Mr. Market and ASM International

ASM International (ASMI), the Dutch semiconductor equipment company owns 52.2% of Hong Kong listed ASM Pacific (ASMP). As of April 2012, ASMI has a market capitalisation of $2.1bn but its stake in ASMP alone is worth $3bn. This article looks at this situation and attempts to outline whether there is an opportunity for value investors.

Many value investors will immediately dismiss ASMI because it is a technology company. They will say that there can never be a big enough margin of safety because the business is too hard to understand and they cannot know whether a new technology might destroy the business. Without doubt ASMI is a complex company. Just looking at the company website and viewing the section called “About Us” brings the reader into a world of technology lingo:

ASM International N.V. is a leading supplier of semiconductor process equipment in both front-end wafer processing and back-end assembly and test markets. The Company possesses a strong technological base, state-of-the-art manufacturing facilities, and a highly trained, strategically distributed support network.

ASM’s products for wafer processing include CVD, diffusion, PECVD, ALD, PEALD and epitaxy, and are running at many of the most advanced 300mm semiconductor fabrication plants around the world.

ASM International and its subsidiaries provide production solutions for wafer processing, assembly and packaging of semiconductor devices from their facilities in the United States, Europe, Japan, Korea and Singapore. The Company is headquartered in Almere, The Netherlands.

Unfortunately I do not know enough about CVD, diffusion, PECVD, ALD, PEALD and epitaxy to be able to say that I understand the dynamics of this business. All I have is a very rudimentary understanding of what these products do and I have no idea whether competitors will launch a better ALD (Atomic Layer Deposition) product or a product that is far better than ALD.

Most technology companies are too complex to fully understand and yet in recent years an increasing number of them have made their way into the portfolios of some well-known value investors. Cisco is an example of a leading technology company that is now part of the portfolios of well known value investors such as Tweedy Browne, Brandes, Donald Yacktman and Mario Gabelli. I would be pleasantly surprised if Don or Mario knows their layer 3 switches from their edge routers and yet they have been prepared to buy Cisco. Other technology names that regularly appear in value portfolios include Google, Intel and Microsoft.

If well-known value managers have been prepared to buy companies they do not fully understand maybe ASMI should not be automatically dismissed. Personally I do not automatically dismiss technology names so for those of you also in this camp what could explain the negative value attached to ASMI?

As value investors we try to think like owners of the whole business. So what would you own if you owned all of ASMI at the current market value of $2.1bn? You would own the ASMI business described above and you would own a 52.2% stake in ASMP that is currently worth $3bn. This means that there is a negative value of $900m attached to the ASMI stand-alone business. Why might this be? Four possible reasons come to mind:

1. Is the ASMI balance sheet highly leveraged or hiding off-balance sheet items?
2. Is the ASMI business unprofitable?
3. Is there a controlling shareholder and/or management that has hurt sentiment?
4. A combination of the above?

1. ASMI Balance Sheet

ASMI publishes a consolidated balance sheet that includes ASMP, so this does not describe the health of the parent. The ASMI annual report provides enough detail to partially get behind ASMI on a standalone basis.

> The net cash of ASMI, excluding Back-end, at December 31, 2011 was €69 million (2010; net debt €69 million). This net cash position is the balance of €228 million cash and €159 million debt. The debt of €159 million consists of €132 million convertible debt and €28 million other debt. Furthermore, ASMI, excluding Back-end, has useable undrawn credit lines of €150 million.

As an aside, the net cash position has been achieved only within the past year. Prior to this there was a reasonably significant net debt position.

If the problem is not one of debt, could it be one of underfunded pension arrangements? This is harder to answer because of the nature of Dutch pension schemes. ASMI participates in a trade union pension arrangement that is a defined benefit arrangement but is treated as a defined contribution arrangement for accounting purposes. Below is an extract from the most recent annual report:

> The Company's employees of the Front-end segment in the Netherlands, approximately 165 FTE, participate in a multi-employer union plan ,"Bedrijfstakpensioenfonds Metalektro", ("PME") determined in accordance with the collective bargaining agreements effective for the industry in which ASMI operates. This collective bargaining agreement has no expiration date. This multiemployer union plan covers approximately 1,220 companies and 130,000 contributing members. ASMI's contribution to the multiemployer union plan is less than 5.0% of the total contribution to the plan as per the annual report for the year ended December 31, 2010. The plan monitors its risks on a global basis, not by company or employee, and is subject to regulation by Dutch governmental authorities. By law (the Dutch Pension Act), a multiemployer union plan must be monitored against specific criteria, including the coverage ratio of the plan assets to its obligations. This coverage ratio must exceed 104.3% for the total plan. Every company participating in a Dutch multiemployer union plan contributes a premium calculated as a percentage of its total pensionable salaries, with each company subject to the same percentage contribution rate. The premium can fluctuate yearly based on the coverage ratio of the multiemployer union plan. The pension rights of each employee are based upon the employee's average salary during employment.

