BRYAN, GARNIER & CO

INDEPENDENT RESEARCH

21st July 2016

TMT

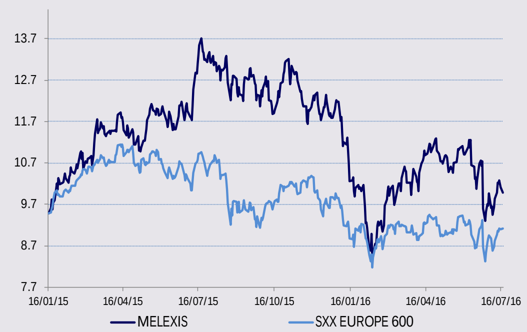
Melexis

Even diamonds have a price

Fair Value EUR48 (price EUR61.00) **SELL**
Coverage initiated

Bloomberg	MELE BB
Reuters	MLXS.BR
12-month High / Low (EUR)	61.0 / 37.7
Market capitalisation (EURm)	2,464
Enterprise Value (BG estimates EURm)	2,405
Avg. 6m daily volume ('000 shares)	38.50
Free Float	35.6%
3y EPS CAGR	5.3%
Gearing (12/15)	-24%
Dividend yields (12/16e)	3.02%

YE December	12/15	12/16e	12/17e	12/18e
Revenue (EURm)	400.14	453.31	494.53	535.98
EBITA EURm)	107.6	111.4	123.1	133.5
Op.Margin (%)	26.9	24.6	24.9	24.9
Diluted EPS (EUR)	2.45	2.37	2.64	2.86
EV/Sales	6.01x	5.31x	4.81x	4.38x
EV/EBITDA	18.4x	17.3x	15.3x	14.0x
EV/EBITA	22.4x	21.6x	19.3x	17.6x
P/E	24.9x	25.8x	23.1x	21.3x
ROCE	52.5	46.2	46.0	45.3



Melexis is a Belgian company specialised in the design of components for the automotive sector. Helped by a buoyant market, the group has a solid track record, managing to maintain average annual sales growth of 21% between 2009 and 2015. However, we believe this momentum will start to slow in coming years. With Melexis' share trading on 2016e P/E of 25.8x, our EPS estimate of 5.1% points to PEG of 5.0x. In this backdrop, we advise avoiding the share and have adopted a Sell recommendation.

- **A rare and attractive profile.** Melexis is among the groups that seem to have an ideal profile at first sight. It is fabless and specialises in automotive sensors, the most buoyant segment at the moment. It has a solid track record with few disappointments and an impressive growth history. As such, it seems to tick all the right boxes for becoming one of our top picks.

- **Nevertheless, a slower momentum limits EPS growth to 5.1% on average over the next three years.** This is primarily due to a less dynamic top line than in the past with the longer maturity of products sold by Melexis (2015-2018e CAGR in sales of 10%), but also due to a margin slightly under pressure in view of increased R&D capex requirements. In all, we expect average EPS growth of 5.1% between 2015 and 2018e. In addition, we expect a downward revision to consensus estimates. Indeed, our estimates are around 3% lower than those of the market, which is currently forecasting EPS growth of 5.9%, adding a weight to the share's upside.

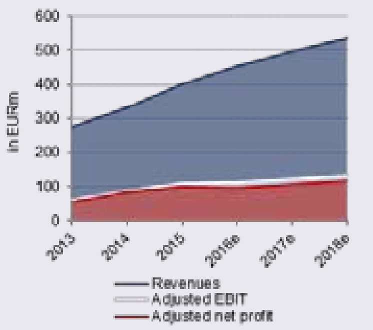
- **Our model points to downside potential of 21%.** Despite the group's attractive track record and profile, the recent share price performance to reach peaks levels over one year prompts us to avoid the share. With low EPS growth and a share trading on 25.8x 2016e net earnings, Melexis' PEG works out to 5.0x, or the highest among the semiconductor stocks we cover. Moreover, our valuation of EUR48 per share points to downside potential of 21%. As such, we believe there is nothing left to play on the share and advise avoiding it, hence our Sell recommendation.

[Bryan Garnier : Semiconductors Looking for lost growth]

Analyst:
Dorian Terral
33(0) 1.56.68.75.92
dterral@bryangarnier.com

Sector Analyst Team:
Richard-Maxime Beaudoux
Thomas Coudry
Gregory Ramirez

P&L structure



ROCE vs. WACC

Company description

Melexis is a Belgian group specialised in sensor production for the automotive sector. The group operates a fabless model and outsources the majority of its production to XFab, a sister-company foundry. Within its segment of automotive sensors, Melexis remains in the number four positioned behind Bosch Sensortec, Infineon and Allegro.

