

CFA Institute Research Challenge

WAT

Vakuum Apparate Technik
(engl.: vacuum device technology)

BUY

RECOMMENDATION



Switzerland



Natalia Grudina



Jeroen Zandbergen



Sam Wagner



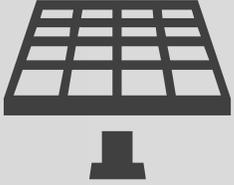
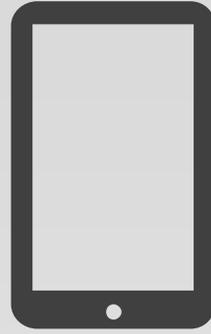
Jonathan Pavillard



Mark Temnikov

Unil

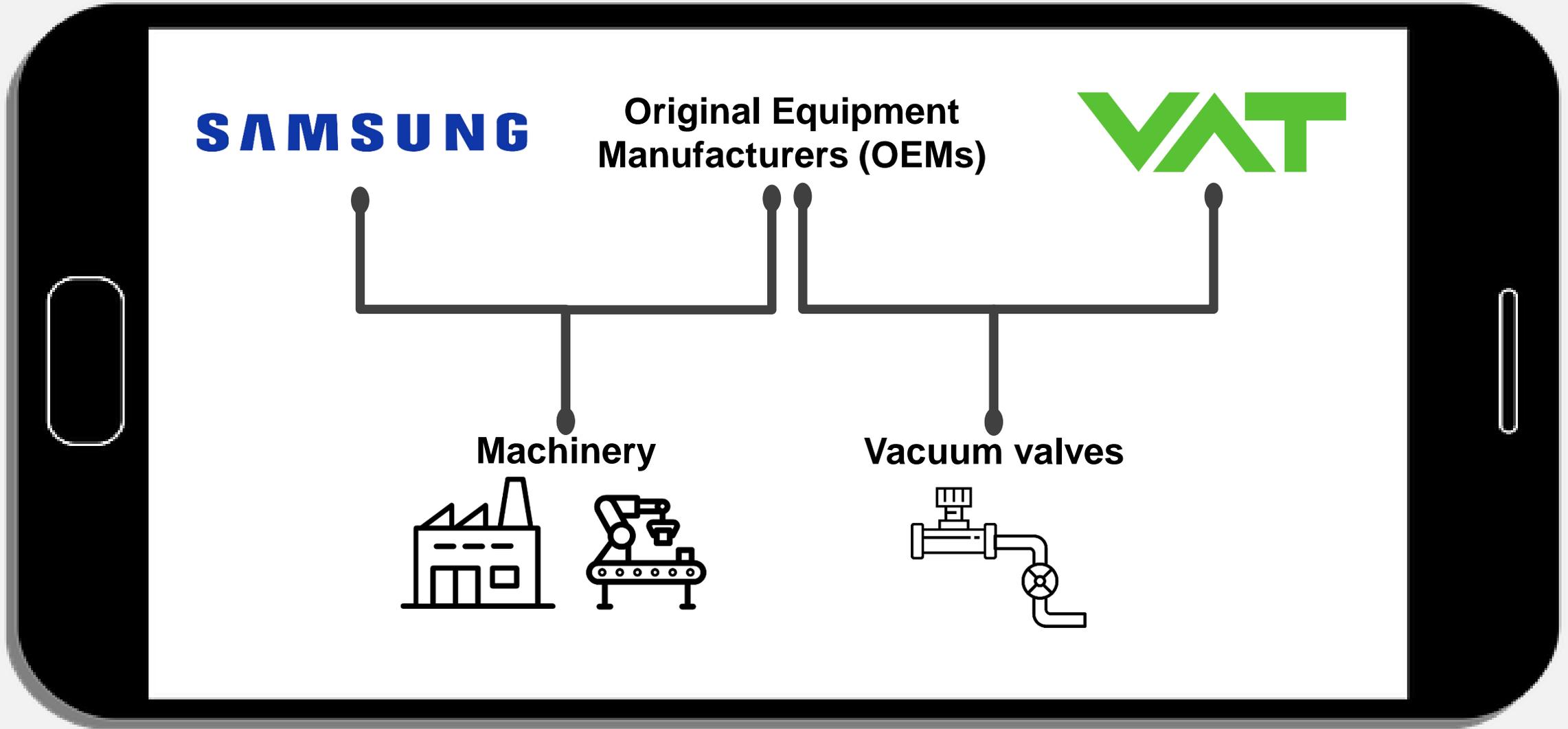
UNIL | Université de Lausanne
HEC Lausanne



