Meylan Finance

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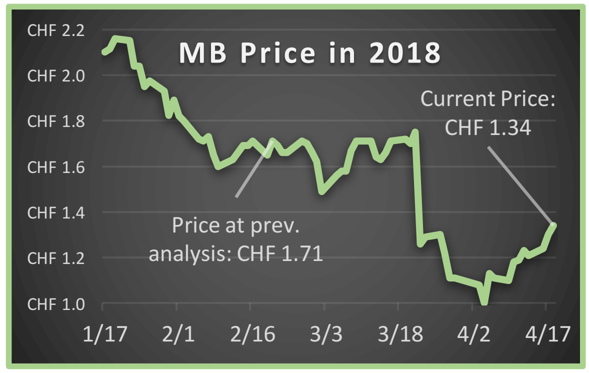
UPDATE ON MEYER BURGER

After issuing a buy recommendation for Meyer Burger in February, recent turbulences in the stock price render an equity update on the company necessary and useful.

MEYER BURGER SINCE LAST REPORT

As it can be seen on the graph, the share's price of Meyer Burger AG has dramatically plunged since the last analysis in early February and went even further from its original target price of CHF 4.85. Therefore, this fall in price imposes a re-evaluation of the originally bullish recommendation of the stock with a less optimistic approach.

Previous target price	CHF 4.85
Price at prev. analysis	CHF 1.70
Current price	CHF 1.34
Change in price (%)	- 21 %



REASONS FOR DOWNWARD MOVEMENT

There are several reasons that explain the dramatic fall in the stock price of Meyer Burger:

1. Disappointing results for 2017
   The company had sales worth CHF 473 million with an EBITDA of CHF 12.4 million, however net income was burdened by various special items and amounted to CHF -73 million. While this number was already expected to be negative, it was actually worst than analyst's previous estimates.

2. Low order intake in Q1 2018
   New orders reached a total of CHF 36 million in January and February (consisting of three orders of respectively CHF 14, CHF 15 and CHF 7 million). This run rate was thus significantly below the expected base orders of CHF 25 million per month (CHF 36 million VS CHF 50 million for first two months of 2018).

3. Lower internal guidance for FY 2018
   As a consequence of the low order intake in Q1, the company revised its expected sales for 2018 to be between CHF 450 to CHF 500 million (in comparison to expected sales of CHF 566 million established by Vontobel Research) and a EBITDA margin of around 10% (in comparison to 14% from Vontobel).

4. General higher volatility on the markets
   While the first few weeks of 2018 were positive for almost all stocks, the climate suddenly changed at the beginning of February which saw the worst week since the financial crisis in 2008 and there is no doubt that this newly and unusual volatility ended up affecting Swiss stock, including Meyer Burger.

UPDATED DCF VALUATION WITH GORDON GROWTH MODEL

Measures[1]	2018	2019	2020	2021	2022
Sales	**482.5**	**492.1**	**502.0**	**527.0**	**553.4**
% Growth	*2%*	*2%*	*2%*	*5%*	*5%*
Cost of GS	**289.5**	**295.3**	**301.2**	**263.5**	**276.7**
% Margin	*60%*	*60%*	*60%*	*50%*	*50%*
Gross Profit	**193.0**	**196.8**	**200.8**	**263.5**	**276.7**
Operating Cost	**144.7**	**157.5**	**160.6**	**210.8**	**221.4**
% Margin	*75%*	*80%*	*80%*	*80%*	*80%*
Op. Profit/Loss	**48.2**	**39.4**	**40.2**	**52.7**	**55.3**
Taxes	**4.5**	**3.7**	**3.8**	**5.0**	**5.2**
% Margin	*9.41%*	*9.41%*	*9.41%*	*9.41%*	*9.41%*
Cap. Expand.	**20**	**20**	**25**	**25**	**25**
Change in WC	**10**	**12**	**15**	**15**	**15**
Unlevered FCF	**13.7**	**3.7**	**-3.6**	**7.7**	**10.1**
Year Discount[2]	*1*	*2*	*3*	*4*	*5*
WACC	**11%**	**11%**	**8%**	**8%**	**6%**
PVLS Factor	*0.901*	*0.812*	*0.794*	*0.735*	*0.747*
PV FCF	**12.35**	**2.97**	**-2.88**	**5.69**	**7.57**