Simplified Profit & Loss Account (CHFm)	**31/12/13**	**31/12/14**	**31/12/15**	**31/12/16e**	**31/12/17e**	**31/12/18e**
Revenues	275	332	400	453	495	536
Change (%)	*11.5%*	*20.7%*	*20.4%*	*13.2%*	*9.2%*	*8.4%*
Adjusted EBITDA	79.2	111	130	139	155	168
Adjusted EBIT	63.7	89.2	108	111	123	133
EBIT	63.7	89.2	108	111	123	133
Change (%)	*14.1%*	*40.0%*	*20.7%*	*3.5%*	*10.6%*	*8.4%*
Financial results	(0.50)	2.9	1.9	0.62	2.5	2.7
Pre-Tax profits	63.2	92.1	109	112	126	136
Tax	(8.0)	(7.1)	(10.4)	(16.4)	(18.8)	(20.4)
Net profit	55.2	85.0	99.1	95.5	107	116
Adjusted net profit	55.2	85.0	99.1	95.5	107	116
Change (%)	*7.2%*	*53.9%*	*16.6%*	*-3.6%*	*11.8%*	*8.4%*
Cash Flow Statement (CHFm)						
Depreciation & amortisation	15.5	22.1	22.8	27.8	32.1	34.8
Change in working capital	0.77	(10.0)	(5.0)	(13.1)	(9.4)	(9.4)
Operating cash flows	70.8	95.0	115	109	130	141
Capex, net	(22.5)	(23.7)	(40.3)	(38.6)	(44.5)	(48.2)
Free Cash flow	48.3	71.3	74.7	70.3	85.0	92.9
Acquisition, net	0.0	0.0	0.0	0.0	0.0	0.0
Financial investments, net	0.82	4.8	0.33	0.0	0.0	0.0
Dividends	(28.0)	(40.1)	(52.1)	(74.5)	(59.0)	(63.9)
Issuance (repurchase) of own shares	0.0	0.0	0.0	0.0	0.0	0.0
Issuance (repayment) of debt	(14.6)	(4.1)	(3.0)	(0.05)	0.0	0.0
Other	14.5	0.33	(2.7)	4.8	0.0	0.0
Net debt	(9.2)	(41.4)	(58.7)	(59.3)	(85.4)	(114)
Balance Sheet (CHFm)						
Tangible fixed assets	66.3	71.7	90.3	101	114	127
Intangibles assets & goodwill	4.7	4.7	7.4	7.2	7.2	7.2
Investments	0.01	0.01	0.01	0.01	0.01	0.01
Deferred tax assets	14.1	13.2	10.9	9.8	9.8	9.8
Other non-current assets	1.5	0.96	0.01	0.01	0.01	0.01
Cash & equivalents	31.5	59.6	73.9	74.5	101	130
Inventories	44.3	56.4	64.1	66.1	72.1	78.1
Current assets	52.4	50.1	60.2	74.4	79.5	84.7
Total assets	215	257	307	333	383	437
Shareholders' equity	158	201	243	264	312	364
Provisions	0.0	0.0	0.0	0.0	0.0	0.0
Deferred tax liabilities	0.0	0.0	0.0	0.0	0.0	0.0
Current liabilities	33.7	35.2	47.4	52.9	54.7	56.5
L & ST Debt	23.5	20.2	16.8	16.5	16.5	16.5
Total Liabilities	215	257	307	333	383	437
Capital employed	150	162	185	206	228	250
Ratios						
Gross margin	46.31	48.53	48.01	46.60	46.80	47.00
Adjusted operating margin	23.14	26.83	26.89	24.57	24.90	24.90
Tax rate	12.66	7.70	9.50	14.68	15.00	15.00
Adjusted Net margin	20.05	25.57	24.76	21.09	21.59	21.59
ROE (after tax)	35.03	42.21	40.85	36.20	34.25	31.83
ROCE (after tax)	37.21	50.82	52.51	46.13	45.97	45.29
Gearing	(5.85)	(20.58)	(24.21)	(22.48)	(27.40)	(31.48)
Pay out ratio	50.78	47.13	52.56	77.93	55.23	55.23
Number of shares, diluted	40.40	40.40	40.40	40.40	40.40	40.40
Data per Share (CHF)						
EPS	1.37	2.10	2.45	2.36	2.64	2.86
Restated EPS	1.37	2.10	2.45	2.36	2.64	2.86
% change	*9.4%*	*53.9%*	*16.6%*	*-3.6%*	*11.8%*	*8.4%*
BVPS	3.90	4.98	6.00	6.53	7.72	9.00
Operating cash flows	1.75	2.35	2.85	2.70	3.21	3.49
FCF	1.20	1.76	1.85	1.74	2.10	2.30
Net dividend	0.69	0.99	1.29	1.84	1.46	1.58

Source: Company Data; Bryan, Garnier & Co ests.

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1. Investment Case

Why the interest now?

The reason for writing now

Melexis boasts an outstanding profile and track record and for this reason is particularly well-liked by investors and is currently trading at one-year high levels, which is an attractive performance so soon after the Brexit vote. However, **we believe the market is overly optimistic** and does not fully price in the change in momentum on the cards (2015-19e CAGR in sales of 10% vs. >20% over the past six years). As such, we are in a situation whereby the share is trading on 2016e P/E of 25.8x whereas average EPS growth expected for the next three years only stands at 5.1%, or a PEG of 5.0x!. In addition, our models point to downside potential. **In this backdrop, we have adopted a Sell recommendation.**

Cheap or Expensive?