WAT

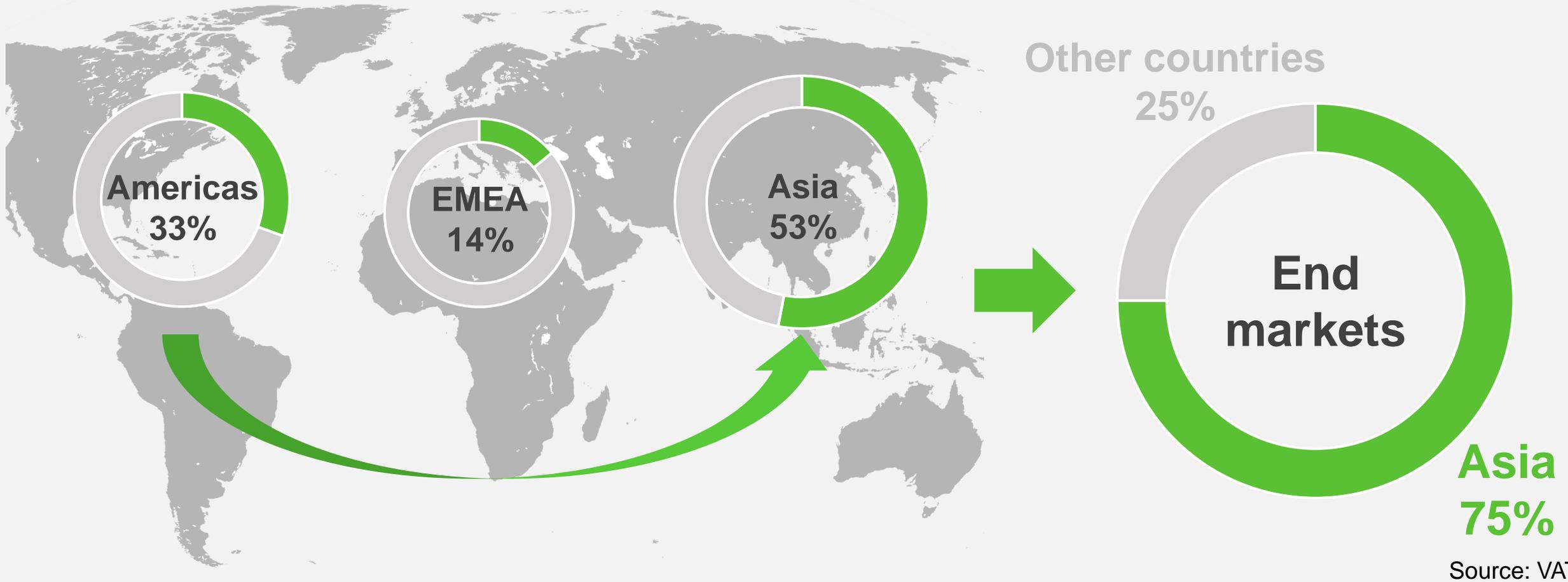


YOU





GLOBAL VACUUM VALVE PURE-PLAYER

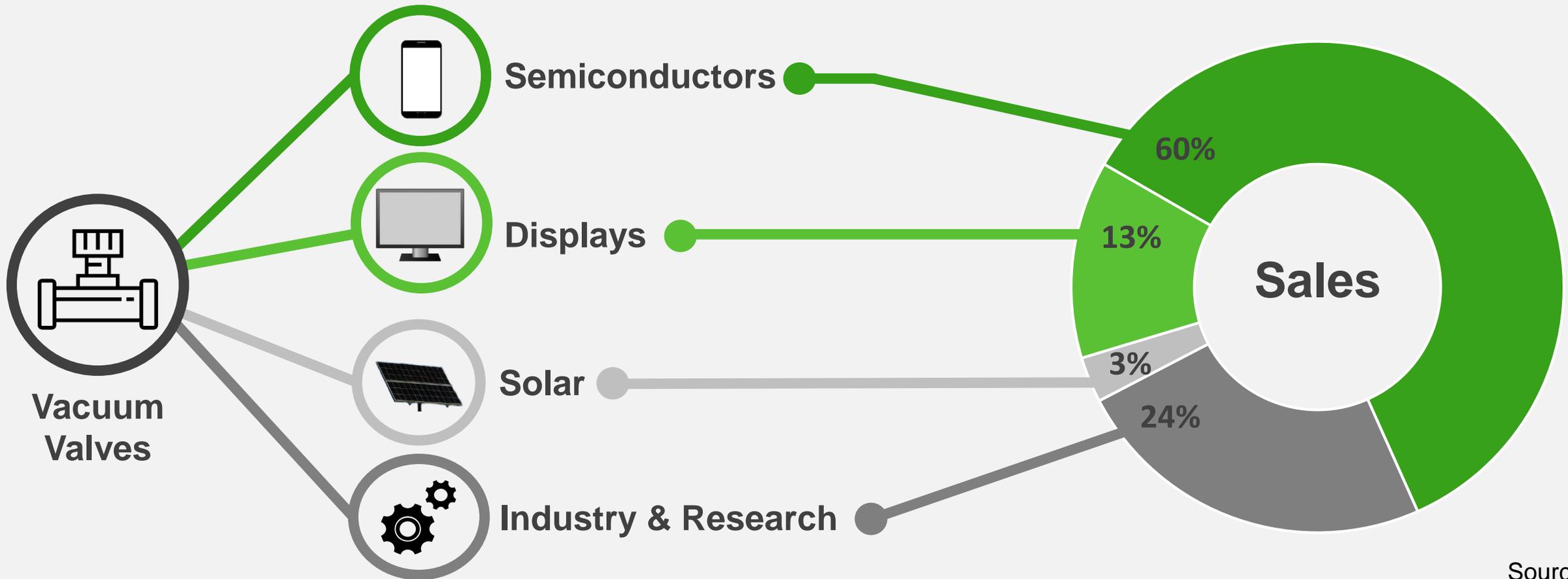


Source: VAT

Geographical markets



GLOBAL VACUUM VALVE PURE-PLAYER



Source: VAT

Market segments



BUY

Recommendation

CHF 158 Closing price
April 13th, 2018

CHF 160
CHF 140
CHF 120
CHF 100
CHF 80
CHF 60
CHF 40

Apr-2016 Sep-2016 Jan-2017 Jun-2017 Nov-2017 Apr-2018

CHF 181
Target price

**15 %
Upside**



End market
growth



Strong competitive
position

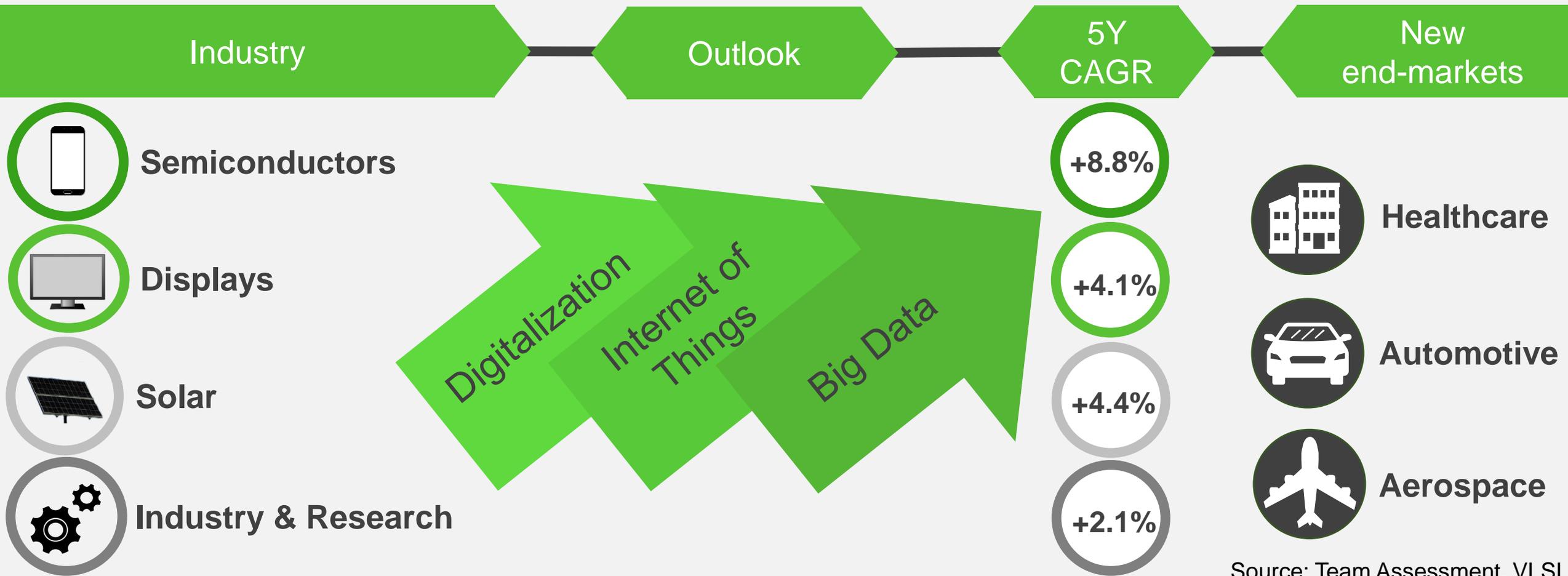


High cashflow
generation



Upside potential
& limited risk

Mega trends drive end market growth



Source: Team Assessment, VLSI

 End market growth

 Strong competitive position

 High cashflow generation

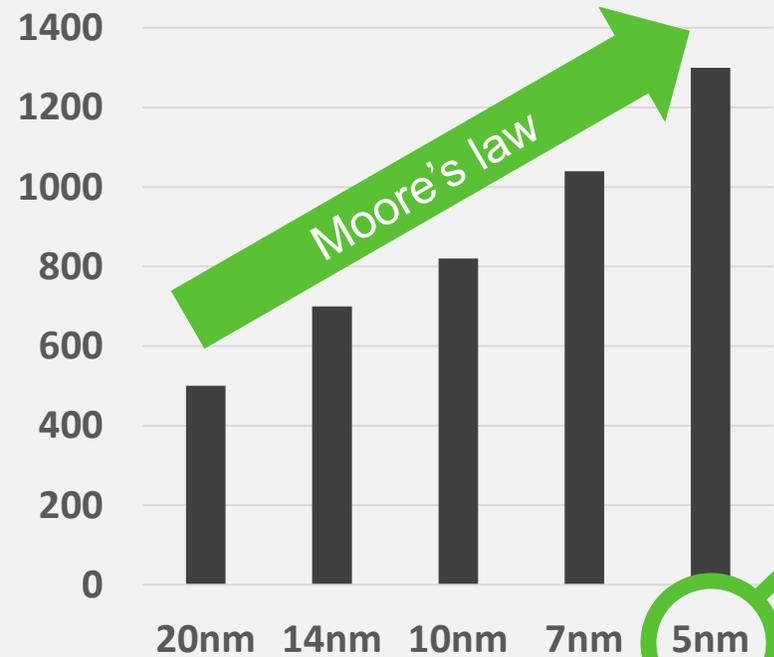
 Upside potential & limited risk

Vacuum processing becomes more essential

Production steps per node size