Terminal Value (in CHF M)	
Exit Year CF	**10.1**
LT Growth Rate	**10%**
FV Term. Val.	**1114.6**
PV Term. Val.	**661.5**

Enterprise Value (in CHF M)	
Cumulative DCF	**25.71**
PV Term. Val.	**661.5**
Total EV	**687.17**

Implied Share Price (in CHF M)	
Enterprise Val.	**687.17**
Long Term Debt	**245.86**
Minority Interest	**0.365**
Cash & Equivalents	**242.17**
Implied Equity	**683.11**
Diluted Shares	**327.65**
Implied Share Price	**CHF 2.085**

The target price of Meyer Burger obtained with the updated analysis is CHF 2.085 per share, a difference of CHF 2.765 per share in comparison to the previous target price of CHF 4.85 . While this approach is way less optimistic than the previous one (the specific changes are explained in the next section), it remains higher than the current stock price of CHF 1.34, indicating an undervaluation of the stock of 55 % and thereby a bullish recommendation on Meyer Burger.

[1] The principal assumptions concerning the following measures are covered in the *DCF Assumptions*, annex I.

[2] Since this valuation is established in April, the unlevered free cash flows are discounted using a full-year convention.

UPDATED ASSUMPTIONS FOR DCF VALUATION

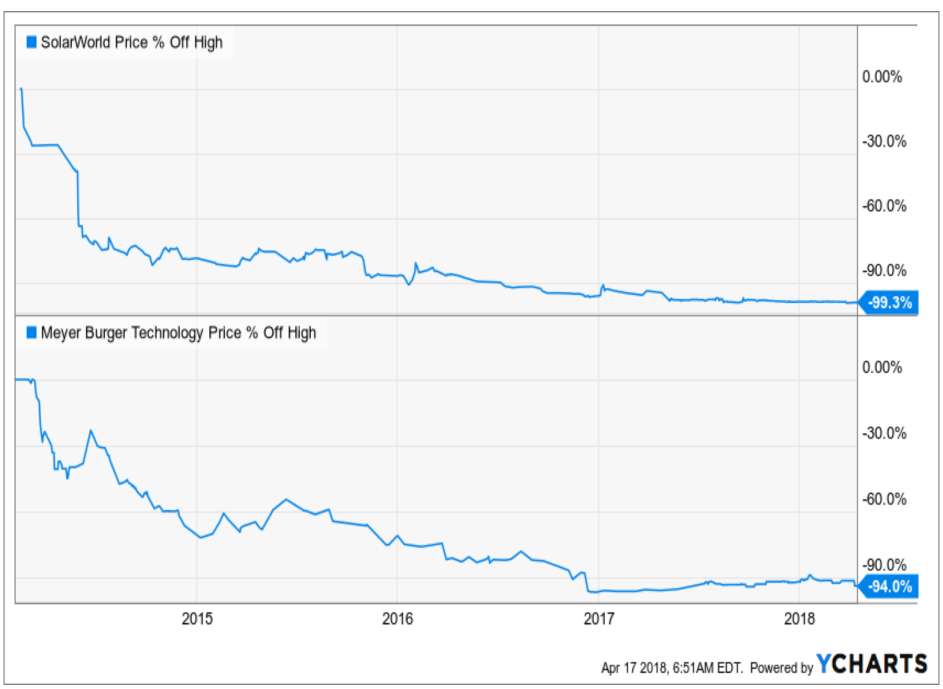
Asides from the factor of sales growth, the other assumptions (which were mostly calculated as averages from the previous years) will remain the same as in the original analysis and can be found in the appendix I. The sales growth percentage was extremely optimistic due to the deep belief in the future of the solar industry, nevertheless is it necessary to recalculate those numbers by taking into account the possibility that Meyer Burger won't play such a major role in this energy revolution.