Valuation

Our EUR48 Fair Value stems from a DCF valuation (WACC of 10.0%). On the basis of our estimates, the share is trading on **2016e EV/sales of 5.0x and 2016e P/E of 25.8x.**

When will I start making money?

Catalysts

Melexis is active in semiconductors primarily destined for the automotive segment. At present, **momentum in the sector is buoyant, but we have noted that competition in Melexis products is strengthening and this could partly limit the group's growth potential.** The group's next publication, expected on 27th July, could bring this weakness to light.

What's the value added?

Difference from consensus

Our estimates show a slight difference relative to the consensus. Our three-year average growth estimate is higher in sales terms (BG ests. 2015-2018e CAGR +10% vs CS +9%) but lower in net profit terms since we have factored in higher R&D investment requirements (as a % of sales). In all, our EPS estimates work out 3% below those of the consensus.

Could I lose money?

Risks to our investment case

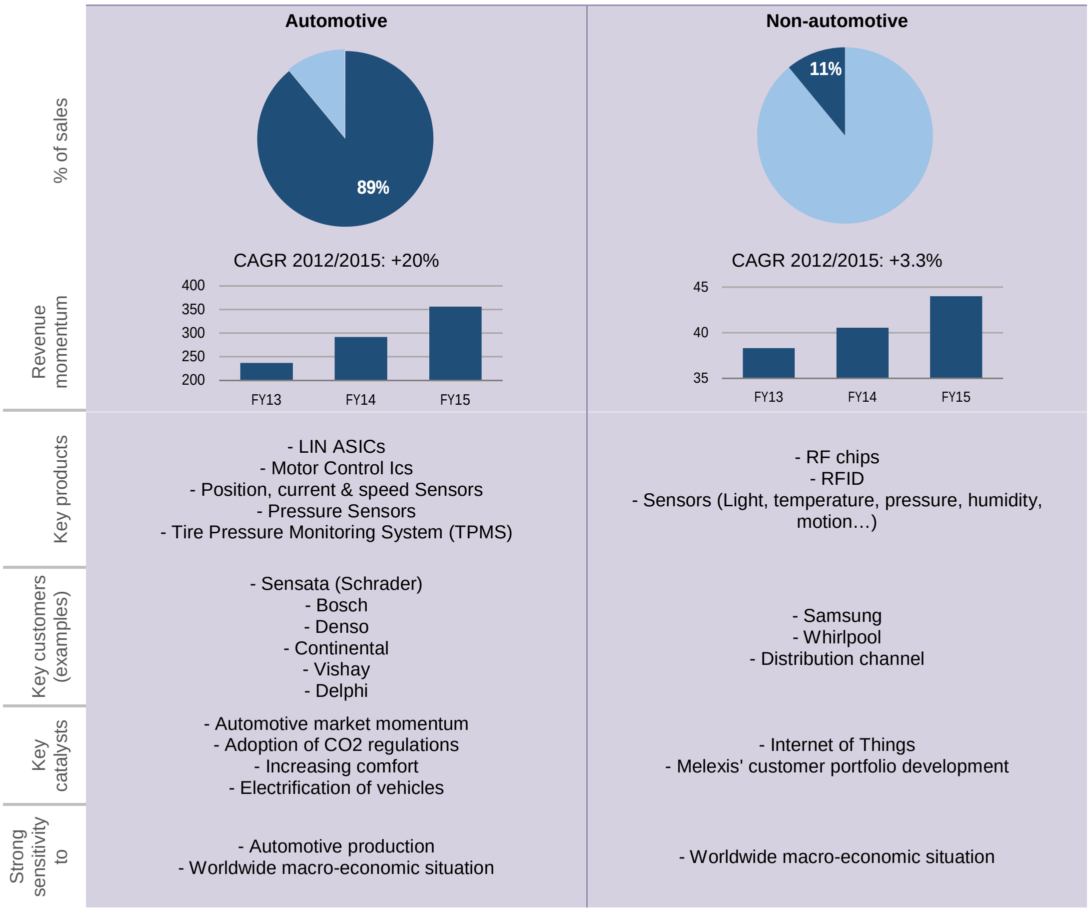
Melexis is clearly exposed to the automotive segment and is therefore particularly **sensitive to macro-economic momentum,** which could have a negative or positive effect on our forecasts.

2. Group snapshot

Melexis is a Belgian group specialised in the design of semiconductor devices destined for the automotive sector

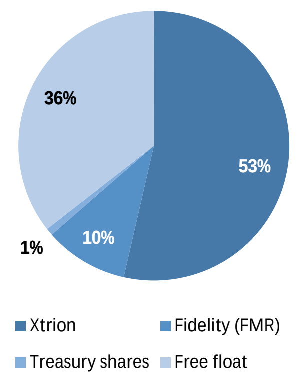
Melexis is a Belgian group specialised in the design of semiconductor devices destined for the automotive sector (almost 89% of 2015 sales). The remaining 11% is sold via partnerships, primarily for connected objects.

Fig. 1: The automotive segment represents almost 90% of the group's sales



Source: Bryan, Garnier & Co.