Need for cleanliness

Sales percentage of vacuum equipment

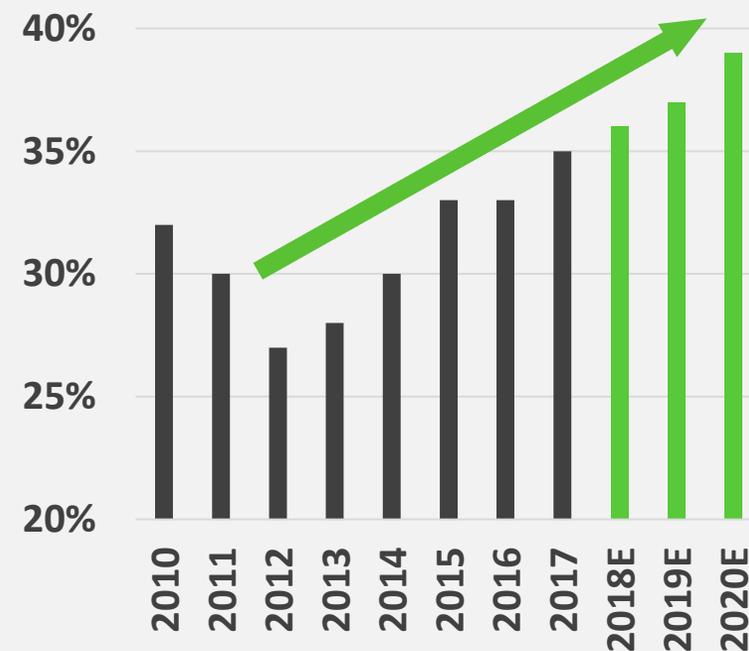


Node size

• 5 nm

Dust Particle

● 35 nm



Source: VLSI, Team Assessment



End market growth



Strong competitive position



High cashflow generation



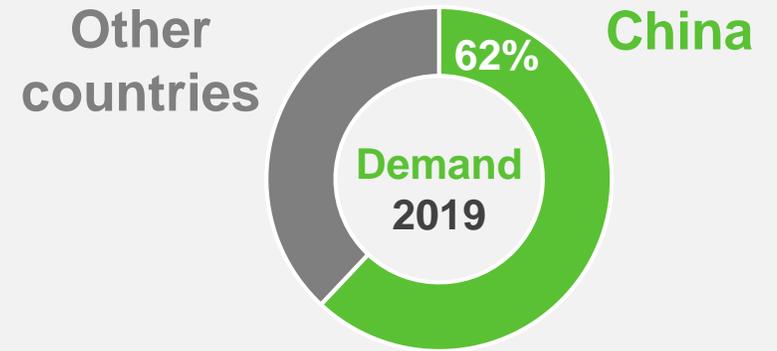
Upside potential & limited risk

Chinese R&D expansion benefits VAT

% of total world supply in semiconductor components

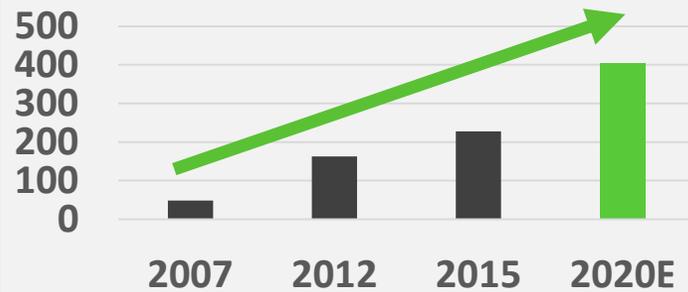


% of total world demand in semiconductor components



VS

Chinese R&D spending in the technological sector (USD Bn)



TOKYO ELECTRON



Source: PWC, McKinsey



End market growth



Strong competitive position



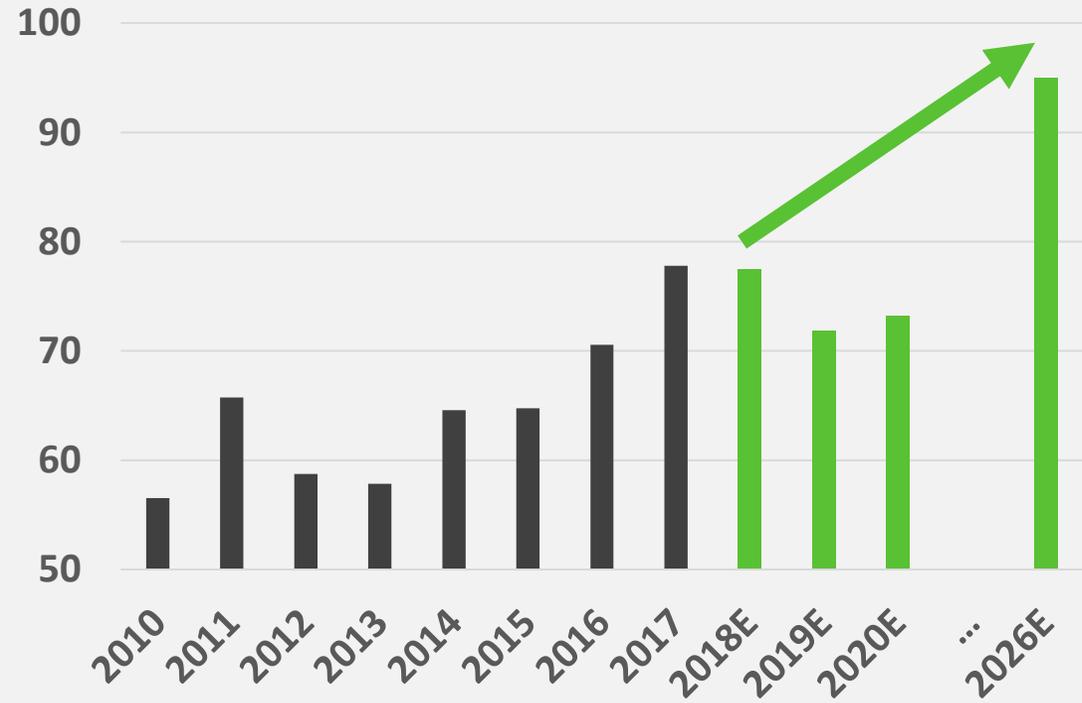
High cashflow generation



Upside potential & limited risk

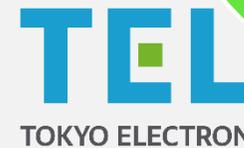
End clients buy from 3 key equipment manufacturers