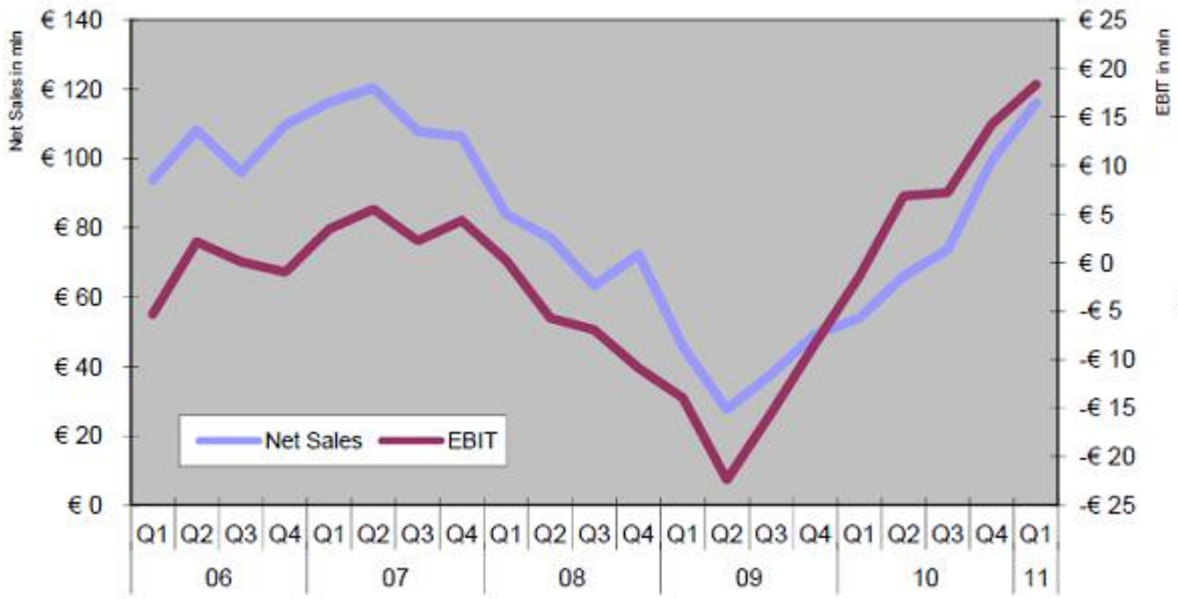
The Company accounts for the multi-employer plan as if it were a defined contribution plan as the manager of the plan, PME, stated that its internal administrative systems do not enable PME to provide the Company with the required Company-specific information in order to account for the plan as a defined benefit plan. The Company's net periodic pension cost for the multi-employer plan for a fiscal period is equal to the required contribution for that period.

As there are only 165 Dutch employees in the scheme it is hard to believe that this is a major financial problem, especially given the size of the net cash position at the company. Note that there is also a small Japanese defined benefit scheme that has a deficit of over €5m but this also appears insignificant.

Unless I am missing something the parent company balance sheet is currently strong and therefore does not explain why the market is placing such a large negative value on it.

2. ASMI Profitability

As can be seen from the chart below taken from the 2011 AGM presentation, the ASMI parent business has been unprofitable at the Earnings Before Interest and Tax (EBIT) level through the last cycle and it is only in the last two years that it has returned to EBIT profitability.



Given the highly cyclical nature of the business perhaps the market has yet to be convinced that current profitability is sustainable. Even if current profitability isn't sustainable however, it would take a major collapse to get down to the scale of losses that the current discount seems to imply.

This is where the distinction between investment and speculation begins to get blurred. What sort of probability can we put on ASMI remaining profitable? Here are some interesting facts:

- Intel is a major customer. Intel is known for being slow to change suppliers and Intel is a shareholder in ASMI.
- ALD is a new product and is now being used by Intel and other leading semiconductor companies. ASMI currently has the largest market share in this emerging technology.
- Tokyo Electron (another leading equipment company) is also a shareholder in ASMI suggesting it possesses leading technology.
- After a major restructuring programme all manufacturing has been consolidated at the one site in Singapore allowing for a significant reduction in costs.

It could be that these positives allow one to fall into the trap of being overly optimistic and possibly becoming over-confident but even if this is the case does it sound logical to put a negative value on ASMI?