Melexis shareholders



Source: Company

Melexis had adopted a fabless model whereby it operates no plant and focuses on developing and selling chips. This widely-used model in the semiconductors industry has the advantage of offering greater flexibility in operating spending and helping to get through cycle lows more easily. We estimate that around 95% of production is outsourced to X-fab, a European speciality foundry, with the remaining 5% outsourced to other foundries such as TSMC (primarily) and UMC (occasionally). Note importantly that the choice of X-Fab as a foundry is not irrelevant since X-Fab is a sister company to Melexis. The majority shareholder in the foundry is Xtrion, which is also the majority shareholder in Melexis.

In the automotive segment, Melexis has established its expertise in analogue chips and especially in sensors and actuators (micro-machine controlling and moving parts that help control flows for example), which represent more than 85% of the group's overall activity. Thanks to a solid product portfolio, Melexis manages to defend itself in the automotive market against players such as NXP, Bosch Sensortec (which is also a customer), STMicroelectronics and Infineon.

3. Beware of disappointments

Melexis has an impressive track record. The group has rarely disappointed the market and between 2009 and 2015, its sales rose from EUR129m to EUR400m, namely average annual growth of 21% over the period. As such, the group has a good reputation in European stockmarkets and is seen as being a solid growth stock.

While we are clearly in admiration of the group's historical performances, we believe there is a risk in terms of future growth.

3.1. Forex effects masking a slowdown

The group is primarily active in a semiconductors universe destined for the automotive segment and more specifically sensors. In 2015, the auto components market reached USD29.3bn (source IDC) but is divided into five main product categories: powerful semiconductors, sensors, microcontrollers (MCU), ASSPs (Application Specific Standard Product, mainly connectivity and amplificators) and logic semiconductors. Melexis' offer is above all made up of sensors. For example, the group has magnetic sensors that are used for reducing car fuel consumption and gyroscopes/accelerometres for safety applications (ABS, airbag…).

Melexis has historically benefited from trends to equip vehicles with electronic components, allowing it to generate impressive average growth since 2009.

As such, Melexis has historically benefited from trends to equip vehicles with electronic components, allowing it to generate impressive average growth since 2009. However, the group has also won market share thanks to better momentum in automotive sensors than in other components. Thanks to its intelligent positioning, the group has therefore managed to outperform its market for several years, although we think things are beginning to change and a slowdown is starting to take shape.

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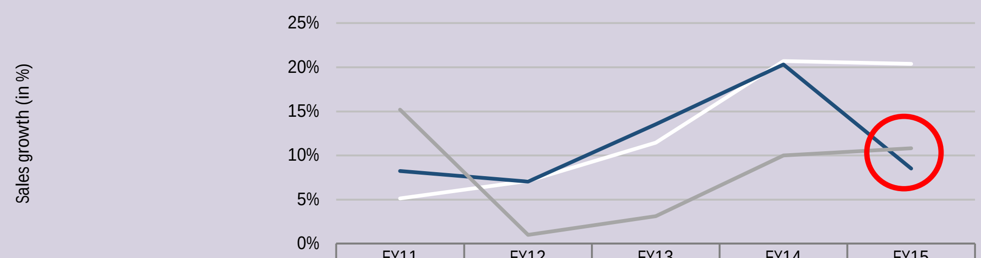
This slowdown is only visible when the group's sales are adjusted for forex effects. Indeed, between 2011 and 2015, average sales growth adjusted for forex effects worked out to 14.8%. Compared with average growth in the automotive semiconductors segment, the group also posted an outperformance of 8.7pp. However, while the group's 2015 growth stood at more than 20%, adjusted for forex, it only worked out to 9%. Admittedly, this is an excellent performance, but over the same period, market growth ran at around 10.8% according to IDC data.

Fig. 2: Growth driven by a beneficial EUR/USD exchange rate

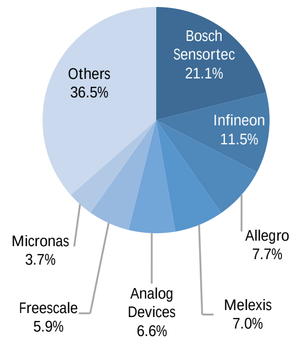


	FY11	FY12	FY13	FY14	FY15
Melexis sales growth	+5.1%	+7.1%	+11.5%	+20.7%	+20.4%
Melexis sales growth at constant change	+8.3%	+7.0%	+13.5%	+20.3%	+8.5%
Semi Automotive market growth	+15.2%	+1.0%	+3.1%	+10.0%	+10.8%

Sources: IDC; Bryan, Garnier & Co ests.

3.2. Competition is changing

Automotive sensors – market share



Source: Strategic Analytics

Melexis is virtually exclusively exposed to the automotive segment, meaning that the group is still advantageously positioned, with the segment continuing to generate healthy momentum in 2016 and offering attractive prospects for coming years. In addition, the market segment has high entry barriers and the group of players active in this segment has remained virtually the same for 20 years. However, we have noticed changes within the segment that could be disadvantageous for Melexis.

Firstly, we would point out STMicroelectronics' aim to penetrate the automotive sensors segment. Boasting good expertise in consumer sensors and a healthy positioning in the automotive segment via other products, the group is now looking for a new source of fresh growth in automotive sensors. Although it is not really visible as yet, we believe that ST has all the right ingredients (expertise, production ability, commercial network etc.) to become a heavyweight rival and 2016 should be a key year for STMicroelectronics in this segment.