Global capex in the semiconductor industry (USD Bn)



Semiconductor equipment supplier market concentration

Other



Source: VLSI, Statista



End market growth



Strong competitive position



High cashflow generation



Upside potential & limited risk



End market growth

Strong competitive position

High cashflow generation

Upside potential & limited risk

New end market trends

Rising need for vacuum

Chinese R&D expansion

Solidified place in the value chain



Source: VLSI, VAT



End market growth



Strong competitive position

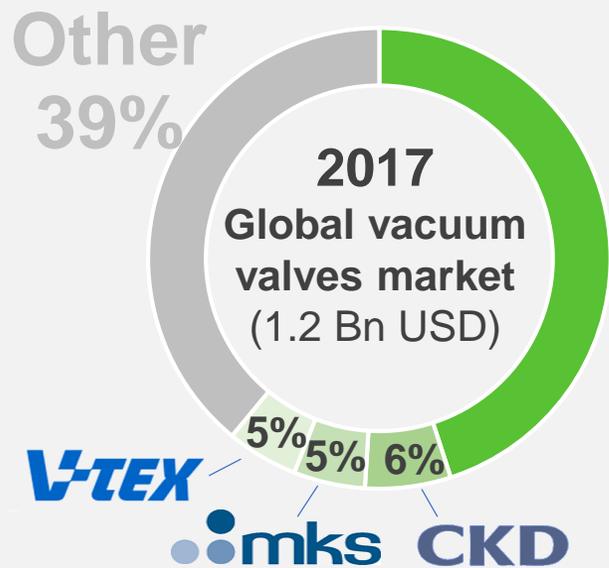


High cashflow generation

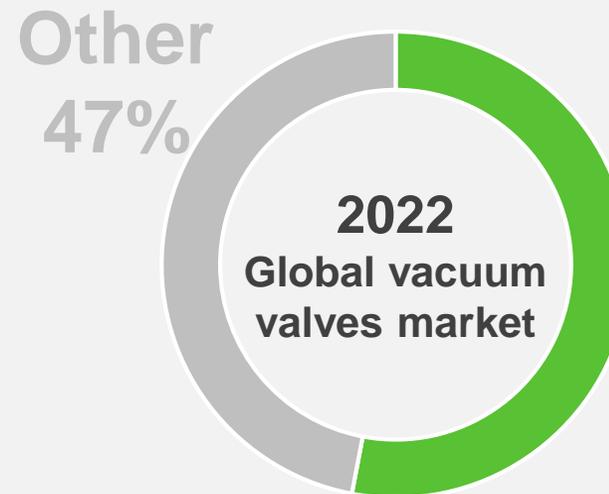


Upside potential & limited risk

Market leader with growing market share



VAT
45%



VAT
53%



Market share gains in growing main semiconductor market

&



Global reach



Focus



Relative size



Innovation

Source: VLSI, VAT, Team Assessment



End market growth



Strong competitive position

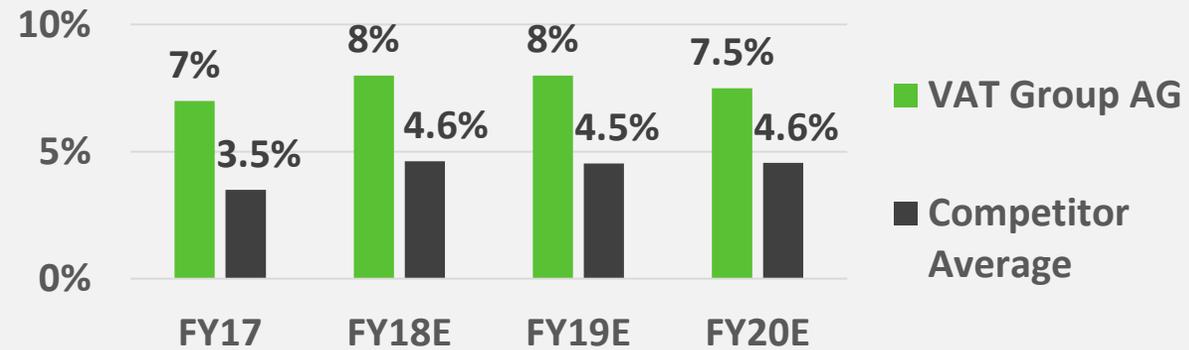


High cashflow generation



Upside potential & limited risk

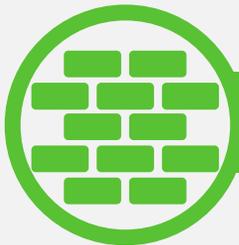
R&D / Sales



20%
of workforce
engaged in R&D



2-3 years
average
development cycle



High barriers to entry



Strong patent portfolio

~170 granted patents
~170 pending patents



Sales generation

~25% of sales generated
from products developed in
the past 3 years

Source: Thomson Reuters, VAT, Team Assessment



End market
growth



Strong competitive
position



High cashflow
generation