3. Controlling Shareholders / Management

ASMI is controlled by Arthur Del Prado and his son Chuck is currently Chief Executive. Here is an extract from the annual report outlining one implication of this situation:

Our founder who is also Chairman of the Board of ASM Pacific Technology controls approximately 20.48% of the voting power which gives him significant influence over matters voted on by our shareholders, including the election of members of our Supervisory Board and Management Board and makes it substantially more difficult for a shareholder group to remove or elect such members without his support.

In the past a couple of years activist shareholders attempted to instigate change at the company but were ultimately defeated by a type of "poison pill". Here is how the annual report describes this situation:

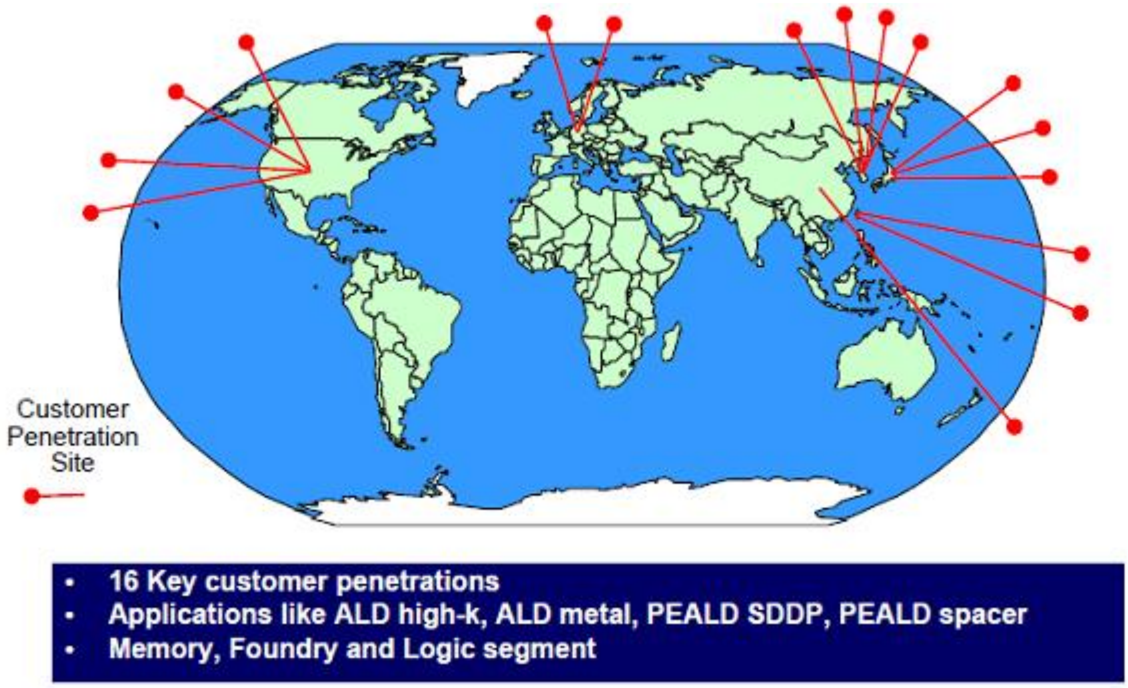
Our anti-takeover provisions may prevent a beneficial change of control.
The Company has granted to Stichting Continuïteit ASM International ("Stichting"), a non-membership organization with a board composed of three members independent of ASMI, the right to acquire and vote our preferred shares. The objective of Stichting is to serve the interests of the Company. To that objective Stichting may, among other things, acquire, own and vote our preferred shares in order to maintain our independence and/or continuity and/or identity. This may prevent a change of control from occurring that shareholders may otherwise support. On May 14, 2008, Stichting exercised this right in response to a perceived threat to our continuity and acquired shares of our preferred stock representing 29.9% of the total voting power of our outstanding capital shares at that time. These shares were retired in 2009 and a new right was issued to Stichting to acquire and vote preferred shares in certain situations in the future. For additional information regarding Stichting, see Item 7, "Major Shareholders and Related Party Transactions."

The voting power of Stichting makes it more difficult for a shareholder or a group of shareholders to cause us to enter into a change of control transaction not supported by

Stichting, even if such transaction offers our shareholders an opportunity to sell their shares at a premium over the market price.

It is therefore possible that the market is saying that investors do not have confidence in the way the Del Prado family has run ASMI. Given the decade long struggle to achieve profitability one can understand why this might be the case.