We also see the acquisition of Micronas by Japanese group TDK (announced in December 2015, closed in March 2016 valuing Micronas at almost CHF214m) as a potentially dangerous operation for Melexis since we believe TDK could provide Micronas additional means to extend and strengthen its product portfolio.

3.3. Macro: a solid group but not insensitive

With recent negative newsflow in smartphones and PCs, numerous investors have found a safe-haven in Melexis, believing the share to be better positioned (thanks to its automotive exposure) and protected from macro-economic hazards. Just looking at the share's reaction in recent weeks is enough to understand the view of Melexis' solidity that investors have.

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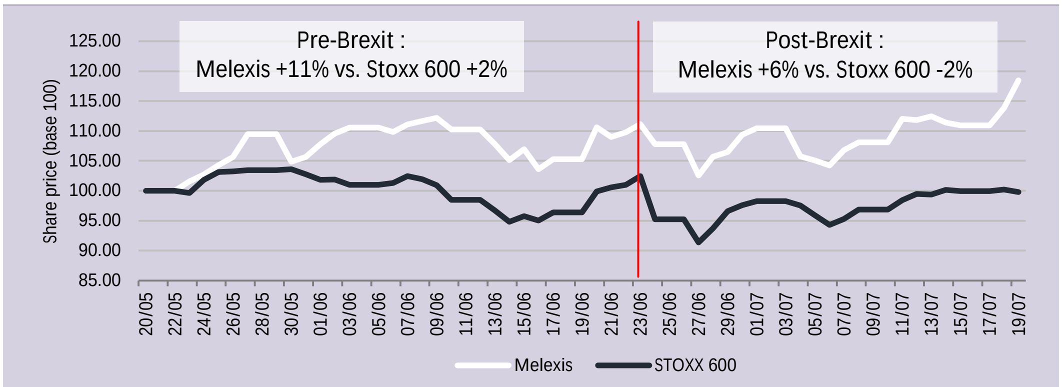
Fig. 3: Market sentiment: market impact of the Brexit seems to be limited on Melexis share price evolution



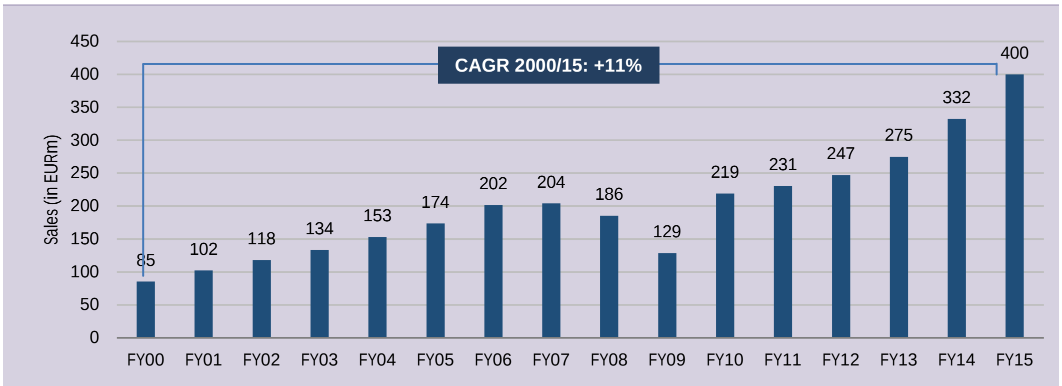
Sources: Bloomberg; Bryan, Garnier & Co ests.

While the overall market always seems to have trouble to get back to pre-Brexit level (Stoxx 600 + 1% over the past two months), Melexis has little suffered from the impact Brexit market (that either before or after the announcement of results). We are not discussing the impact of Brexit on Melexis' business here, but would simply highlight the very positive market sentiment underpinning the share price.

The group nevertheless suffered harshly from the global recession prompted by the financial crisis in 2008.

Furthermore, whereas the market still has this sentiment of solidity, Melexis has already proved that it is not immune to the hazards of the global economy. Between 2000 and 2015, the group generated growth of 11% on average whereas the 2000/2015 CAGR in global sales in the industry stood at 3.2%. The group nevertheless suffered harshly from the global recession prompted by the financial crisis in 2008. In semi-conductors, significant sensitivity to the economic backdrop is not surprising, but we would note that Melexis suffered more than the rest of the industry. Between 2007 and 2009, global semiconductor sales fell by 6% on an average annual basis whereas the group saw its sales plummet 21% a year on average.

Fig. 4: Robust growth but sensitive to the economic backdrop



Sources: Melexis; Bryan, Garnier & Co ests.

Over the same period, we noted that despite the fabless model operated by Melexis, the margin was also affected.