Upside potential
& limited risk



End market
growth



Strong competitive
position

Strong value chain

Market leadership

Innovation



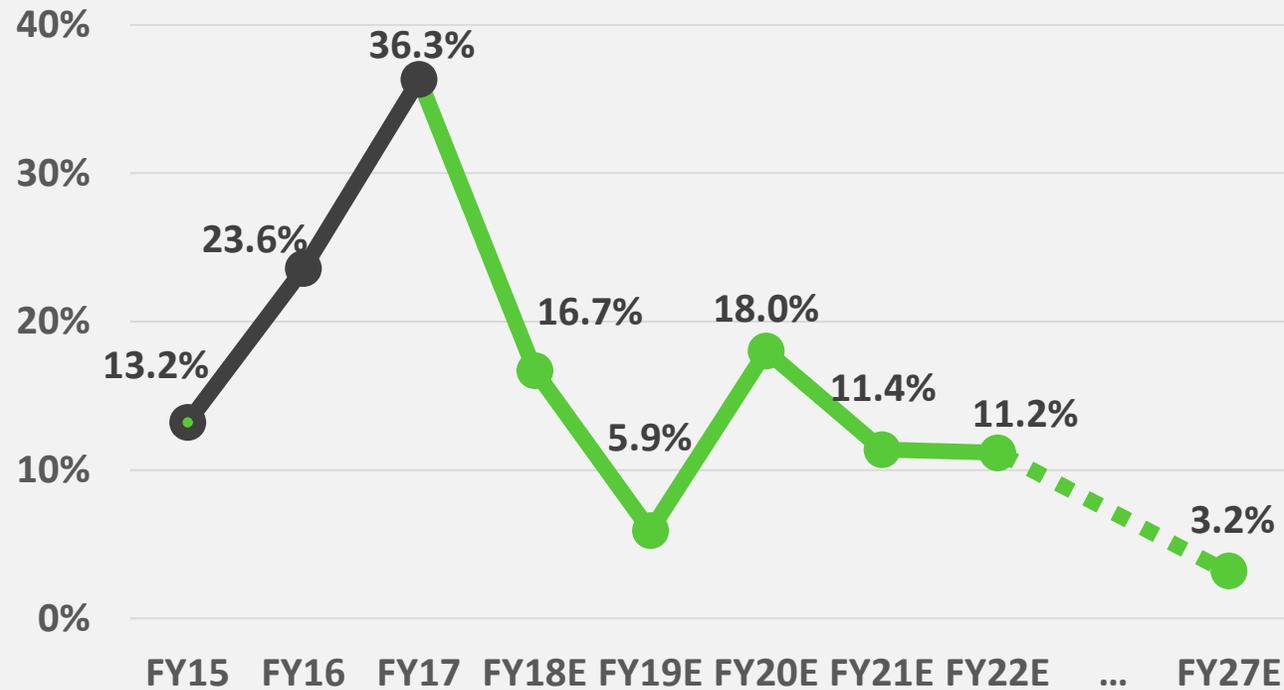
High cashflow
generation



Upside potential
& limited risk

High revenue growth through increasing volumes

Revenue growth forecast



Source: VLSI, Team Assessment



Growth drivers



Volume effect

- Growing end-markets
- Opportunities in new markets
- Market share gains



Pricing liberty

- Complexity in the product
- Reliance on VAT
- Ability to pass on FX and raw material price fluctuations



End market growth



Strong competitive position



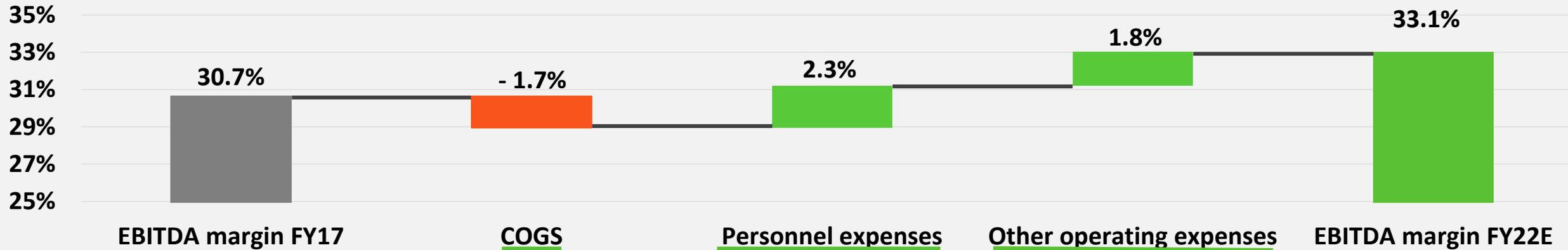
High cashflow generation



Upside potential & limited risk

Outsourcing and cost efficiency drive margins up

EBITDA margin bridge FY17 - FY22E



COGS

Outsourcing affects COGS negatively:
Suppliers increase their prices to take into account the depreciation of machinery

Personnel expenses

Outsourcing affects personnel expenses positively:
Provides flexibility to adjust capacity

Other operating expenses

VATmotion program:
Global sourcing and material planning

Source: Team Assessment, VAT



End market growth



Strong competitive position



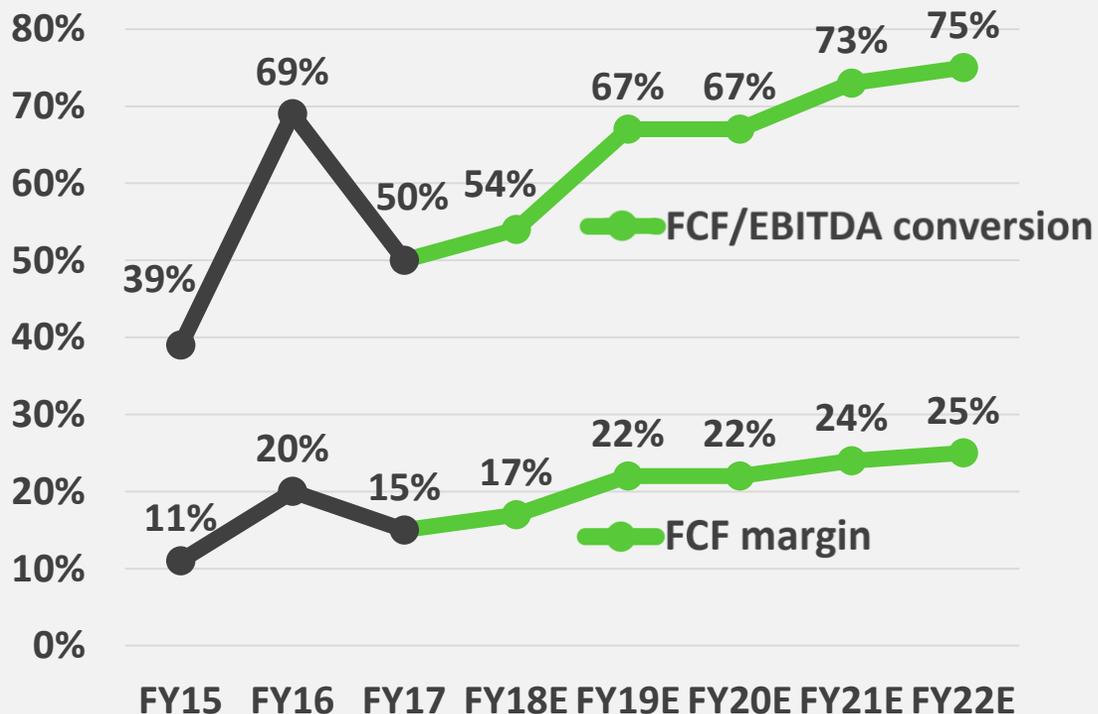
High cashflow generation



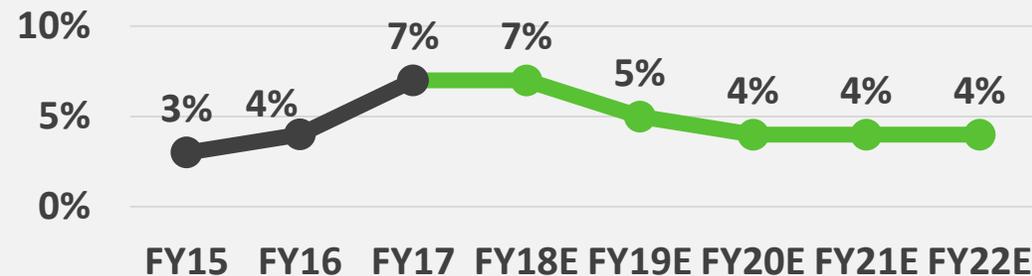
Upside potential & limited risk

High FCF generation via strong operating performance

High FCF margin & conversion



Not capital-intensive (low capex / sales)