I first met company representatives back in 2002 and at that time they were talking about their leading position in ALD. I began to doubt whether ALD would ever become established but here we are 10 years later and ALD might be finally about to justify the confidence shown in it. Here is a slide from the most recent company presentation:



It might just be that having the Del Prado family in control allowed ASMI to be truly long term. If the activists had gained control they might have sold the technology off cheaply to Applied Materials. It is also important to point out that Arthur Del Prado has also had effective control of ASMP and there is no question that ASMP has been an incredibly successful company. It would seem logical to give Arthur some credit for this success and allow him to be given the benefit of the doubt with ASMI.

In my opinion the controlling shareholders have not done anything to justify the scale of negative value attached to ASMI. In fact their track record suggests they are a dedicated and hard working protector of shareholders' interests.

Another complication is provided by the following:

Change of Control Transaction

If the Company desires to effect a change of control transaction with a competitor of Applied Materials, Inc., ("Applied Materials") the Company must, pursuant to a litigation settlement agreement in 1997, as amended and restated in 1998, first offer the change of control transaction to Applied Materials on the same terms as the Company would be willing to accept from that competitor pursuant to a bona fide arm's-length offer by that competitor.

In other words even if the Del Prado family were prepared to sell, Applied Materials have the right of first refusal and this might deter a potential bidder. Given the determination of the Del Prado family to stay in control of ASMI this seems like an unlikely scenario and therefore I do not think it explains the discount.

I should also mention that back in June 2008, Applied Materials, working in conjunction with private equity firm Francisco Partners, attempted to buy the ASMI parent company for a price of up to $800m. The board rejected the takeover attempt saying that it undervalued the business and finally in November 2008 the bidders withdrew due to the implications of the Lehman collapse in September 2008.

4. **Combination of above factors**

It is true that ASMI has had a difficult time in the last decade but given the current health of the balance sheet, recent profitability and overall track record of the controlling shareholders I believe that ASMI parent company should not have a negative value.

ASMI Intrinsic Value

Attempting to put an intrinsic value on ASMI parent is incredibly difficult but the one conclusion I would feel pretty confident about is that it is worth more than nothing. As the old John Maynard Keynes saying goes I would rather be vaguely right rather than precisely wrong so being conservative I will value it at nothing. This suggests that if one could buy all of ASMI for $2.1bn one would be buying an intrinsic value of $3bn (ASMI parent value of zero plus stake in ASMP worth $3bn). Not quite buying dollars for 50c but still giving a reasonable margin of safety. (Note: If one was to value ASMI parent at the $800m that Applied Materials was prepared to pay in 2008 one would get closer to getting dollars for 50c!)

CAVEAT

This analysis assumes that ASMP is fairly valued. If one thought that ASMP was overvalued one would have to go long ASMI and short ASMP to take advantage of this anomaly. Obviously this strategy is only available to people with the ability to go short but there are enough of those in the world to potentially reduce the negative value attached to ASMI. An analysis of ASMP is work for another article!

CONCLUSION

Mr. Market seems to be manic depressive in relation to ASMI. For patient investors their might be an opportunity to wait for the day when he gets a bit more euphoric.

APPENDIX 1

2011 Top Semiconductor Equipment Suppliers
(worldwide sales, semiconductor equipment and service, $M)

2011 Rank	AOW	COMPANY	2009	2010	2011	11/'10 Growth
1	EU	ASML	2267.9	5973.1	7877.1	32%
2	NA	Applied Materials*	3507.9	7284.0	7437.8	2%
3	JA	Tokyo Electron	2323.7	5261.3	6203.3	18%
4	NA	KLA-Tencor	1316.1	2431.7	3106.2	28%
5	NA	Lam Research	1198.0	3004.6	2804.1	-7%
6	JA	Dainippon Screen Mfg. Co.	887.1	1727.3	2104.9	22%
7	JA	Nikon Corporation	1342.3	1517.3	1645.5	8%
8	JA	Advantest**	430.0	1134.2	1446.7	28%
9	EU	ASM International	693.9	1416.3	1443.0	2%
10	NA	Novellus Systems	581.9	1316.7	1318.7	0%
11	JA	Hitachi High-Technologies	474.4	910.5	1138.7	25%
12	NA	Teradyne	552.4	1406.5	1106.2	-21%
13	NA	Varian Semiconductor Equipment***	395.9	971.8	1096.3	13%
14	JA	Hitachi Kokusai Electric	212.8	626.4	838.4	34%
15	NA	Kulicke & Soffa	262.4	745.9	780.9	5%
Total Top 15			**16446.7**	**35727.8**	**40347.7**	
y-o-y growth				117%	13%	

Full Disclosure:
The author is a shareholder in ASMI.

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