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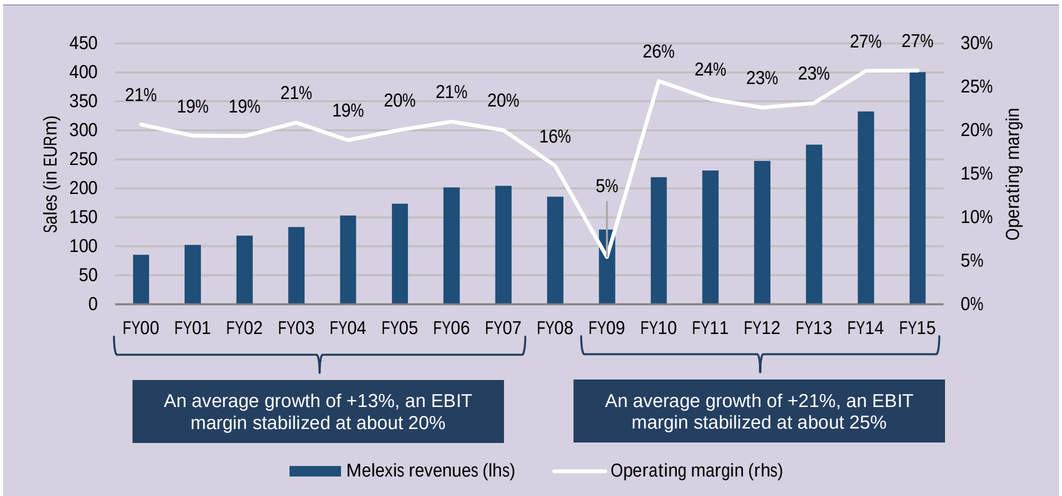
Fig. 5: Margins more sensitive to growth than business volumes



Sources: Melexis; Bryan, Garnier & Co ests.

As such, although the group has a solid business model, it is not insensitive to macro-economic hazards. At present, we have no reason to think that there is a potential risk for the group's business, but would point out that the share currently benefits from very positive market sentiment that is likely to change rapidly. In this respect, the market situation is very similar to that of Dialog until the acquisition of Atmel in September 2015. Also, we remind that IMF recently revised down its growth forecasts (again). IMF's projection for global growth are now down to 3.1% from 3.2% for 2016, and to 3.4% from 3.5% for 2017.

4. Our scenario

4.1. A brake on growth

We are forecasting average 2015/2018e growth of 10.0% and a 25% EBIT margin.

With increased competition in Melexis products (STMicroelectronics is currently entering the segment, Bosch Sensortec is firmly maintaining its positions, Micronas has been acquired by TDK and could see its product portfolio strengthen rapidly), we estimate that the group could no longer be in a position of significant market share gains. In addition, since the beginning of 2016, the evolution of the EUR/USD exchange rate appears to be less favourable compared with 2015. As such, we do not expect the group to outperform significantly its peers and are forecasting average 2015/2018e growth of 10.0%.

With this growth momentum, we estimate that the group can maintain EBIT margin at 25%. Indeed, outsourcing of production has not enabled it to efficiently activate any leverage thanks to additional volumes and we believe the group will not risk cutting R&D and sales investments and these could grow slightly faster than top-line growth. As such, we are forecasting a downturn in margins as of 2016 with 2016e EBIT margin at 25% (vs. 27% in 2015). Our scenario points to average EPS growth of 5.1% over the next three years.

Fig. 6: P&L – Average EPS growth of 5.1% over 2015/2018e

[in EURm]	2015	1Q16	2Q16e	3Q16e	4Q16e	2016e	2017e	2018e	CAGR 15/18e
Sales	**400**	**109**	**113**	**114**	**116**	**452**	**492**	**533**	**10.0%**
Seq. growth	20%	7%	4%	0%	2%	13%	9%	8%	
Gross profit	**192**	**49**	**54**	**54**	**54**	**211**	**230**	**251**	
Gross margin	48%	45%	47%	47%	47%	47%	47%	47%	
R&D	-57	-15	-17	-18	-19	-69	-74	-80	
% of sales	-14%	-13%	-15%	-16%	-17%	-15%	-15%	-15%	
G&A	-19	-5	-5	-5	-6	-20	-23	-26	
% of sales	-5%	-4%	-4%	-5%	-5%	-5%	-5%	-5%	
S&M	-9	-2	-3	-3	-3	-10	-11	-12	
% of sales	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	
EBIT	**108**	**28**	**29**	**28**	**26**	**111**	**123**	**133**	**7.3%**
Operating margin	27%	25%	26%	24%	23%	25%	25%	25%	
Financial result	2	-1	1	1	1	1	2	3	
% of sales	0%	-1%	1%	1%	1%	0%	1%	1%	
Income tax	-10	-4	-4	-4	-4	-16	-19	-20	
Income tax rate	-10%	-14%	-15%	-15%	-15%	-15%	-15%	-15%	
Net profit	**99**	**23**	**25**	**24**	**23**	**95**	**106**	**115**	**5.1%**
Net margin	25%	21%	22%	21%	20%	21%	22%	22%	
Dil. EPS	**2.45**	**0.57**	**0.63**	**0.60**	**0.57**	**2.36**	**2.63**	**2.85**	**5.1%**
EPS seq. growth	17%	4%	11%	-5%	-4%	-4%	11%	8%	

Source: Bryan, Garnier & Co ests.