More efficient (decreasing operating cycle)



Source: Thomson Reuters, VAT, Team Assessment



End market growth



Strong competitive position



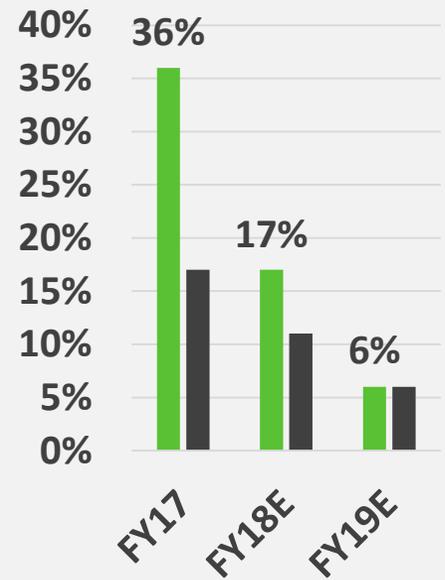
High cashflow generation



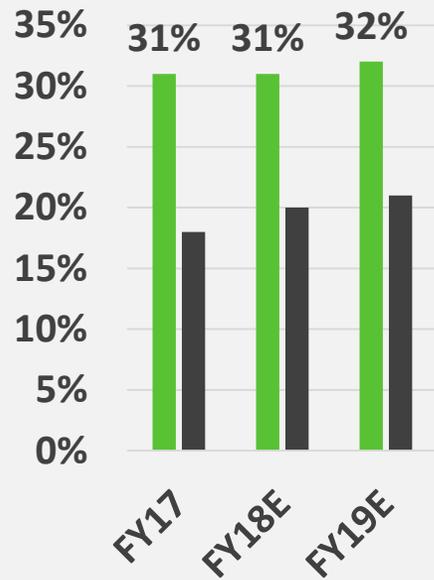
Upside potential & limited risk

VAT above peers

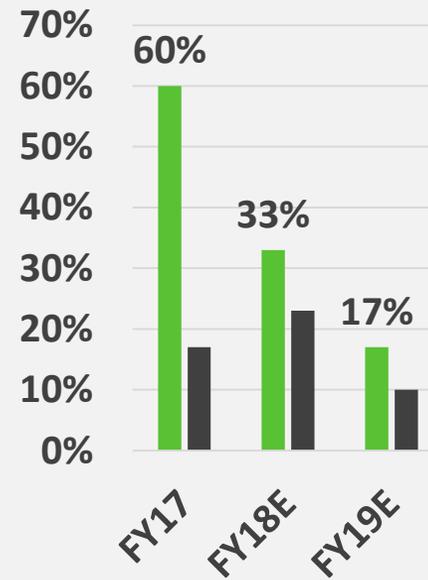
Sales growth



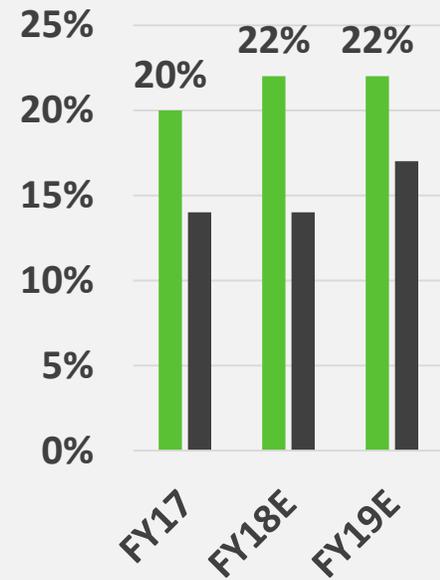
EBITDA margin



EPS growth



ROIC



Peers



Source: Thomson Reuters, Team Assessment



End market growth



Strong competitive position



High cashflow generation



Upside potential & limited risk



End market
growth



Strong competitive
position



High cashflow
generation

Revenue growth

Efficiency gains

Shareholder value



Upside potential
& limited risk

VAT is a good investment

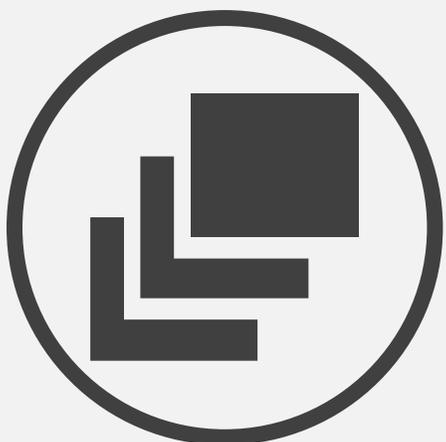
Discounted free cash flow to firm



75%

+

Multiple valuation



25%

=

VAT



Blended target price

BUY



Upside potential

Source: Team Assessment



End market growth



Strong competitive position



High cashflow generation



Upside potential & limited risk

DCF yields positive upside

DCF TARGET: CHF 182

Cost of debt

1.9%

Cost of equity

9.8%

WACC

9.4%

Terminal growth

3.2%

WACC

		8.4%	8.9%	9.4%	9.9%	10.4%
Terminal Growth (2027E)	4.2%	68%	49%	34%	22%	11%
	3.7%	52%	44%	24%	18%	4%
	3.2%	39%	32%	15%	10%	-2%
	2.7%	29%	23%	9%	1%	-7%
	2.2%	20%	14%	2%	-3%	-11%

