         (184)         (219)           Total cashflow         (226)         (1)         6         (2)           Adjustments         (1)         0         0         0		(237)	(256)		
Net borrowings         197         120         340         (10)           Other financing cash in/(outflows)         (540)         0         0         0           Financing cashflow         (581)         (133)         (184)         (219)           Total cashflow         (226)         (1)         6         (2)           Adjustments         (1)         0         0         0					. ,
Other financing cash in/(outflows)         (540)         0         0         0           Financing cashflow         (581)         (133)         (184)         (219)           Total cashflow         (226)         (1)         6         (2)           Adjustments         (1)         0         0         0		197	120	340	
Financing cashflow         (581)         (133)         (184)         (219)           Total cashflow         (226)         (1)         6         (2)           Adjustments         (1)         0         0         0		(540)	0	0	
Total cashflow         (226)         (1)         6         (2)           Adjustments         (1)         0         0         0		(581)	(133)	(184)	(219)
Adjustments (1) 0 0					
	Adjustments	(1)	Ó	0	
	Movement in cash/equivalents		(1)	6	(2)

_				
Earnings	6/16A	6/17E	6/18E	6/19E
Equiv. FPO (period avg)	1,464	1,465	1,465	1,465
EPS (CS adj.) (c)	18.0	15.6	15.9	13.5
EPS growth (%)	1.8	(13.5)	2.2	(15.1)
DPS (c)	17.5	37.5	15.5	13.0
Dividend Payout (%)	97.2	240.9	97.4	96.3
Free CFPS (c)	11.3	13.6	17.7	14.8
Valuation	6/16A	6/17E	6/18E	6/19E
P/E (CS) (x)	22.3	25.8	25.3	29.8
PEG (x)	12.3	(1.9)	11.5	(2.0)
EV/EBIT (x)	16.6	19.1	18.8	21.0
EV/EBITDA (x)	14.1	15.7	15.5	16.9
Dividend Yield (%)	4.4	9.3	3.9	3.2
FCF Yield (%)	2.8	3.4	4.4	3.7
Price to book (x)	2.0	2.0	2.2	2.2
Returns	6/16A	6/17E	6/18E	6/19E
Return on Equity (%)	8.9	7.7	8.8	7.5
Profit Margin (%)	9.0	8.1	7.9	8.5
Asset Turnover (x)	0.6	0.5	0.6	0.4
Equity Multiplier (x)	1.8	1.8	2.0	2.0
Return on Assets (%)	5.0	4.3	4.4	3.8
Return on Invested Cap.	7.2	6.3	6.6	6.0
Gearing	6/16A	6/17E	6/18E	6/19E
ND/ND+E (%)	26.3	28.6	36.3	35.3
Net Debt to EBITDA (x)	2.1	2.6	3.2	3.3
Int Cover (EBITDA) (x)	12.0	9.4	8.1	6.6
Int Cover (EBIT) (x)	10.2	7.7	6.7	5.3
Capex to Sales (%)	3.3	4.2	2.0	2.2
Capex to Depr (%)	284.7	298.9	140.7	116.6
EBITDA Segmentals	06/16A	06/17E	06/18E	06/19E
Lotteries	345.5	324.1	348.6	304.3
Lotteries % chg	345.5 10.2	324.1 (6.2)	348.6 7.5	304.3 (12.7)
Lotteries % chg Wagering	345.5 10.2 133.3	324.1 (6.2) 118.5	348.6 7.5 121.1	304.3 (12.7) 123.3
Lotteries % chg Wagering % chg	345.5 10.2 133.3 (13.2)	324.1 (6.2) 118.5 (11.1)	348.6 7.5 121.1 2.2	304.3 (12.7) 123.3 1.8
Lotteries % chg Wagering % chg Maxgaming	345.5 10.2 133.3 (13.2) 64.7	324.1 (6.2) 118.5 (11.1) 65.6	348.6 7.5 121.1 2.2 66.3	304.3 (12.7) 123.3 1.8 67.3
Lotteries % chg Wagering % chg Maxgaming % chg	345.5 10.2 133.3 (13.2) 64.7 0.1	324.1 (6.2) 118.5 (11.1) 65.6 1.4	348.6 7.5 121.1 2.2 66.3 1.1	304.3 (12.7) 123.3 1.8 67.3 1.6
Lotteries % chg Wagering % chg Maxgaming % chg Bytecraft	345.5 10.2 133.3 (13.2) 64.7 0.1 3.4	324.1 (6.2) 118.5 (11.1) 65.6 1.4 5.6	348.6 7.5 121.1 2.2 66.3 1.1 5.7	304.3 (12.7) 123.3 1.8 67.3 1.6 5.8
Lotteries % chg Wagering % chg Maxgaming % chg Bytecraft % chg	345.5 10.2 133.3 (13.2) 64.7 0.1 3.4 23.0	324.1 (6.2) 118.5 (11.1) 65.6 1.4 5.6 62.9	348.6 7.5 121.1 2.2 66.3 1.1	304.3 (12.7) 123.3 1.8 67.3 1.6
Lotteries % chg Wagering % chg Maxgaming % chg Bytecraft % chg Talarius (Discontinued)	345.5 10.2 133.3 (13.2) 64.7 0.1 3.4 23.0 0.0	324.1 (6.2) 118.5 (11.1) 65.6 1.4 5.6	348.6 7.5 121.1 2.2 66.3 1.1 5.7	304.3 (12.7) 123.3 1.8 67.3 1.6 5.8
Lotteries % chg Wagering % chg Maxgaming % chg Bytecraft % chg Talarius (Discontinued) % chg	345.5 10.2 133.3 (13.2) 64.7 0.1 3.4 23.0 0.0 (100.0)	324.1 (6.2) 118.5 (11.1) 65.6 1.4 5.6 62.9 0.0	348.6 7.5 121.1 2.2 66.3 1.1 5.7 2.0	304.3 (12.7) 123.3 1.8 67.3 1.6 5.8 2.0
Lotteries % chg Wagering % chg Maxgaming % chg Bytecraft % chg Talarius (Discontinued) % chg Other	345.5 10.2 133.3 (13.2) 64.7 0.1 3.4 23.0 0.0 (100.0) (52.2)	324.1 (6.2) 118.5 (11.1) 65.6 1.4 5.6 62.9 0.0	348.6 7.5 121.1 2.2 66.3 1.1 5.7 2.0	304.3 (12.7) 123.3 1.8 67.3 1.6 5.8 2.0
Lotteries % chg Wagering % chg Maxgaming % chg Bytecraft % chg Talarius (Discontinued) % chg	345.5 10.2 133.3 (13.2) 64.7 0.1 3.4 23.0 0.0 (100.0)	324.1 (6.2) 118.5 (11.1) 65.6 1.4 5.6 62.9 0.0	348.6 7.5 121.1 2.2 66.3 1.1 5.7 2.0	304.3 (12.7) 123.3 1.8 67.3 1.6 5.8 2.0