YEARS	2018	2019	2020	2021	2022	Long-Term
Original sales % growth	5%	5%	10%	15%	15%	10%
Updated sales % growth	2%	2%	2%	5%	5%	10%

As it can be seen in the table above, there are considerable difference in the expected percentage growth of sales from just 3% in 2018 to 10% in 2022, yet the long-term growth rate will remain at 10% for the following reasons; as the world population keep growing as well as the energy needs, and in addition to the change in the type of energy consumed, Meyer Burger will certainly be able to profit from this phenomenon, even if it doesn't become such an important actor in the industry. Basically, the only manner in which such rate won't be realizable is if the company find itself in bankruptcy…

COMPARISON WITH SOLARWOLRD BANKRUPTCY

The possibility of bankruptcy need to be evaluated as well in order to determinate the safety of any investments in Meyer Burger and especially when we consider the case of Solarworld in Germany which was declared bankrupt for the second time in 1 years, reflecting the real trouble of European companies active in the domain of the solar industry. Therefore, it is essential to compare the last few years of both companies and the price of their shares as well as the nature of their business itself in order to determines whether they bear any similarities.



In this graphical comparison, it is possible to see the significant resemblance in the drastic downwards trajectory of both companies' stock prices (which appears in percentage off high to equalize for the difference in currency). In the same period of 4 years, the shares of Solarworld have gone down by a whooping 99.3% while shares of Meyer Burger by 94%, a frightening number which demonstrates the closeness between the two companies' situations and invite for more scrutiny on the Swiss firm and its future opportunities.

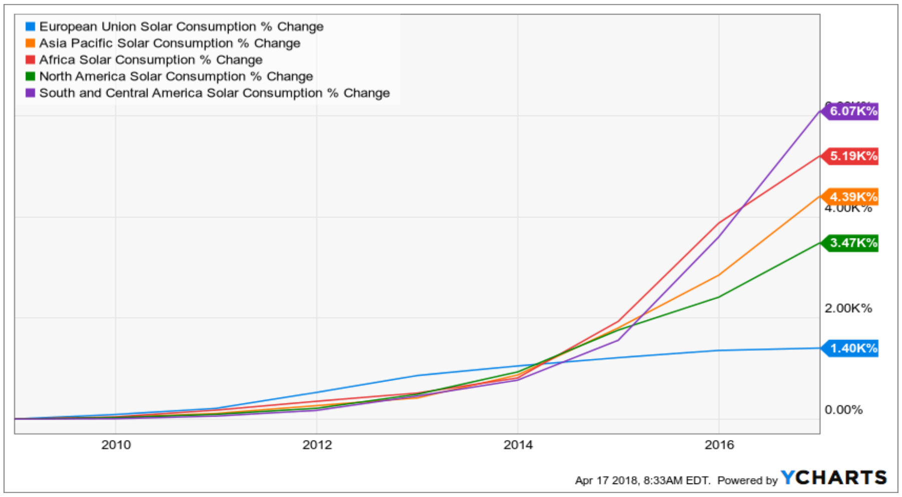
MEYER BURGER (IN M CHF)[3]					SOLARWORLD (IN M EUR)				
YEAR	**2014**	**2015**	**2016**	**2017**	**YEAR[4]**	**2013**	**2014**	**2015**	**2016**
Sales	315.8	323.5	453.1	473.2	**Sales**	455.8	573.3	763.4	803.0
Change %	56%	2%	40%	4%	**Change %**	-25%	26%	33%	5%
COGS	371.6	330.5	400.6	404.9	**COGS**	476.4	523.4	648.7	726.0
% of sales	118%	102%	88%	86%	**% of sales**	105%	91%	85%	90%
Gross Inc.	-121.1	-63.9	1.74	36.9	**Gross Inc.**	-60.5	8.32	69.7	3.94
% of sales	-38%	-20%	0.38%	8%	**% of sales**	-13%	1%	9.13%	0%
R & D	8.77	7.91	7.95	7.54	**R & D**	4.06	2.54	3.14	1.47
% of GI	-7%	-12%	457%	20%	**% of GI**	-7%	31%	5%	37%
Net Inc.	-132.74	-168.45	-96.85	-79.21	**Net Inc.**	-228.31	463.1[5]	-33.28	-91.94
% of GI	110%	264%	-5566%	-215%	**% of GI**	377%	5566%	-48%	-2334%

In this analytical comparison between MB and SW, it is possible to observe a few similarities; first of all, both companies have seen their sales grow in the recent years and therefore the fact that MB sales have been increasing isn't necessarily a guarantee against possible bankruptcy. Another aspect that might have been positive but actually doesn't make MB safe is to be found in the COGS: both companies have extremely high COGS, yet it is possible to observe a decreasing trend for this factor in both companies. Nevertheless, it remains too high and it is probably one of the main cause for SW bankruptcy: the obligation of making little margin because of the PV market dumping by China. Another aspect to be worried about is the R&D factor, which remains at the same level for MB (while decreasing for SW); indeed, in this competitive industry, a much larger sum of money should be dedicated to this factor in order to stay innovative, yet it doesn't seem to be the case in those companies. The only positive aspect of MB is the fact that its net income is slightly improving and becoming less negative, in comparison to SW's net income which shows serious inconsistencies.