Source: Team Assessment



End market growth



Strong competitive position

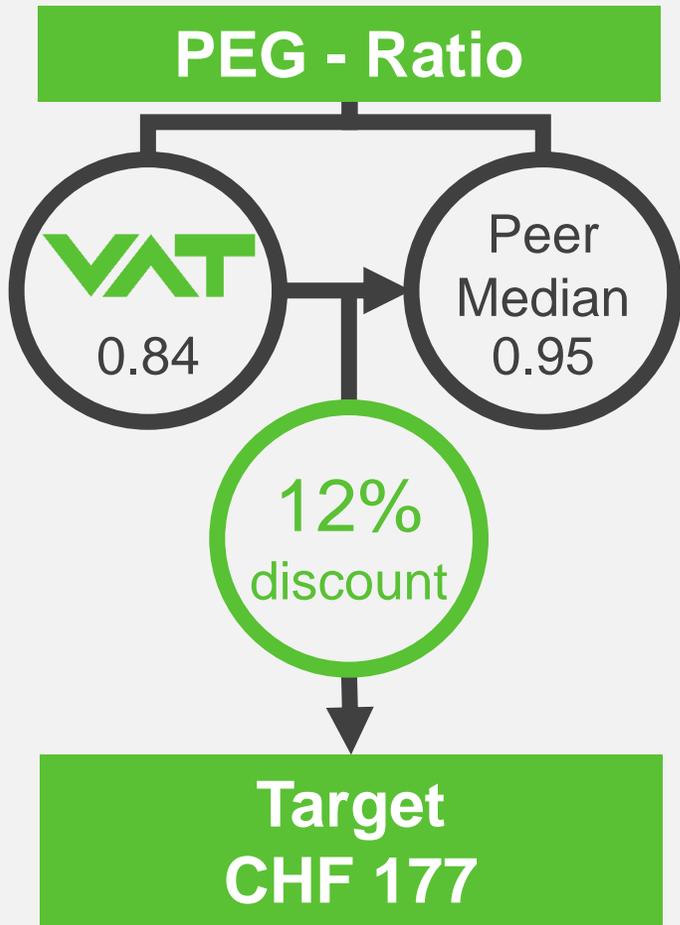


High cashflow generation



Upside potential & limited risk

VAT trades at a discount to peers



Peers	Size (EV)	Line of business	Revenue CAGR	EBITDA margin	Total Leverage	Dividend Yield
	🕒	🕒	🕒	🕒	🕒	🕒
	🕒	🕒	🕒	🕒	🕒	🕒
	🟢	🕒	🕒	🕒	🟢	🕒
	🕒	🕒	🕒	🕒	🕒	🕒
	🟢	🕒	🕒	🕒	🕒	🕒
	🕒	🕒	🕒	🕒	🕒	🕒
	🕒	🟢	🟢	🕒	🕒	🕒
	🕒	🕒	🕒	🕒	🕒	🕒
	🕒	🕒	🕒	🟢	🕒	🕒
	🕒	🕒	🕒	🕒	🕒	🕒
	🕒	🕒	🕒	🕒	🕒	🕒
	🟢	🕒	🕒	🕒	🕒	🕒
	🕒	🕒	🕒	🕒	🕒	🟢