# **MSCI IVA Rating AA**



TP ESG Risk (%): 0.00
TP Risk Comment: No material ESG risks. TTS valuation already captures social concerns related to problem gambling. TTS has established responsible gambling codes of conduct for some of its lottery games. We see some, limited downside risk for the wagering division, which is currently investigating the deductibility of race information fees on interstate content with Queensland Racing. MSCI IVA Risk: Neutral MSCI IVA Risk Comment: CS ESG risk assessment in line with MSCI rating

Source: Company data, Credit Suisse Estimates, MSCI ESG Research



Figure 1: Comparison between TAH and Pacific Consortium Offer

	TAH Offer	Pacific Consortium Offer					
Value of Shares Tabcorp	A\$3.48 = 0.80 TAH Shares	N/A	V	Wagering & Gaming Co Valuation	FY19E EBITDA	Multiple	Valu
Value of Shares in Wagering Co	N/A	\$0.49					
Special Dividend	\$0.20	\$0.20	V	Wagering	123	8.5x	104
Cash Component	\$0.225	\$3.105	\	Gaming	73	7.0x	51
Interim dividend paid	\$0.095	\$0.095		Corporate	(45)	7.0x	(31
Total Value to Tatts Shareholders	\$4.00	\$3.89	\  1	<b>Total</b>	151	8.2x	123
Credit Suisse do not incorporate take Gaming Co . There is no guarantee TA may strategically wait for earnings de	AH or another party will buy the		E	ess net debt including NSW CMS Licence Equity Value of Wagering & Gaming Co Shares Jalue per share			513 <b>72</b> 0 1, <b>\$0.</b> 4

Source: Company data, Credit Suisse estimates



# Reference Appendix

Our new "Total return forecast in perspective" chart helps visualize Credit Suisse and consensus views of a company's 12-month return within the context of forecasting risks and its historical trading pattern:

**12mth Volatility** is calculated as the annualised standard deviation of weekly total return series over the past 12 months. It illustrates variability of stock returns; in other words, risk. The way to think about it is that one would rather take 10% forecast return from a stock that has 20% volatility, than from the stock that has 40% volatility. The shaded area shows the one standard deviation range based on past 12 months volatility. In statistical terms, once you make a number of brave assumptions, there is a 68% probability that the share price will end up inside that range in 12 months' time.

