

# Schaffner Holding AG

Switzerland | Industrial Goods & Services

## Management change update

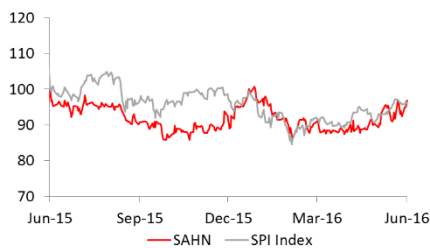
18 July 2016

### Company Data

Price:	CHF 226
Market Cap:	CHF 143.7mn
Free Float (% of total shares):	78.47%
No. of shares:	635,940
Avg. traded volume (1 year):	479
Bloomberg:	SAHN SW
Reuters:	SAHN.S
ISIN:	CH0009062099

Source: Bloomberg (As of 15 July 2016)

### Share Price Movement (Rebased to 100)



Source: Bloomberg

### Key Financial Data

	2014	2015	2016E	2017E
Sales	214.6	201.8	189.2	201.0
EBITDA %	10.8%	8.7%	4.2%	8.1%
EBIT %	7.0%	4.4%	0.7%	4.9%
Net Margin %	5.9%	3.1%	0.0%	3.5%
Basic EPS	19.97	9.96	(0.00)	11.19
Diluted EPS	19.86	9.91	(0.00)	11.14
DPS	6.5	6.5	0.0	3.4
Equity Ratio %	43%	40%	39%	43%
Capex	6.4	4.7	6.1	8.1
P/E	14.8	21.6	N/A	20.2
EV/EBITDA	8.8	8.5	10.7	7.9
EV/EBIT	13.6	16.9	114.3	15.2

### Next Events

FY2015/16 Annual Results	6 Dec 2016
21 <sup>th</sup> Annual General Meeting	12 Jan 2017

### Analysts

Doris Rudischhauser  
dru@researchdynamics.ch

Alexandre Müller  
amu@researchdynamics.ch

Tel: +41 43 268 3232

[www.researchdynamics.ch](http://www.researchdynamics.ch)

## Interim management to guide through challenging times

Schaffner (‘the group’) is among the leading global players that offer products/solutions ensuring efficient and reliable operations of various electric and electronic systems. The group develops and manufactures products that are used in motor controls, drive systems, the alternative energy sector, rail technology, robots, machine tools, etc., and also supports OEMs and equipment manufacturers to develop and implement energy-efficient systems. Schaffner also manufactures components for keyless entry antennas used in automobiles.

### CEO Alexander Hagemann leaving with immediate effect

On Friday, 15 July 2016, Schaffner announced the leaving of the long-term CEO of the Group, Alexander Hagemann, with immediate effect. He is said to pursue new challenges outside of the company. Ad interim, the Group’s CFO Kurt Ledermann, who has been with the company for more than 8 years, will take over as CEO. Thus, the Group Executive Committee will consist of Kurt Ledermann, CEO ad interim, Ah Bee Goh, Chief Operating Officer, and Guido Schlegelmilch, Head of the EMC – Schaffner’s largest – division. Kurt Ledermann seems predestined to take on the ad interim CEO role, since in addition to his finance and accounting background he also holds a degree in Electrical Engineering from the Swiss Federal Institute of Technology ETH. To manage the additional function, he will be supported by his long-term deputy CFO, Christian Herren. No news regarding the search of a successor was provided, but we believe that given that the Power Magnetics division has been at an interregnum stage for some time (and “ad interim” managed by Alexander Hagemann), a joint personnel decision might be envisaged.

### Resignation not a total surprise

Strategically, the Group has moved into the right direction during the 9-year tenure of CEO Hagemann – purposefully building up the PM division by internal and external growth, expanding into Asian and North American markets to reduce the dependency on Europe and thus driving internalization of the Group, focusing on lean manufacturing, etc. However, operationally the Group had been facing unexpected challenges for various (external) reasons such as unfavourable FX developments, postponed or cancelled projects, wage inflation, etc. over the past years, hence missing to achieve its own guidance more than once and disappointing with the results. Thus, while being crucial in the strategic development of the Group, the bottom-line results that management under Alexander Hagemann presented were lacklustre in the last 5 years, except for FY2014. We could well imagine that some investors were not satisfied with this performance.

### “Strategy 2020” maintained, but short-term focus on internal projects

Just recently, on occasion of its Investors’ Day on 8 June 2016, Schaffner management maintained the targets set out under the Vision 2020, with the Group’s EBITA margin to reach more than 8% within the next 24 months and organic revenue growth above 5%. However, the revenue target originally set at CHF 400 million looks increasingly challenging to reach, given that in the short-term management focus is on internal projects, not external growth.