For the next three years, our EPS estimates are on average 3% lower than the consensus. As such, we estimate there is a risk that the consensus could reduce its figures in coming months.

4.2. Cash generation intact

The group's profile is changing in terms of momentum. However, this slower trend should not change Melexis' cash generation ability. Our scenario therefore shows cash generation in the coming three years and a 2016e free cash flow yield of 3.0%.

Fig. 7: Still extensive cash generation

[in EURm]	2015	1Q16	2Q16e	3Q16e	4Q16e	2016e	2017e	2018e	CAGR 15/18e
EBITDA	**130**	**33**	**37**	**35**	**34**	**139**	**155**	**168**	
Change in WCR	-43	-4	-3	-1	-1	-15	-9	-9	
Other	28	-6	-4	-4	-3	-15	-16	-18	
Cash flow from operating activities	115	23	30	31	29	109	130	141	
Capex	-40	-8	-10	-10	-10	-39	-45	-48	
Free Cash Flow	**75**	**15**	**20**	**21**	**19**	**70**	**85**	**93**	**7.5%**
Acquisitions	0	0	0	0	0	0	0	0	
Other	0	0	0	0	0	0	0	0	
Cash flow used for investing activities	-40	-8	-10	-10	-10	-39	-45	-48	
Proceeds/Repayment of LT & ST debt	-3	0	0	0	0	0	0	0	
Dividend payment	-52	0	0	0	-74	-74	-59	-64	
Other	-6	1	0	0	0	1	0	0	
Cash flow from financing activities	-61	1	0	0	-74	-73	-59	-64	
Total Cash flow	14	16	20	21	-56	-3	26	29	
CTA (Cumulative translation adj.)	0	0	0	0	0	0	0	0	
Net increase in cash	14	16	20	21	-56	-3	26	29	
Cash at beginning of period	60	74	90	110	130	74	74	100	
Cash at end of period	**74**	**90**	**110**	**130**	**74**	**71**	**100**	**130**	**20.6%**

Source: Bryan, Garnier & Co ests.

4.3. Balance sheet strengthening gradually

With cash generation of more than EUR70m in 2016e, then EUR85m and EUR93m generated in 2017e and 2018e respectively, Melexis' balance sheet continues to strengthen in our model.

At the end of 2015, the group had net cash of EUR59m and this level rises to EUR114m in 2018e in our model. Gearing therefore changes from -24% in 2015 to -31% in 2018e.

Fig. 8: Balance sheet continuing to strengthen

[in EURm]	2015	1Q16	2Q16e	3Q16e	4Q16e	2016e	2017e	2018e
Cash and cash equivalents	74	90	110	130	74	74	100	130
Inventories	64	62	64	65	66	66	72	78
Account receivable Trade	51	53	55	55	56	56	61	66
Other	9	18	18	18	18	18	18	18
Total current assets	198	223	247	269	215	215	252	292
Property, plant and equipment	90	93	96	98	101	101	114	127
Intangible fixed assets	7	7	7	7	7	7	7	7
Deferred tax assets	11	10	10	10	10	10	10	10
Total non-current assets	109	110	113	115	118	118	131	144
Total assets	**307**	**333**	**360**	**384**	**333**	**333**	**383**	**437**
Account payable Trade	15	18	19	19	20	20	21	23
Current portion of LT debt	7	4	4	4	4	4	4	4
Accured expenses and payroll	7	10	10	10	10	10	10	10
Other	25	22	23	23	23	23	23	23
Current liabilities	54	54	55	56	56	56	58	60
LT debt less current portion	8	11	11	11	11	11	11	11
Deferred tax liabilities	0	0	0	0	0	0	0	0
Other non-current liabilities	2	2	2	2	2	2	2	2
Non-current liabilities	10	13	13	13	13	13	13	13
Total equity	243	266	291	315	264	264	312	364
Total liabilities and Equity	**307**	**333**	**360**	**384**	**333**	**333**	**383**	**437**

Source: Bryan, Garnier & Co ests.

5. Downside potential for the share

We generally use at least two valuation methods. However, like u-blox, the specific profile (midcap and fabless highly exposed to the automotive sector) of Melexis makes the composition of a representative sample irrelevant. As such, a peer comparison does not seem relevant.

Our Fair Value of EUR48 therefore stems from a DCF valuation and points to downside risk of 21% relative to the share price. Given the items mentioned above in Chapter 3, we have adopted a Sell recommendation on the share.

Our DCF valuation is based on the following assumptions:

- **Our base scenario, which includes estimates out to 2018e.** Like other semiconductors players that we cover, we have applied a cyclical growth scheme over the normalised period (from 2019e to 2024e). Nevertheless, in view of the fundamental changes affecting Melexis' profile, we have not applied our usual method of reproducing the characteristics of the previous cycle in the normalised period. We have assumed a growth rate of 13.0% (equivalent to the average growth rate over the past five years) at the beginning of the normalised period, or 2019e, which seems more representative of coming years. We have then applied a linear reduction to this rate out to 2024e in order to reach our terminal growth rate of 3.0%. For the 2016/25e period, this scenario points to average growth of 9.1%.