**52wk Hi-Lo** is maximum and minimum daily closing price over the past 52 weeks. It is often handy to know the price momentum especially when the stock is trading close to its highs and lows: Is the stock trading close to its peak? Is the momentum against the stock?

\*Consensus is IBES consensus supplied by Thomson Reuters. IBES is a survey of sell side research analysts, collecting a few dozen data points such as EPS, DPS, Sales, Target Price, ROE and so on. \*Mean is the average of target returns, while the shaded area around the mean represents the range of estimates from the lowest to the highest estimate. This aids visualisation of a number of important factors such as: the range of analyst estimates; where Credit Suisse's estimates on this stock sit relative to consensus; and where the share price is relative to consensus mean and consensus range target.

**Target return** is calculated as capital gain plus forecast dividend yield (net) over the next 12 months. For "CS tgt" we have used Credit Suisse's target price and Credit Suisse forecast for 12-month forward dividend, grossed up for franking. For the consensus mean and range, we have used consensus target price and consensus dividend forecasts for 12 month forward.



## Companies Mentioned (Price as of 16-Feb-2017)

KKR and Co LP (KKR.N, \$18.18) Macquarie Group (MQG.AX, A\$88.19) Morgan Stanley (MS.N, \$46.49) Tabcorp Holdings (TAH.AX, A\$4.35)

Tatts Group (TTS.AX, A\$4.02, NEUTRAL, TP A\$4.2)

# Disclosure Appendix

### **Analyst Certification**

Larry Gandler and Ben Levin each certify, with respect to the companies or securities that the individual analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

### 3-Year Price and Rating History for KKR and Co LP (KKR.N)

KKR.N	Closing Price	Target Price	
Date	(US\$)	(US\$)	Rating
21-Feb-14	23.98	29.00	N
09-Jul-14	24.85	33.00	0 *
07-Aug-14	22.65	32.00	
15-Aug-14	22.58		R
28-Aug-14	23.39	32.00	0
07-Oct-14	21.52	32.00	*
18-Nov-14	22.69	29.00	
06-Jan-15	23.11	30.00	
16-Feb-15	24.42	31.00	
01-Apr-15	23.08	28.00	
27-Aug-15	20.34	23.00	
02-Oct-15	17.44	21.00	
29-Oct-15	17.30	24.00	
01-Dec-15	16.92	22.00	
27-Jan-16	13.39	20.00	
18-Feb-16	12.81	16.00	
25-Mar-16	13.90		R
05-Jul-16	12.06		NR
07-Jul-16	12.09	16.00	0
05-Aug-16	14.63	18.00	
03-Nov-16	13.89	17.00	
30-Dec-16	15.39	18.00	



## 3-Year Price and Rating History for Macquarie Group (MQG.AX)

MQG.AX	Closing Price	Target Price	
Date	(A\$)	(A\$)	Rating
02-Mar-14	56.27	63.00	0
02-May-14	58.70	65.00	
31-Oct-14	61.17	68.00	
17-Feb-15	70.90	78.00	
04-Mar-15	73.52	82.00	
08-May-15	79.18	90.00	
08-Oct-15	77.84		R
02-Nov-15	81.93	90.00	0
04-Feb-16	64.86	85.00	
28-Oct-16	81.76	85.00	N
18-Jan-17	84.81	95.00	

 $<sup>\</sup>hbox{$^*$ Asterisk signifies initiation or assumption of coverage}.$ 



<sup>\*</sup> Asterisk signifies initiation or assumption of coverage.



# 3-Year Price and Rating History for Morgan Stanley (MS.N)

MS.N	Closing Price	Target Price	
Date	(US\$)	(US\$)	Rating
21-Feb-14	29.62	31.00	N
17-Apr-14	30.76	33.00	
03-Oct-14	35.05	36.00	
05-Jan-15	37.50	41.00	
02-Jul-15	39.00	42.00	
28-Sep-15	31.09	37.00	
11-Nov-15	35.02		R
12-Nov-15	35.02	37.00	N
19-Jan-16	26.26	33.00	
29-Feb-16	24.70	28.00	
30-Mar-16	25.07	25.00	
11-Jul-16	26.46	28.00	
20-Jul-16	28.78	30.00	
19-Oct-16	32.93	33.00	
05-Dec-16	42.09	44.00	
17-Jan-17	42.15	47.00	