In the interim, we believe that the daily operations would not be too affected by the leaving of the long-term CEO as also under the Executive Management Committee now in place, the priority should remain on cutting costs, firstly by consolidating production facilities and cutting overheads. Secondly, the Group is transferring more of production (mostly from Shanghai) to its Thailand factory, which is the lowest cost production facility for the company, while at the same time continuing with one factory each in the US, Europe, China and Thailand in order to have customer proximity. With these ongoing initiatives, Schaffner aims to reduce production and overhead costs by CHF 6 million annually.

The above short-term measures, together with the “ad interim” situation, make the acquisition part of the Strategy 2020 over the next 12 months more unlikely, unless an opportunity would present itself unexpectedly. While it may also take as long as a year to solve the CEO succession, we believe that with successful execution on the cost cutting side investors might be increasingly interested in the stock again that seems to have bottomed out following last year’s disappointing results.

**Reminder: Management priority for the next twelve months**

**EMC:**

- Execute COGS and overhead cost reduction.
- Gain market share in all regions to expand Schaffner’s lead

**Power Quality:**

- Complete the development of Generation 2 product platforms
- Launch and global roll-out of new products

**Power Magnetics:**

- Complete restructuring of division and reduce break-even
- Diversify customer base and return to growth

**Automotive:**

- Win customer RFQ to further expand market share in keyless entry
- Develop innovative EMC filter solutions for market introduction in 2017
- Manage volume ramp up at Thailand plant

Source: Company update on occasion of Investors’ Day on 8 June 2016

**Valuation**

The company continues on its restructuring path, and this change looks to be a part of the overall process. The transitory phase and the one-off restructuring expenses have significantly impacted 2016’s profitability. Thus, we value the company based on its 2017E earnings. Looking on a PE basis, the stock is trading mostly in line with its 3-year historical average. Compared to peers, Schaffner is trading at a premium to its product as well as industry peers 2017 PE median. However, the company is trading at a sharp discount to its industry peers median 2017 EV/EBITDA (though at a slight premium to product peers). We believe Schaffner will come out stronger and much more leaner post the restructuring phase and this discount to industry peers on EV/EBITDA is unwarranted.

**Exhibit 3: Schaffner – Comparison with Product peers**

Company (Product peers)	EV/EBITDA			EV/EBIT			P/E		
	3 year average	CY2016E	CY2017E	3 year average	CY2016E	CY2017E	3 year average	CY2016E	CY2017E
Schaffner Holding AG	9.5x	10.7x	7.9x	16.8x	114.3x	15.2x	20.8x	NA	20.2x
Omron Corp	9.4x	7.4x	6.6x	12.1x	10.8x	9.8x	20.1x	17.1x	15.0x
Laird Plc	12.5x	0.1x	0.1x	23.8x	0.1x	0.1x	20.2x	13.5x	11.9x
Yokogawa Electric Corp	9.0x	7.1x	5.6x	13.8x	8.1x	8.0x	20.9x	15.2x	12.8x
Lem Holding SA	13.9x	14.9x	13.9x	16.1x	17.1x	15.8x	18.5x	20.6x	19.2x
Komax Holding AG	11.1x	10.7x	10.4x	12.8x	12.6x	12.0x	18.6x	15.5x	14.9x
Gavazzi Carlo Holding AG	5.9x	6.1x	5.8x	7.5x	7.4x	7.0x	12.8x	13.6x	12.9x
Eaton Corp Plc	13.9x	11.0x	10.5x	19.9x	15.1x	14.4x	14.4x	14.6x	13.5x
Aparator SA	11.4x	8.7x	8.0x	15.0x	12.5x	11.0x	13.5x	14.4x	12.6x
Median	11.3x	8.0x	7.3x	14.4x	11.6x	10.4x	18.5x	14.9x	13.2x
High	13.9x	14.9x	13.9x	23.8x	17.1x	15.8x	20.9x	20.6x	19.2x
Low	5.9x	0.1x	0.1x	7.5x	0.1x	0.1x	12.8x	13.5x	11.9x
Premium (disc) to product peers	(15%)	33%	8%	17%	882%	46%	12%	NA	53%

Source: Bloomberg (as on 15 July 2016)