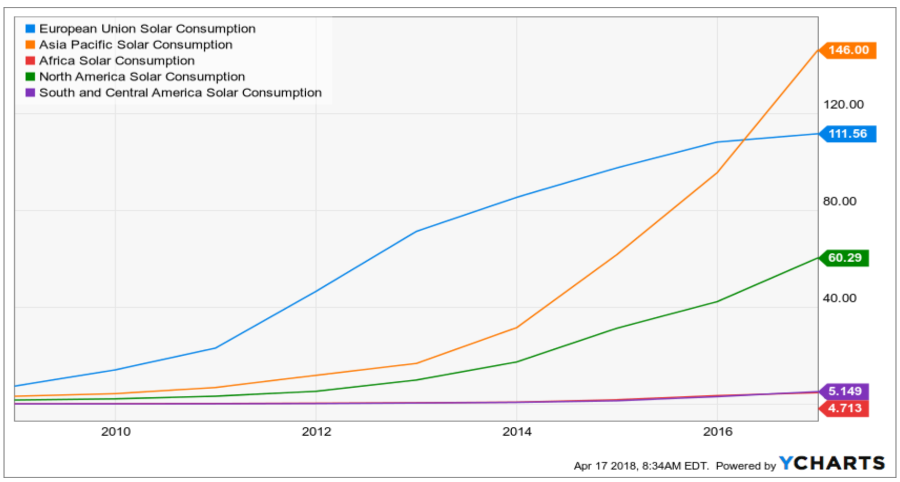
Finally, it is also important to consider the nature of the business itself between the two companies; SW is selling purely PV systems while MB is active in a broad range of domain in the solar industry. Seen from this perspective, it seems like MB has more probability to survive the low cost of PV systems induced by the Chinese overproduction…

[3] In order to compensate for the difference in currency, margins have been established for the following factors.
[4] Because of the bankruptcy in 2017, only the 4 previous years have been taken into consideration (2013-2016).
[5] Strong positive special effects due to financial restructuring and the takeover of the Arnstadt plant

REMAINING BULLISH ON SOLAR ENERGY



Region	10yr change	Quantity
EU	1.40 K %	111 T
Asia	4.39 K %	146 T
Africa	5.19 K %	4.71 T
N. A.	3.47 K %	60.2 T
S. A.	6.07 K %	5.14 T

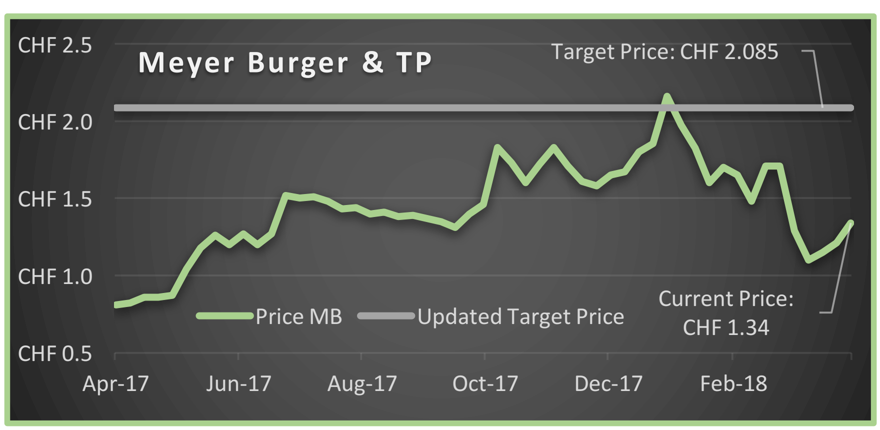


Those graphs clearly show the global trend for solar energy usage, going up almost exponentially. Nevertheless, it is important to make the difference between the percentage increase and the actual energy consumed in those regions. For instance, the European Union has the second largest consumption behind Asia but ranks last in terms of percentage change, while South America is last in quantity but first in the change.