# 3-Year Price and Rating History for Tabcorp Holdings (TAH.AX)

TAH.AX	Closing Price	Target Price	
Date	(A\$)	(A\$)	Rating
24-Feb-14	3.35	3.40	N
07-Aug-14	3.32	3.73	0
29-Oct-14	3.73	4.20	
05-Feb-15	4.39	4.60	N
23-Apr-15	4.73	5.20	0
22-May-15	4.66	5.35	
13-Aug-15	4.64	5.70	
04-Feb-16	4.39	5.10	
12-Feb-16	4.15	5.00	
22-Mar-16	3.99	4.30	N
04-Aug-16	4.84	5.30	
11-Oct-16	5.07	5.60	0
15-Nov-16	4.53	5.35	
02-Feb-17	4.50	5.00	



# 3-Year Price and Rating History for Tatts Group (TTS.AX)

TTS.AX	Closing Price	Target Price	
Date	(A\$)	(A\$)	Rating
20-Feb-14	2.96	3.15	N
27-Jun-14	3.21	3.45	
21-Aug-14	3.41	3.30	U
18-Feb-15	3.87	3.40	
13-Mar-15	3.99	3.55	
20-Aug-15	3.81	3.40	N
30-Oct-15	3.96	3.40	U
27-Jan-16	4.09	3.45	
02-Mar-16	3.74	3.30	
27-Jun-16	3.86	3.15	
18-Aug-16	3.99	3.50	
20-Oct-16	4.17	4.85	0
25-Nov-16	4.21	4.50	N



<sup>\*</sup> Asterisk signifies initiation or assumption of coverage.

<sup>\*</sup> Asterisk signifies initiation or assumption of coverage.

 $<sup>{}^*\, {\</sup>it Asterisk signifies initiation or assumption of coverage}.$ 



The analyst(s) responsible for preparing this research report received Compensation that is based upon various factors including Credit Suisse's total revenues, a portion of which are generated by Credit Suisse's investment banking activities

#### As of December 10, 2012 Analysts' stock rating are defined as follows:

Outperform (O): The stock's total return is expected to outperform the relevant benchmark\* over the next 12 months.

**Neutral (N):** The stock's total return is expected to be in line with the relevant benchmark\* over the next 12 months.

**Underperform (U):** The stock's total return is expected to underperform the relevant benchmark\* over the next 12 months.

\*Relevant benchmark by region: As of 10th December 2012, Japanese ratings are based on a stock's total return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. As of 2nd October 2012, U.S. and Canadian as well as European ratings are based on a stock's total return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. For Latin American and non-Japan Asia stocks, ratings are based on a stock's total return relative to the average total return of the relevant country or regional benchmark; prior to 2nd October 2012 U.S. and Canadian ratings were based on (1) a stock's absolute total return potential to its current share price and (2) the relative attractiveness of a stock's total return potential within an analyst's coverage universe. For Australian and New Zealand stocks, the expected total return (ETR) calculation includes 12-month rolling dividend yield. An Outperform rating is assigned where an ETR is greater than or equal to 7.5%; Underperform where an ETR less than or equal to 5%. A Neutral may be assigned where the ETR is between -5% and 15%. The overlapping rating range allows analysts to assign a rating that puts ETR in the context of associated risks. Prior to 18 May 2015, ETR ranges for Outperform and Underperform ratings did not overlap with Neutral thresholds between 15% and 7.5%, which was in operation from 7 July 2011

**Restricted (R):** In certain circumstances, Credit Suisse policy and/or applicable law and regulations preclude certain types of communications, including an investment recommendation, during the course of Credit Suisse's engagement in an investment banking transaction and in certain other circumstances.

Not Rated (NR): Credit Suisse Equity Research does not have an investment rating or view on the stock or any other securities related to the company at this time.

Not Covered (NC): Credit Suisse Equity Research does not provide ongoing coverage of the company or offer an investment rating or investment view on the equity security of the company or related products.

Volatility Indicator [V]: A stock is defined as volatile if the stock price has moved up or down by 20% or more in a month in at least 8 of the past 24 months or the analyst expects significant volatility going forward.

Analysts' sector weightings are distinct from analysts' stock ratings and are based on the analyst's expectations for the fundamentals and/or valuation of the sector\* relative to the group's historic fundamentals and/or valuation:

Overweight: The analyst's expectation for the sector's fundamentals and/or valuation is favorable over the next 12 months.

Market Weight: The analyst's expectation for the sector's fundamentals and/or valuation is neutral over the next 12 months.

Underweight: The analyst's expectation for the sector's fundamentals and/or valuation is cautious over the next 12 months.