**Exhibit 4: Schaffner – Comparison with Industry peers**

Company (Industry peers)	EV/EBITDA			EV/EBIT			P/E		
	3 year average	CY2016E	CY2017E	3 year average	CY2016E	CY2017E	3 year average	CY2016E	CY2017E
Schaffner Holding AG	9.5x	10.7x	7.9x	16.8x	114.3x	15.2x	20.8x	NA	20.2x
Lem Holding SA	13.9x	14.9x	13.9x	16.1x	17.1x	15.8x	18.5x	20.6x	19.2x
Kudelski SA	8.5x	8.5x	8.0x	14.9x	12.8x	12.0x	20.2x	16.0x	14.4x
Inficon Holding AG	12.7x	12.4x	11.2x	15.4x	14.4x	12.9x	19.7x	20.2x	18.5x
Also Holding AG	6.4x	6.3x	5.5x	8.4x	7.2x	6.1x	10.9x	NA	NA
Comet Holding AG	13.2x	13.7x	10.2x	19.3x	21.2x	15.2x	27.4x	31.6x	22.9x
Cicor Technologies	7.6x	NA	NA	13.6x	NA	NA	16.9x	NA	NA
Datacolor AG	11.4x	8.9x	NA	16.0x	12.3x	NA	22.1x	NA	NA
Median	11.4x	10.6x	10.2x	15.4x	13.6x	12.9x	19.7x	20.4x	18.8x
High	13.9x	14.9x	13.9x	19.3x	21.2x	15.8x	27.4x	31.6x	22.9x
Low	6.4x	6.3x	5.5x	8.4x	7.2x	6.1x	10.9x	16.0x	14.4x
Premium (disc) to Industry peers	(16%)	1%	(23%)	9%	739%	18%	6%	NA	7%

Source: Bloomberg (as on 15 July 2016)

## DETAILED FINANCIAL STATEMENTS

### Income Statement

CHF mn (except per share)	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E
EMC sales	129	106	110	110	95	93	98
PM sales	36	46	54	67	64	54	57
AM sales	18	25	31	37	43	43	46
<b>Sales</b>	<b>183</b>	<b>177</b>	<b>195</b>	<b>215</b>	<b>202</b>	<b>189</b>	<b>201</b>
Cost of goods sold	(126)	(128)	(142)	(152)	(145)	(138)	(143)
<b>Gross profit</b>	<b>56</b>	<b>49</b>	<b>53</b>	<b>63</b>	<b>57</b>	<b>51</b>	<b>58</b>
Marketing and sales	(15)	(17)	(17)	(18)	(18)	(20)	(19)
R& D expenses	(14)	(14)	(15)	(15)	(17)	(18)	(19)
General and administration	(14)	(11)	(10)	(13)	(13)	(12)	(10)
Other income	0	1	0	0	1	0	0
Total operating costs	(43)	(41)	(42)	(47)	(47)	(53)	(48)
<b>EBITA</b>	<b>15</b>	<b>10</b>	<b>12</b>	<b>18</b>	<b>11</b>	<b>7</b>	<b>12</b>
<b>Operating profit (EBIT)</b>	<b>13</b>	<b>7</b>	<b>9</b>	<b>15</b>	<b>9</b>	<b>1</b>	<b>10</b>
Depreciation	3	4	4	4	5	5	5
Amortization of intangible assets	2	3	3	3	3	2	2
<b>EBITDA</b>	<b>19</b>	<b>15</b>	<b>17</b>	<b>23</b>	<b>18</b>	<b>14</b>	<b>19</b>
Finance costs	(13)	(4)	(7)	(7)	(5)	(2)	(1)
Finance income	11	2	5	6	4	1	0
Total financial income (expenses)	(2)	(2)	(2)	(1)	(1)	(1)	(1)
Profit before taxes	11	5	7	14	8	(0)	9
Taxation	(1)	(1)	(1)	(1)	(2)	0	(1)
Profit attributable to the parent	10	4	6	13	6	(0)	7
<b>Basic EPS</b>	<b>16.0</b>	<b>6.2</b>	<b>9.9</b>	<b>20.0</b>	<b>10.0</b>	<b>(0.0)</b>	<b>11.2</b>
<b>Diluted EPS</b>	<b>15.4</b>	<b>6.0</b>	<b>9.9</b>	<b>19.9</b>	<b>9.9</b>	<b>(0.0)</b>	<b>11.1</b>
DPS	4.5	3.5	4.5	6.5	6.5	0.0	3.4