FINAL RECOMMENDATION AFTER UPDATE

This second and less optimistic approach results in a target price of CHF 2.08 per share, therefore remaining bullish on MB. On a short-term perspective, the recent dip in share price could actually be considered as a serious discount and thereby further motivate the buy recommendation. On the long-term, MB remains an attractive investment because of the endless possibility and opportunity of the solar industry, still far from its real potential. Nevertheless, it is extremely important to also consider the seriousness of a possible bankruptcy situation since MB is exhibiting similar issues and pattern with the defeated Solarworld. Additionally, it is most likely that if a financial crisis occurs in in the short future MB won't be able to survive.

Current Price	CHF 1.34
Updated Target Price	CHF 2.08
Recommendation	BUY/HOLD
Invest. Risk	7 / 10



ANNEX I: ASSUMPTIONS FOR DCF VALUATION

There are many reasons why the DCF valuation is the most appropriate in the case of Meyer Burger: First of all, its troubled past makes it extremely difficult to remain fair and balanced in comparison to other companies which might not have been through the same difficulties and therefore it would most likely indicate an overvaluation of the current price of the stock. Secondly, the uniqueness of Meyer Burger whether because of its very specific domain of activities, its relatively small size in comparison to industry giants or its location in Switzerland in opposition to the tremendous amount of solar companies installed in China, would make it extremely difficult to find a significant number of real comparable companies and would have for effect to falsify the final result. Moreover, while Meyer Burger is primarily perceived as a company active in the sector of solar energy, it is crucial to keep in mind the importance of technology in this industry and therefore ground-breaking innovations could have an amazing effect on the price per share, an aspect that would be neglected in a traditional comparative valuation. Finally, it is very important to consider the dramatic changes that are occurring in the global energy consumption, which can only be reflected through a DCF valuation.

COST OF GOODS SOLD & OPERATING COSTS

Aside from year 2012 in which the cost of goods sold represented only 24.5% of the revenue, the other years (from 2009 to 2016) it roughly ranged between 50% to 70% and therefore this model will use first an average of the previous years (without including 2012), that is of 59.3% (60%) for the years 2018 – 2020, and then reduces this percentage margin to 50% for the next years due to the assumption that as solar energy is becoming mainstream, the costs will eventually be reduced. It is really hard to detect any trends in the historical values of the operating costs which considerably vary during the years with an impressive spike in 2012 with 676.95 M (which were roughly equal to the revenues of the company). Nevertheless, we will take an average of those values (in term of percentage margin) for the current year, resulting in 75% of the gross profit, and then slightly increase it to 80% starting 2019 since a company such as Meyer Burger should spend a tremendous amount of money in R&D in order to keep a competitive hedge over its competitors from a technological perspective.

TAXES

The amount of tax historically paid was calculated by taking the difference between the Pre-Tax Income and Net Income over the years 2009 to 2016, which gives surprising results in term of percentage margin (ranging from negative 28% in 2016 to positive 30% in 2010). Therefore, the forecast percentage margin for tax will simply be calculated as an average of the previous years, which gives a result of 9.41%.

CAPITAL EXPENDITURE & WORKING CAPITAL

Since this valuation uses an optimistic scenario for the growth in revenues of the company, it is normal to be accompanied by a growing capex and net working capital necessary to support this growth. The basis for the first year of capex will use an average of years 2009 – 2010 and years 2013 – 2016 resulting in a capex of 14.31 M (years 2011 and 2012 are disregarded since they are definitely un-ordinary years), and it will slowly grow in order to reach 20 M by 2022. As for the changes in Net Working Capital, which is incredibly unstable as well over the years, ranging from positive 184 M in 2010 to negative 129 M in 2011, the forecast will simply remain at a “normal” level of 10 M to 15 M over the years.

WEIGHTED AVERAGE COST OF CAPITAL

The current WACC of 11 % is used to discount the FCF of the valuation for year 2018 and 2019 as well as the terminal value. Nevertheless, it is important to keep in mind that this level is extremely high and a quick look at its historical value shows a considerable increase over the recent years as MB was becoming less profitable and entered loss territory. Since this optimistic model predicts a brighter future for the company, the WACC decreases to 8% for year 2020 and 2021 and further to 6% in 2022 as the company becomes more attractive, thereby reducing the cost of its debt.