\*An analyst's coverage sector consists of all companies covered by the analyst within the relevant sector. An analyst may cover multiple sectors.

Credit Suisse's distribution of stock ratings (and banking clients) is:

### **Global Ratings Distribution**

Rating	Versus universe (%)	Of which banking clients (%)
Outperform/Buy*	45%	(64% banking clients)
Neutral/Hold*	38%	(60% banking clients)
Underperform/Sell*	14%	(52% banking clients)
Restricted	2%	

<sup>\*</sup>For purposes of the NYSE and NASD ratings distribution disclosure requirements, our stock ratings of Outperform, Neutral, and Underperform most closely correspond to Buy, Hold, and Sell, respectively; however, the meanings are not the same, as our stock ratings are determined on a relative basis. (Please refer to definitions above.) An investor's decision to buy or sell a security should be based on investment objectives, current holdings, and other individual factors.

#### **Important Global Disclosures**

Credit Suisse's research reports are made available to clients through our proprietary research portal on CS PLUS. Credit Suisse research products may also be made available through third-party vendors or alternate electronic means as a convenience. Certain research products are only made available through CS PLUS. The services provided by Credit Suisse's analysts to clients may depend on a specific client's preferences regarding the frequency and manner of receiving communications, the client's risk profile and investment, the size and scope of the overall client relationship with the Firm, as well as legal and regulatory constraints. To access all of Credit Suisse's research that you are entitled to receive in the most timely manner, please contact your sales representative or go to https://plus.credit-suisse.com.

Credit Suisse's policy is to update research reports as it deems appropriate, based on developments with the subject company, the sector or the market that may have a material impact on the research views or opinions stated herein.

Credit Suisse's policy is only to publish investment research that is impartial, independent, clear, fair and not misleading. For more detail please refer to Credit Suisse's Policies for Managing Conflicts of Interest in connection with Investment Research: <a href="https://www.credit-suisse.com/sites/disclaimers-ib/en/managing-conflicts.html">https://www.credit-suisse.com/sites/disclaimers-ib/en/managing-conflicts.html</a>.

Credit Suisse does not provide any tax advice. Any statement herein regarding any US federal tax is not intended or written to be used, and cannot be used, by any taxpayer for the purposes of avoiding any penalties.

### **Target Price and Rating**

Valuation Methodology and Risks: (12 months) for Tatts Group (TTS.AX)

Method: Our Tatts Group (TTS.AX) target price of A\$4.20 is set using an implied bid price based on an estimate that Tabcorp could trade higher toward our A\$5.00 target price. Tabcorp has offered each TTS shareholder 0.8 TAH shares + cash. We hold a NEUTRAL as we see limited prospect of another competing bid, while there is better value to play the merger through Tabcorp.



Risk:

The key risks to our A\$4.20 target price and NEUTRAL rating for Tatts Group relates to lack of deal completion which may occur should Australian competition regulators raise any concern. Longer term, there may be market share losses in wagering and potential future licence wins or losses (note Vic Lotteries licence due in FY18).

Please refer to the firm's disclosure website at https://rave.credit-suisse.com/disclosures for the definitions of abbreviations typically used in the target price method and risk sections.

See the Companies Mentioned section for full company names

The subject company (KKR.N, TAH.AX, MQG.AX, MS.N) currently is, or was during the 12-month period preceding the date of distribution of this report, a client of Credit Suisse.

Credit Suisse provided investment banking services to the subject company (KKR.N, TAH.AX, MQG.AX, MS.N) within the past 12 months.

Credit Suisse provided non-investment banking services to the subject company (MQG.AX, MS.N) within the past 12 months

Credit Suisse has managed or co-managed a public offering of securities for the subject company (KKR.N, MS.N) within the past 12 months.

Credit Suisse has received investment banking related compensation from the subject company (KKR.N, TAH.AX, MQG.AX, MS.N) within the past 12 months

Credit Suisse expects to receive or intends to seek investment banking related compensation from the subject company (KKR.N, TAH.AX, MQG.AX, MS.N) within the next 3 months.

Credit Suisse has received compensation for products and services other than investment banking services from the subject company (MQG.AX. MS.N) within the past 12 months

Credit Suisse has a material conflict of interest with the subject company (KKR.N) . Credit Suisse acted as the Exclusive Financial Advisor to Alliance Tire Group B.V (ATG) relating to the announced sale of stake by KKR AT Dutch B.V. and other shareholders in ATG to Yokohama Rubber Co. Ltd. Credit Suisse has a material conflict of interest with the subject company (KKR.N). An associate of Keith Leung is a Director of KKR.N.