- **We have assumed average EBIT margin of 24.8% over 2016/25e**, i.e. the margin in our 2016/18e scenario and then a linear reduction in this margin in order to reach our long term margin of 24.6% (i.e. average EBIT margin of the past five years).

- **WCR close to 23% of sales over the entire period**, or slightly below the historical level in view of low growth.

- **Capex equivalent to 8.5% of sales in 2015e**, then 9.0% of sales over the rest of the period, close to the historical level.

- **A corporate tax rate close to 15% corresponding to Melexis' normal average corporate tax rate.** The group has a low corporate tax rate thanks to the advantages granted by the Belgian government to companies in technological innovation.

- **WACC of 10.0%.** We have applied beta of 1.2x similar to that applied in our valuation of ASML, Infineon and u-blox, a risk-free rate of 1.6% and a market risk premium of 7%. At end-2015, the group had net cash of EUR59m.

Fig. 9: WACC of 10.0%

WACC	
European risk-free interest rate	1.6%
Equity risk premium	7.0%
Beta	1.2
Return expected on equity	**10.0%**
Interest rate on debt	2.5%
Market capitalisation (EURm)	2,169
Net debt on 31/03/15 (EURm)	**-59**
Enterprise value (EURm)	2,111
WACC	**10.0%**

Source: Bryan, Garnier & Co. ests.

Fig. 10: DCF, FV of EUR48 or downside risk of 21%

in EURm (FYE 31/12)	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e
Revenues	**453**	**495**	**536**	**605**	**675**	**744**	**808**	**867**	**917**	**958**
Change (%)	*13.3%*	*9.1%*	*8.4%*	*13.0%*	*11.5%*	*10.1%*	*8.7%*	*7.3%*	*5.8%*	*4.4%*
Adjusted EBIT	**111**	**123**	**133**	**151**	**168**	**185**	**200**	**214**	**227**	**236**
Adjusted operating margin	*24.6%*	*24.9%*	*24.9%*	*24.9%*	*24.9%*	*24.8%*	*24.8%*	*24.7%*	*24.7%*	*24.7%*
Tax	-16	-19	-20	-23	-25	-28	-30	-32	-34	-35
Tax rate	*14.7%*	*15.0%*	*15.0%*	*15.0%*	*15.0%*	*15.0%*	*15.0%*	*15.0%*	*15.0%*	*15.0%*
Net Operating income after tax	**95**	**104**	**113**	**128**	**143**	**157**	**170**	**182**	**193**	**201**
Capex, net	-39	-45	-48	-54	-61	-67	-73	-78	-83	-86
As a % of sales	*8.5%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*
Depreciation & amortisation	28	32	35	54	61	67	73	78	83	86
As a % of sales	*6.1%*	*6.5%*	*6.5%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*
WCR	104	113	123	139	155	170	185	199	210	219
As a % of sales	*23.0%*	*22.9%*	*22.9%*	*22.9%*	*22.9%*	*22.9%*	*22.9%*	*22.9%*	*22.9%*	*22.9%*
Change in working capital	-13	-9	-9	-16	-16	-16	-15	-13	-12	-9
Free cash flows	**71**	**83**	**90**	**112**	**127**	**141**	**155**	**169**	**181**	**191**
Discounted free cash flows	**68**	**72**	**72**	**81**	**83**	**84**	**84**	**83**	**81**	**78**

Total discounted FCF - 2016e-2025e	787
Discounted Terminal value - 2026e	1,101
Enterprise value	**1,888**
- Provision (incl. pension plan)	7
- Fair value minority interests	12
- Net debt on 31/12/2016e	-59
Equity value	**1,928**
Nbr of diluted shares (m)	40.400
Valuation per share (EUR)	**48**
Upside vs. current share price	-21%

		WACC				
	[in EUR]	9.0%	9.5%	10.0%	10.5%	11.0%
Op. margin	23%	53	49	45	42	39
	24%	54	50	46	43	40
	25%	56	52	**48**	44	41
	26%	58	53	49	46	43
	27%	60	55	51	47	44

Source: Bryan, Garnier & Co.

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BRYAN, GARNIER & CO

London
Beaufort House
15 St. Botolph Street
London EC3A 7BB
Tel: +44 (0) 207 332 2500
Fax: +44 (0) 207 332 2559
Authorised and regulated by the Financial Conduct Authority (FCA)

Paris
26 Avenue des Champs Elysées
75008 Paris
Tel: +33 (0) 1 56 68 75 00
Fax: +33 (0) 1 56 68 75 01
Regulated by the Financial Conduct Authority (FCA) and the Autorité de Contrôle prudential et de resolution (ACPR)

New York
750 Lexington Avenue
New York, NY 10022
Tel: +1 (0) 212 337 7000
Fax: +1 (0) 212 337 7002
FINRA and SIPC member

Munich
Widenmayerstrasse 29
80538 Munich
Germany
+49 89 2422 62 11

New Delhi
The Imperial Hotel Janpath
New Delhi 110 001
Tel +91 11 4132 6062
+91 98 1111 5119
Fax +91 11 2621 9062

Geneva
rue de Grenus 7
CP 2113
Genève 1, CH 1211
Tel +4122 731 3263
Fax+4122731 3243
Regulated by the FINMA