Source: Research Dynamics, Company data

### Key Ratios

	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E
<b>Growth Ratios</b>							
Sales Growth	(3%)	(3%)	10%	10%	(6%)	(6%)	6%
EMC division	16%	(18%)	4%	0%	(13%)	(2%)	5%
PM division	(41%)	29%	16%	25%	(5%)	(16%)	7%
AM division	6%	40%	27%	19%	15%	(1%)	8%
Operating profit Growth	(15%)	(43%)	30%	60%	(41%)	(85%)	651%
Net Income Growth	(15%)	(61%)	61%	101%	(50%)	NM	NM
<b>Profitability Ratios (%)</b>							
Operating margin (%)	7%	4%	5%	7%	4%	1%	5%
EMC division (OPM)	16%	12%	13%	14%	9%	8%	7%
PM division (OPM)	(1%)	(1%)	5%	6%	1%	(8%)	2%
AM division (OPM)	(2%)	2%	(6%)	7%	15%	22%	19%
EBITDA Margin %	10%	8%	9%	11%	9%	4%	9%
Net Margin (%)	6%	2%	3.2%	5.9%	3.1%	(0.0%)	3.5%
<b>Return Ratios</b>							
Profit Margin	6%	2%	3%	6%	3%	(0%)	4%
Asset Turnover	1.4x	1.3x	1.4x	1.4x	1.3x	1.3x	1.4x
Financial Leverage	2.3x	2.4x	2.3x	2.3x	2.4x	2.5x	2.4x
Dupont ROE (%)	18%	7%	10%	20%	10%	(0%)	12%
ROCE (%)	23%	8%	11%	16%	10%	1%	11%
ROA (%)	8%	3%	4%	8%	4%	(0%)	5%
<b>Leverage Ratios</b>							
Debt - Equity Ratio	0.6x	0.6x	0.5x	0.5x	0.6x	0.7x	0.5x
Net Debt - Equity Ratio	0.4x	0.4x	0.2x	0.2x	0.3x	0.4x	0.2x
Interest Coverage	14.1x	4.9x	6.5x	15.3x	8.9x	0.5x	6.1x
<b>Liquidity Ratios</b>							
Current Ratio	1.1x	2.2x	2.0x	2.1x	2.5x	2.2x	2.2x
Quick Ratio	0.7x	1.4x	1.4x	1.4x	1.6x	1.5x	1.5x
<b>Valuation Ratios</b>							
EV/EBITDA	9.1x	11.8x	9.1x	8.8x	8.4x	18.4x	8.6x
P/E	14.6x	37.9x	22.8x	14.8x	21.4x	na	19.0x
P/BV	2.6x	2.5x	2.3x	2.8x	2.3x	2.4x	2.2x

Source: Research Dynamics, Bloomberg, Company data

### Balance Sheet

In CHF mn	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E
<b>Assets</b>							
Non-current assets							
PPE	18.2	21.1	20.9	24.8	22.7	23.9	26.6
Intangible assets	24.1	22.3	19.6	24.1	22.1	20.3	18.2
Investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long term assets	11.8	13.3	12.5	4.8	2.2	2.2	2.2
Deferred tax	2.7	2.9	3.0	3.7	4.6	5.6	5.6
<b>Total Non Current Assets</b>	<b>56.8</b>	<b>59.6</b>	<b>56.1</b>	<b>57.4</b>	<b>51.7</b>	<b>52.0</b>	<b>52.7</b>
Current assets							
Inventories	29.1	29.9	28.1	31.3	32.0	30.2	31.4
Trade receivables	32.4	34.8	34.0	38.5	34.7	34.7	36.3
Income tax receivables	0.4	0.6	0.5	0.5	0.3	0.4	0.4
Other receivables	3.7	3.7	3.8	3.2	3.0	4.1	4.1
Other financial assets	0.2	2.1	4.1	4.9	5.6	2.0	2.0
Cash and cash equivalents	14.2	10.3	17.0	18.6	19.6	19.5	18.3
<b>Total assets</b>	<b>136.8</b>	<b>140.8</b>	<b>143.7</b>	<b>154.5</b>	<b>146.9</b>	<b>143.1</b>	<b>145.2</b>
<b>Shareholders' Equity and Liabilities</b>							
Share capital							
Share capital	20.7	20.7	20.7	20.7	20.7	20.7	20.7
Reserves & Surplus	40.1	40.3	36.5	35.3	28.4	24.5	24.5
Retained earnings	(3.9)	(0.6)	5.4	10.7	10.4	10.4	17.5
<b>Total equity</b>	<b>56.9</b>	<b>60.3</b>	<b>62.5</b>	<b>66.6</b>	<b>59.4</b>	<b>55.6</b>	<b>62.7</b>
Non-current liabilities							
Long term borrowings	0.4	36.0	29.8	35.1	37.5	34.0	29.5
Deferred tax liabilities	1.9	2.2	2.3	1.2	0.4	0.2	0.2
Provisions	6.6	6.1	5.6	6.1	10.9	11.6	11.6
<b>Total Non-Current Liab.</b>	<b>8.9</b>	<b>44.2</b>	<b>37.6</b>	<b>42.4</b>	<b>48.8</b>	<b>45.9</b>	<b>41.4</b>
Current liabilities							
Trade and other payables	31.0	32.2	40.3	41.9	36.7	35.9	36.0
Income tax liabilities	1.9	1.0	0.7	1.0	1.0	1.0	1.0
Short term borrowings	34.6	0.2	0.5	0.2	0.3	3.8	3.3
Provisions	3.5	2.9	2.0	2.3	0.7	0.9	0.9
<b>Total Current Liabilities</b>	<b>71.0</b>	<b>36.3</b>	<b>43.5</b>	<b>45.4</b>	<b>38.6</b>	<b>41.6</b>	<b>41.2</b>
<b>Total liabilities</b>	<b>79.9</b>	<b>80.5</b>	<b>81.1</b>	<b>87.8</b>	<b>87.4</b>	<b>87.5</b>	<b>82.5</b>
<b>Total equity and liab.</b>	<b>136.8</b>	<b>140.8</b>	<b>143.7</b>	<b>154.5</b>	<b>146.9</b>	<b>143.1</b>	<b>145.2</b>