For date and time of production, dissemination and history of recommendation for the subject company(ies) featured in this report, disseminated within the past 12 months, please refer to the link; https://rave.credit-suisse.com/disclosures/view/report?i=284850&y=-7evy36dyhlgl0w67ifilr71si

#### **Important Regional Disclosures**

Singapore recipients should contact Credit Suisse AG, Singapore Branch for any matters arising from this research report.

The analyst(s) involved in the preparation of this report may participate in events hosted by the subject company, including site visits. Credit Suisse does not accept or permit analysts to accept payment or reimbursement for travel expenses associated with these events.

Restrictions on certain Canadian securities are indicated by the following abbreviations: NVS--Non-Voting shares; RVS--Restricted Voting Shares; SVS--Subordinate Voting Shares.

Individuals receiving this report from a Canadian investment dealer that is not affiliated with Credit Suisse should be advised that this report may not contain regulatory disclosures the non-affiliated Canadian investment dealer would be required to make if this were its own report.

For Credit Suisse Securities (Canada), Inc.'s policies and procedures regarding the dissemination of equity research, please visit https://www.creditsuisse.com/sites/disclaimers-ib/en/canada-research-policy.html.

Credit Suisse has acted as lead manager or syndicate member in a public offering of securities for the subject company (KKR.N. MQG.AX, MS.N) within the past 3 years.

Principal is not guaranteed in the case of equities because equity prices are variable.

Commission is the commission rate or the amount agreed with a customer when setting up an account or at any time after that. This research report is authored by:

To the extent this is a report authored in whole or in part by a non-U.S. analyst and is made available in the U.S., the following are important disclosures regarding any non-U.S. analyst contributors: The non-U.S. research analysts listed below (if any) are not registered/qualified as research analysts with FINRA. The non-U.S. research analysts listed below may not be associated persons of CSSU and therefore may not be subject to the NASD Rule 2711 and NYSE Rule 472 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

For Credit Suisse disclosure information on other companies mentioned in this report, please visit the website at https://rave.creditsuisse.com/disclosures or call +1 (877) 291-2683.



This report is produced by subsidiaries and affiliates of Credit Suisse operating under its Global Markets Division. For more information on our structure, please use the following link: https://www.credit-suisse.com/who-we-are This report may contain material that is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Credit Suisse or its affiliates ("CS") to any registration or licensing requirement within such jurisdiction. All material presented in this report, unless specifically indicated otherwise, is under copyright to CS. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of CS. All trademarks, service marks and logos used in this report are trademarks or service marks or service marks of CS or its affiliates. The information, tools and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. CS may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. CS will not treat recipients of this report as its customers by virtue of their receiving this report. The investments and services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. CS does not advise on the tax consequences of investments and you are advised to contact an independent tax adviser. Please note in particular that the bases and levels of taxation may change. Information and opinions presented in this report have been obtained or derived from sources believed by CS to be reliable, but CS makes no representation as to their accuracy or completeness. CS accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that such liability arises under specific statutes or regulations applicable to CS. This report is not to be relied upon in substitution for the exercise of independent judgment. CS may have issued, and may in the future issue, other communications that are inconsistent with, and reach different conclusions from, the information presented in this report. Those communications reflect the different assumptions, views and analytical methods of the analysts who prepared them and CS is under no obligation to ensure that such other communications are brought to the attention of any recipient of this report. Some investments referred to in this report will be offered solely by a single entity and in the case of some investments solely by CS, or an associate of CS or CS may be the only market maker in such investments. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at its original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. Investors in securities such as ADR's, the values of which are influenced by currency volatility, effectively assume this risk. Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved. The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility, and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct their own investigation and analysis of the product and consult with their own professional advisers as to the risks involved in making such a purchase. Some investments discussed in this report may have a high level of volatility investments may experience sudden and large falls in their value causing losses when that investment is realised. Those losses may equal your original investment. Indeed, in the case of some investments the potential losses may exceed the amount of initial investment and, in such circumstances, you may be required to pay more money to support those losses. Income yields from investments may fluctuate and, in consequence, initial capital paid to make the investment may be used as part of that income yields. Some investments may not be readily realisable and it may be difficult to sell or realise those investments, similarly it may prove difficult for you to obtain reliable information about the value, or risks, to which such an investment is exposed. This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed any such site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses of hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of any such website does not in any way form part of this document. Accessing such website or following such link through this report or CS's website shall be at your own risk.