Comparability

- 🟢 Highly
- 🕒 Likely
- 🕒 Somewhat
- 🕒 Not likely
- 🕒 Not at all

Source: Thomson Reuters, Team Assessment



End market growth



Strong competitive position

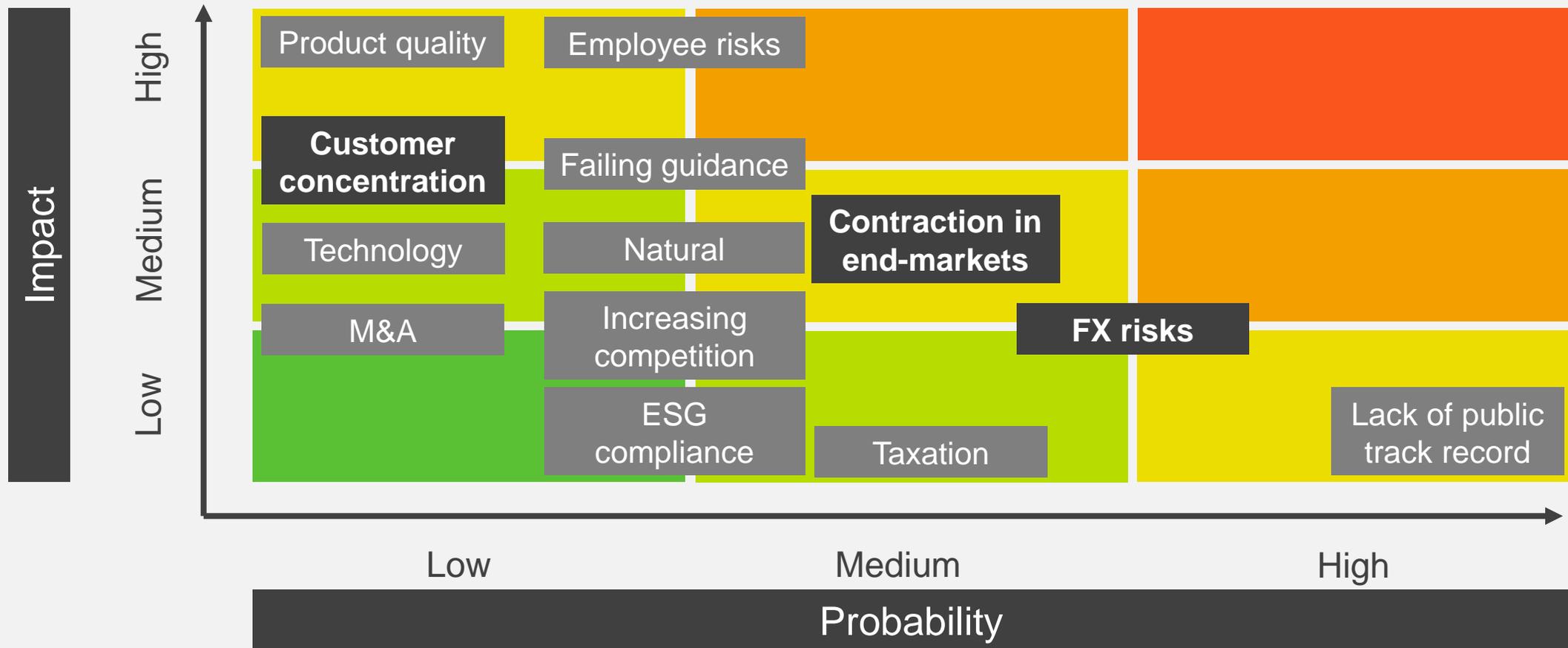


High cashflow generation



Upside potential & limited risk

No high-probability, high-impact risk



Source: Team Assessment



End market growth



Strong competitive position



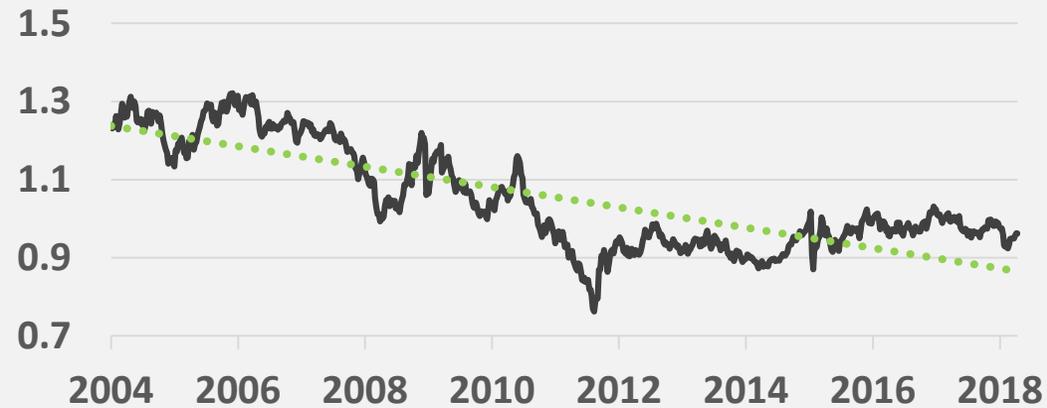
High cashflow generation



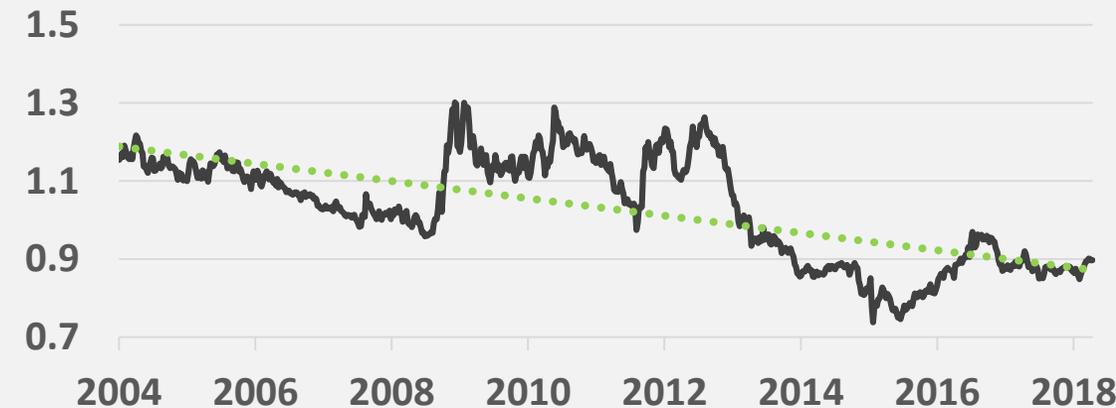
Upside potential & limited risk

Swiss Franc appreciation

CHF per USD – Exchange rate



CHF per JPY 100 – Exchange rate



Effect on Swiss manufacturing companies

47 %

Significant negative effects

34%

Moderate negative effects



Main concern

Lower profit margins

(in 90% of cases)

Source: Datastream, IMF



End market growth



Strong competitive position

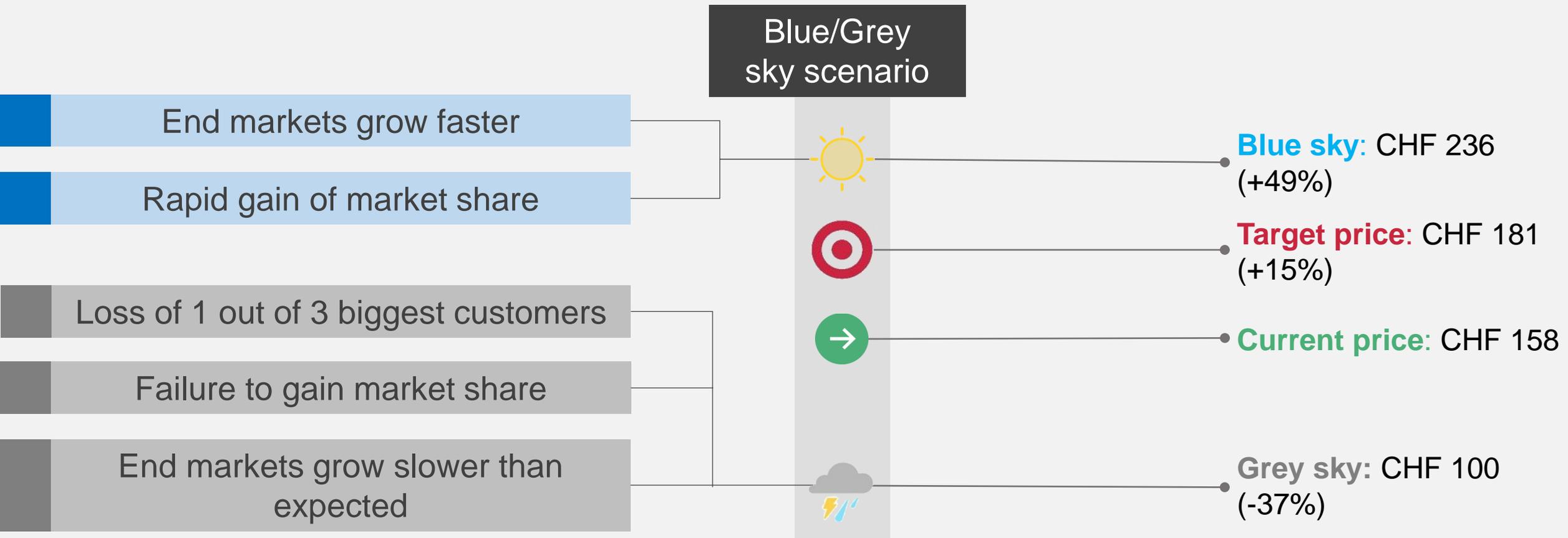


High cashflow generation



Upside potential & limited risk

Sensitivity analysis shows limited downside



Source: Team Assessment



End market growth



Strong competitive position

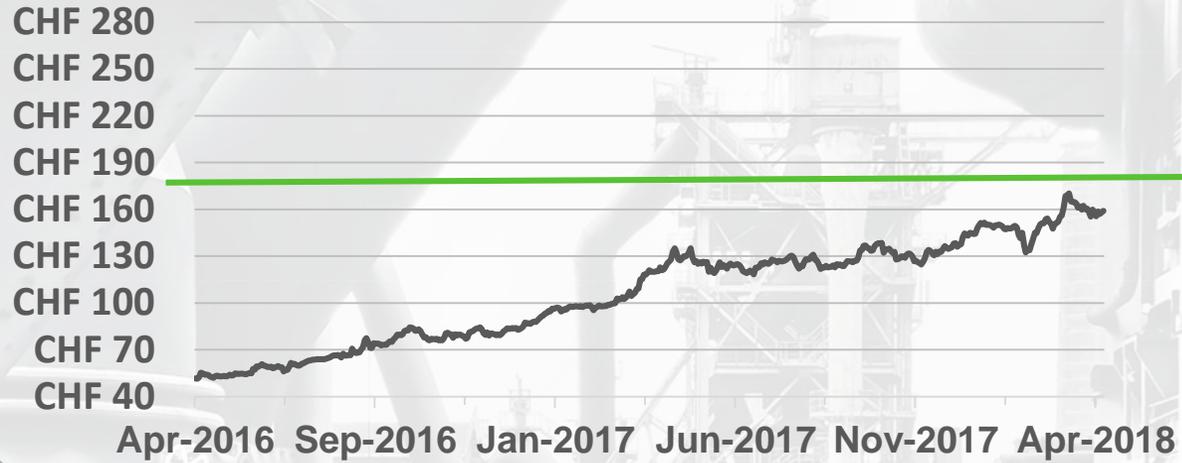


High cashflow generation



Upside potential & limited risk

BUY



Target price
CHF 181
(+15%)

VMT



End market growth

- New end market trends
- Rising need for vacuum
- Chinese R&D expansion



Strong competitive position

- Strong value chain
- Market leadership
- Innovation



High cashflow generation

- Revenue growth
- Efficiency gains
- Shareholder value



Upside potential & limited risk

- Blended approach
- Attractive upside
- Limited downside