Source: Research Dynamics, Company data

### Cash Flow Statement

In CHF mn	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E
Net profit for the period	10.2	3.9	6.3	12.6	6.3	(0.0)	7.1
Non-cash adjustments:	11.7	9.0	8.8	9.1	14.6	7.4	7.1
<b>Change in current assets and liabilities:</b>							
(Increase)/decrease in inventories	0.3	0.0	1.3	(1.2)	(2.5)	1.8	(1.2)
(Increase)/decrease in receivables	6.4	(3.5)	(0.0)	(0.8)	2.5	1.3	(1.6)
(Decrease)/increase in current liabilities	(3.5)	(0.4)	9.0	(0.2)	(3.5)	(0.7)	0.1
Change in operating working capital	3.2	(3.9)	10.3	(2.2)	(3.6)	2.5	(2.7)
<b>Cash flows from operating activities</b>							
<b>operating activities</b>	<b>17.8</b>	<b>4.6</b>	<b>20.8</b>	<b>15.3</b>	<b>8.2</b>	<b>9.9</b>	<b>11.5</b>
Purchase of PPE	(6.9)	(3.7)	(4.8)	(6.4)	(4.7)	(6.1)	(7.7)
Disposal of PPE	0.2	1.4	0.3	0.3	0.3	-	-
Purchase of intangible assets	(1.4)	(0.7)	(0.4)	(0.4)	(0.8)	-	-
(Acquisition)/divestment	(10.6)	(0.4)	(0.4)	(8.6)	-	-	-
Change in other assets	(0.0)	(0.0)	(0.9)	(0.7)	(0.7)	-	-
<b>Cash flow generated (used) in investment activities</b>							
<b>activities</b>	<b>(18.7)</b>	<b>(3.4)</b>	<b>(6.2)</b>	<b>(15.8)</b>	<b>(5.9)</b>	<b>(6.1)</b>	<b>(7.7)</b>
Change in treasury shares	(7.3)	(1.0)	(1.1)	(3.1)	(0.9)	0.3	-
Proceeds from Share issues	4.4	0.5	1.2	2.7	1.3	-	-
Repayment of excess share premium	(2.8)	(2.8)	(2.2)	(2.9)	(4.1)	(4.1)	-
Net proceeds/(repayment) from debt	13.4	(1.8)	(5.5)	5.2	2.9	-	(5.0)
Amortization related to finance lease	-	(0.1)	(0.2)	(0.2)	(0.2)	-	-
<b>Cash flow generated (used) in financing activities</b>							
<b>activities</b>	<b>7.6</b>	<b>(5.3)</b>	<b>(7.7)</b>	<b>1.8</b>	<b>(1.0)</b>	<b>(3.9)</b>	<b>(5.0)</b>
Exchange (losses)/gains	(0.5)	0.2	(0.2)	0.3	(0.4)	0.1	-
<b>Net change in cash</b>	<b>6.2</b>	<b>(4.0)</b>	<b>6.8</b>	<b>1.6</b>	<b>1.0</b>	<b>(0.1)</b>	<b>(1.2)</b>
Opening cash balance	8.1	14.2	10.3	17.0	18.6	19.6	19.5
<b>Closing cash balance</b>	<b>14.2</b>	<b>10.3</b>	<b>17.0</b>	<b>18.6</b>	<b>19.6</b>	<b>19.5</b>	<b>18.3</b>