This report is issued and distributed in European Union (except Switzerland): by Credit Suisse Securities (Europe) Limited, One Cabot Square, London E14 4QJ, England, which is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Germany: Credit Suisse Securities (Europe) Limited Niederlassung Frankfurt am Main regulated by the Bundesanstalt fuer Finanzdienstleistungsaufsicht ("BaFin"). United States and Canada: Credit Suisse Securities (USA) LLC; Switzerland: Credit Suisse AG; Brazil: Banco de Investimentos Credit Suisse (Brazil) S.A or its affiliates; Mexico: Banco Credit Suisse (México), S.A. (transactions related to the securities mentioned in this report will only be effected in compliance with applicable regulation); Japan: by Credit Suisse Securities (Japan) Limited, Financial Instruments Firm, Director-General of Kanto Local Finance Bureau (
Kinsho) No. 66, a member of Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Investment Advisers Association, Type II Financial Instruments Firms Association; Hong Kong: Credit Suisse (Hong Kong) Limited; Australia: Credit Suisse Equities (Australia) Limited; Thailand: Credit Suisse Securities (Thailand) Limited, regulated by the Office of the Securities and Exchange Commission, Thailand, having registered address at 990 Abdulrahim Place, 27th Floor, Unit 2701, Rama IV Road, Silom, Bangrak, Bangkok10500, Thailand, Tel. +66 2614 6000; Malaysia: Credit Suisse Securities (Malaysia) Sdn Bhd; Singapore: Credit Suisse AG, Singapore Branch; India: Credit Suisse Securities (India) Private Limited (CIN no.U67120MH1996PTC104392) regulated by the Securities and Exchange Board of India as Research Analyst (registration no. INH 000001030) and as Stock Broker (registration no. INB230970637; INF230970637; INF030970637; INF030970631), having registered address at 9th Floor, Ceejay House, Dr.A.B. Road, Worli, Mumbai - 18, India, T - +91-22 6777 3777; South Korea: Credit Suisse Securities (Europe) Limited, Seoul Branch; Taiwan: Credit Suisse AG Taipei Securities Branch; Indonesia: PT Credit Suisse Securities Indonesia; Philippines: Credit Suisse Securities (Philippines) Inc., and elsewhere in the world by the relevant authorised affiliate of

#### Additional Regional Disclaimers

Hong Kong: Credit Suisse (Hong Kong) Limited ("CSHK") is licensed and regulated by the Securities and Futures Commission of Hong Kong under the laws of Hong Kong, which differ from Australian laws. CSHKL does not hold an Australian financial services licence (AFSL) and is exempt from the requirement to hold an AFSL under the Corporations Act 2001 (the Act) under Class Order 03/1103 published by the ASIC in respect of financial services provided to Australian wholesale clients (within the meaning of section 761G of the Act). Research on Taiwanese securities produced by Credit Suisse AG, Taipei Securities Branch has been prepared by a registered Senior Business Person.

Australia (to the extent services are offered in Australia): Credit Suisse Securities (Europe) Limited ("CSSEL") and Credit Suisse International ("CSI") are authorised by the Prudential Regulation Authority and regulated by the Financial Conduct

Authority ("FCA") and the Prudential Regulation Authority under UK laws, which differ from Australian Laws. CSSEL and CSI do not hold an Australian Financial Services Licence ("AFSL") and are exempt from the requirement to hold an AFSL under the Corporations Act (Cth) 2001 ("Corporations Act") under Class Order 03/1099 published by the Australian Securities and Investments Commission ("ASIC"), in respect of the financial services provided to Australian wholesale clients (within the meaning of section 761G of the Corporations Act). This material is not for distribution to retail clients and is directed exclusively at Credit Suisse's professional clients and eligible counterparties as defined by the FCA, and wholesale (within the meaning of section 7615 of the Corporations Act). This tratefail is not for distribution to fetal clients and is directed exclusively at Credit Suisses professional clients and englide counterparties as defined by the FCA, and wholesale clients as defined under section 7616 of the Corporations Act. Credit Suisse (Hong Kong) Limited ("CSHK) is licensed and regulated by the Securities and Futures Commission of Hong Kong under the laws of Hong Kong under the Corporations Act under Class Order 03/1103 published by the ASIC in respect of financial services provided to Australian wholesale clients (within the meaning of section 761G of the Corporations Act). Credit Suisse Securities (USA) LLC (CSSU) and Credit Suisse Asset Management LLC (CSAM LLC) are licensed and regulated by the Securities Exchange Commission of the United States under the laws of the United States, which differ from Australian laws. CSSU and CSAM LLC do not hold an AFSL and is exempt from the requirement to hold an AFSL under the Corporations Act under Class Order 03/1100 published by the ASIC in respect of financial services provided to Australian wholesale clients (within the meaning of section 761G of the Corporations Act).

Malaysia: Research provided to residents of Malaysia is authorised by the Head of Research for Credit Suisse Securities (Malaysia) Sdn Bhd, to whom they should direct any queries on +603 2723 2020.

Singapore: This report has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (each as defined under the Financial Advisers Regulations) only, and is also distributed by Credit Suisse AG, Singapore Branch to overseas investors (as defined under the Financial Advisers Regulations). Credit Suisse AG, Singapore Branch may distribute reports produced by its foreign entities or affiliates pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Singapore recipients should contact Credit Suisse AG, Singapore Branch at +65-6212-2000 for matters arising from, or in connection with, this report. By virtue of your status as an institutional investor, accredited investor, accredited investor, expert investor or overseas investor, Credit Suisse AG, Singapore Branch is exempted from complying with certain compliance requirements under the Financial Advisers Act, Chapter 110 of Singapore (the "FAA"), the Financial Advisers Regulations and the relevant Notices and Guidelines issued thereunder, in respect of any financial advisory service which Credit Suisse AG, Singapore Branch may provide to you.

UAE: This information is being distributed by Credit Suisse AG (DIFC Branch), duly licensed and regulated by the Dubai Financial Services Authority ("DFSA"). Related financial services or products are only made available to Professional Clients or Market Counterparties, as defined by the DFSA, and are not intended for any other persons. Credit Suisse AG (DIFC Branch) is located on Level 9 East, The Gate Building, DIFC, Dubai, United Arab Émirates.

EU: This report has been produced by subsidiaries and affiliates of Credit Suisse operating under its Global Markets Division

This research may not conform to Canadian disclosure requirements.

In jurisdictions where CS is not already registered or licensed to trade in securities, transactions will only be effected in accordance with applicable securities legislation, which will vary from jurisdiction to jurisdiction and may require that the trade be made in accordance with applicable exemptions from registration or licensing requirements. Non-US customers wishing to effect a transaction should contact a CS entity in their local jurisdiction unless governing law permits otherwise. US customers wishing to effect a transaction should do so only by contacting a representative at Credit Suisse Securities (USA) LLC in the US.

Please note that this research was originally prepared and issued by CS for distribution to their market professional and institutional investor customers. Recipients who are not market professional or institutional investor customers of CS should seek the advice of their independent financial advisor prior to taking any investment decision based on this report or for any necessary explanation of its contents. This research may relate to investments or services of a person outside of the UK or to other matters which are not authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority or in respect of which the protections of the Prudential Regulation Authority and Financial Conduct Authority for private customers and/or the UK compensation scheme may not be available, and further details as to where this may be the case are available upon request in respect of this report.

CS may provide various services to US municipal entities or obligated persons ("municipalities"), including suggesting individual transactions or trades and entering into such transactions. Any services CS provides to municipalities are not viewed as "advice" within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. CS is providing any such services and related information solely on an arm's length basis and not as an advisor or fiduciary to the municipality. In connection with the provision of the any such services, there is no agreement, direct or indirect, between any municipality (including the officials,management, employees or agents thereof) and CS for CS to provide advice to the municipality. Municipalities should consult with their financial, accounting and legal advisors regarding any such services provided by CS. In addition, CS is not acting for direct or indirect compensation to solicit the municipality on behalf of an unaffiliated broker, dealer, municipal securities dealer, municipal advisor, or investment advisor for the purpose of obtaining or retaining an engagement by the municipality for or in connection with Municipal Financial Products, the issuance of municipal securities, or of an investment adviser to provide investment advisory services to or on behalf of the municipality. If this report is being distributed by a financial institution other than Credit Suisse AG, or its affiliates, that financial institution is solely responsible for distribution. Clients of that institution should contact that institution to effect a transaction in the securities mentioned in this report or require further information. This report does not constitute investment advice by Credit Suisse to the clients of the distributing financial institution, and neither Credit Suisse AG, its affiliates, and their respective officers, directors and employees accept any liability whatsoever for any direct or consequential loss arising from their use of this report or its content. Principal is not guaranteed. Commission is the commission rate or the amount agreed with a customer when setting up an account or at any time after that. Copyright © 2017 CREDIT SUISSE AG and/or its affiliates. All rights reserved.

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

When you purchase non-listed Japanese fixed income securities (Japanese government bonds, Japanese municipal bonds, Japanese government guaranteed bonds, Japanese corporate bonds) from CS as a seller, you will be requested to pay the purchase price only.