Source: Research Dynamics, Company data

## DISCLAIMER

Schaffner Holding AG ("SAHN") is a client of Research Dynamics. The equity research report(s) are prepared for informational purposes only and are paid for by the company portrayed in the report. Research Dynamics is a division of Dynamics Group AG. Dynamics Group is an independent consultancy firm focused on strategic advisory, communication management and research and analysis.

This report (henceforth known as "document") has been drafted by the authors concerned as a non-binding opinion on the market situation and on the instruments of investment in question and compiled by Dynamics Group in order to provide background information about the companies. It is intended exclusively for the purpose of information.

Dynamics Group has not individually verified the information and data on which this document is based. All information and data in this document originate from generally available sources which the author concerned or Dynamics Group viewed as reliable at the time of drafting this document. However, no liability can be assumed for their correctness, accuracy, completeness and appropriateness – neither expressly nor tacitly. The contents of this document do not represent an assurance or guarantee by the authors concerned or Dynamics Group. Forward-looking information or statements in this document contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations

Dynamics Group shall not be liable for any consequential damage to properties – on whatever legal grounds it may be. Liability of Dynamics Group on account of premeditation or gross negligence shall remain unaffected by this.

Dynamics Group has no permission to provide assurances or assume guarantees on behalf of the companies or a third party mentioned in this document. Neither the companies mentioned in this document nor any other individual assumes liability for any loss, damage or detriment that may result from the use of this document, especially when taking decisions on investments, or from other reasons. Dynamics Group cannot be held responsible for detrimental consequences that occur or may occur due to the use or its omission based on the views and inferences contained in this document. Past performance trends of value, price or rates do not provide any indications to the future trends for an investment. Dynamics Group does not provide any guarantees for the suggested yield or the achievement of referred targets.

This document does neither represent an offer of purchase, holding or sale of any securities, money market instruments or of derivatives, nor does it contain the basis for a contract or a commitment of any kind. Every investment, for example, in debentures, shares and options, is associated with enormous risks. A decision on investment with regard to any security may not be based on this document. This document is neither an advice on investment, nor a recommendation or invitation for purchasing, holding or selling any securities, money market instruments or derivatives.

Dynamics Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this document. However, the respective directors, employees and contractors of Dynamics Group may hold positions in the described securities and/or options, futures and other derivatives that are based on these securities.

This document has been provided to you for information only. It may not be reproduced or distributed to others or published in any other form partially or fully.

The distribution of this document and the information contained therein may be restricted in other jurisdictions by law and persons who may come into possession of this document must be aware of possible restrictions and adhere to the same. Failure to comply with such restrictions may constitute an infringement of the laws in USA or Canada governing the securities or of the laws of any other jurisdiction.

This study is protected by the copyright laws. It may be used only for the purpose as defined in this disclaimer. Portions of the study, if quoted, must be acknowledged by indicating the source. Any use other than this shall require prior written permission by Dynamics Group. Reproduction, circulation, publication and provision of online access to the document shall be regarded as its use and the same shall require permission. Circulation of this document, especially in a foreign country, may be permitted only under the provisions of the disclaimer and the applicable regulations. Unauthorized use of the study or omission of details of the source or the acknowledgement of copyright may lead to initiation of a civil suit for damages and be liable for prosecution.

If any part or individual formulations of this disclaimer are found to be unsustainable or become unsustainable at a future date, the rest of the contents and their validity shall not be affected by it.

---

## Dynamics Group AG

Utoquai 43  
CH-8008 Zürich  
Tel. +41 43 268 32 32  
Fax +41 43 268 32 39

Zeughausgasse 22  
CH-3011 Bern  
Tel. +41 31 312 28 41  
Fax +41 31 312 28 49

21, rue des Caroubiers  
CH-1227 Carouge/GE  
Tel. +41 22 308 62 20  
Fax +41 22 308 62 36

[contact@dynamicsgroup.ch](mailto:contact@dynamicsgroup.ch)

<http://www.dynamicsgroup.ch>