MERGERS AND ACQUISITIONS

ARM TAKEOVER BY INTEL

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Abstract

By the end of 2009 a lot had already been talked about ARM prospects for the future and its sustainability. Several rumors surfaced that the company could be one of the intervenients in the most interesting deal of the last years among IT companies. Among others, Intel was pointed as the most obvious candidate for the acquisition, however Intel had the company of Google, Apple and Samsung, just to name a few.

In this thesis we analyzed the hypothesis of a deal between Intel and ARM, what value would be created for Intel and ARM shareholders, and how much competition would Intel face in the case it decided to move forward.

We concluded that the deal is feasible and would create value for Intel and ARM shareholders, at the expense of the current ARM customers and, most likely, final consumers.

There seems to be no other firm with capabilities and reasons to go for such deal, and Intel would face no competition, offering a premium of 55% over ARM market value. This would leave value for Intel as we calculated the synergy at 73% the actual ARM market value.

Finally as a separated note, it should be kept in mind that such a deal would probably face a tough time being approved by regulators, such is already the dominant position Intel has in the market.

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Preface

Going through the process of writing this dissertation will certainly have a huge impact on my future career. All the steps and challenges faced provided me a set of tools that will certainly be incredibly useful in the future, not only in the professional, but also in my personal life.

All the effort done would not be enough however to complete such a task, and Professor Peter Tsvetkov played a fundamental role in the process that finally culminated with this thesis. It would had been impossible for me to complete this work without the technical knowledge, guidance and encouragement from Professor Peter Tsvetkov.

I would also like to appreciate the help given by my colleagues Pedro Bernardes and Pedro Cardoso, when analyzing the industry and discussing specific topics of my thesis.

Finally I would like to recognize the contribution of the ones that are closest to me, with all their support, who kept me focused and motivated during all the process.

1. Introduction

Following stressful years, in the beginning of the century with the threat posed by AMD, Intel has managed to get clear of their competitors and enjoy a clear dominance in the microprocessors market. From 2003 until now, Intel has only known success and increasing revenues and profits. However this dominance seems, at least, shadowed in the next few years.

With the increasing number of smartphones and mobile platforms, a new company emerged as the future of mobile and light computation: ARM. Although barely recognized by the general consumer, ARM designs, are the most sold nowadays. Every, but every smartphone carries an ARM microprocessor, whether it is manufactured by Apple, Samsung, Nokia or someone else. ARM does not actually produce any hardware, it just develop the architecture, leaving manufacturing for other companies.

In the last few years ARM has just consolidated its market position, dominating virtually 100% of the Smartphone's market in the world. However with the new Windows 8 (compatible with ARM architecture) it seems the actual equilibrium may be in cause.

In the next chapters we analyze the possibility of a deal, with Intel buying ARM. In first place we review the academic literature regarding mergers and acquisitions and valuations, then we present company and market analyzes and after that we move to the valuation of the companies. In the end we evaluate the firm that would emerge in the case of a deal a finally we propose the deal itself.

2. Literature Review

The final purpose of this Master Thesis is to evaluate the possibility of a deal between Intel and ARM. Mergers and Acquisitions (M&A) are a usual tool for firms trying to deliver value for shareholders, however final results can vary a lot between deals, from the ones with very good results to the ones that destroyed a lot of value.

The focus will be on the strategy behind the deal and on the structure of the deal itself, trying to understand how value can be created and shared among the shareholders of both companies. This creation of value can be achieved in two ways: through synergies or through improvements in the management of the target company.

Solid knowledge in various financial topics are needed to undertake such task and these topics will be divided in two main areas: valuation techniques and other M&A issues.

2.1. Valuation Approaches

Valuation is a vital piece of any M&A. It is essential to estimate correctly the value of an asset if anyone wants next to create value with it. A misevaluation is a simple way to throw away shareholders money in an acquisition.

There are several types of valuation techniques but I will concentrate on the most common two of them: Discounted Cash-Flow techniques and the Multiples approach. Multiples' approaches are widely used by investment bankers and dealmakers, however most business schools teach their students DCF techniques (Kaplan and Ruback, 1996). Goedhart, Koller and Wessels (2005) point the merit of multiples analyses but they also concede that DCF are the "most accurate and flexible" methods for valuing projects. However, sometimes, more important than the use of advanced financial models, is the use of plausible assumptions in the valuation process (Sirower and Sahni, 2006).

2.1.1. Cash-Flow Approaches

DCF calculates the value of an asset as the present value of the expected future cash flows from that asset. Several types of DCF models exist but they should yield the same results if one is consistent with the assumptions. As Luehrman (1997) refers, present value is a function of cash-flows and their timing and riskiness. Some models calculate the value of equity only – FCFE – some others calculate the value of the entire asset, including debt – FCFF and APV.

2.1.1.1. Estimating Cash Flows

Firm value is derived from cash and not from earnings as some may think. How to calculate these cash flows is of the upmost importance for any valuation since any error in the estimation of this component will result in mistakes in final valuation (Goedhart et al. 2005)

Types of Cash Flow

The cash flows used depend on the model used. Damodaran (2006) presents a wide variety of DCF models and among others the following cash flows can be used:

1. Dividends per share (DPS) can be used to calculate the equity value of the firm using a dividend discount model (DDM), however according Damodaran (2006), since the 1990s that companies started to distribute cash to shareholders in the form of stock buybacks and so this model can undervalue firms that use this method of distribute cash.
2. Free Cash Flow to Equity (FCFE) deals with the problems of the of a DDM given that it assumes that all the cash the is left in the firm after reinvestment needs and debt payments is returned to shareholders. This model assumes that a strong corporate governance system is in place.
3. Free Cash Flow to the Firm (FCFF) is an alternative cash flow that can be used in a WACC based DCF valuation or in an APV valuation. FCFF reflects the firm cash flow after taxes and reinvestment decisions but it does not reflect any debt and interest payments.

Cross Border Cash-Flows

In our case we will have a British company – ARM – bought by an American company – Intel. As the currencies differ we will need to use some tools to adjust the Pound Sterling value of ARM to US Dollars. These tools will solve problems related to different real interest rates and inflation expectations and also differences in tax systems among countries.

Regarding the estimation of cash flows, it can be done both in the home or the local currency. In our case both solutions are easy to adopt as spot and forward exchange rates are easily available for the USD/GBP. Froot and Kester (1995) refer that both methods should yield similar results as long as the assumptions are consistent in both cases:

In the case of the estimates being done in GBP, which is our local currency for ARM, the local cost of capital should be used to discount them to the present. In the end the NPV in GBP is converted to USD at the spot rate yielding the firm NPV in Intel home currency.

The other option would be to convert each cash flow at the correspondent forward exchange rate and then discount them, at the domestic cost of capital. In the case Forward rates are not available interest rate parity can also be used (Zenner, Matthews, Marks and Mago, 2008).

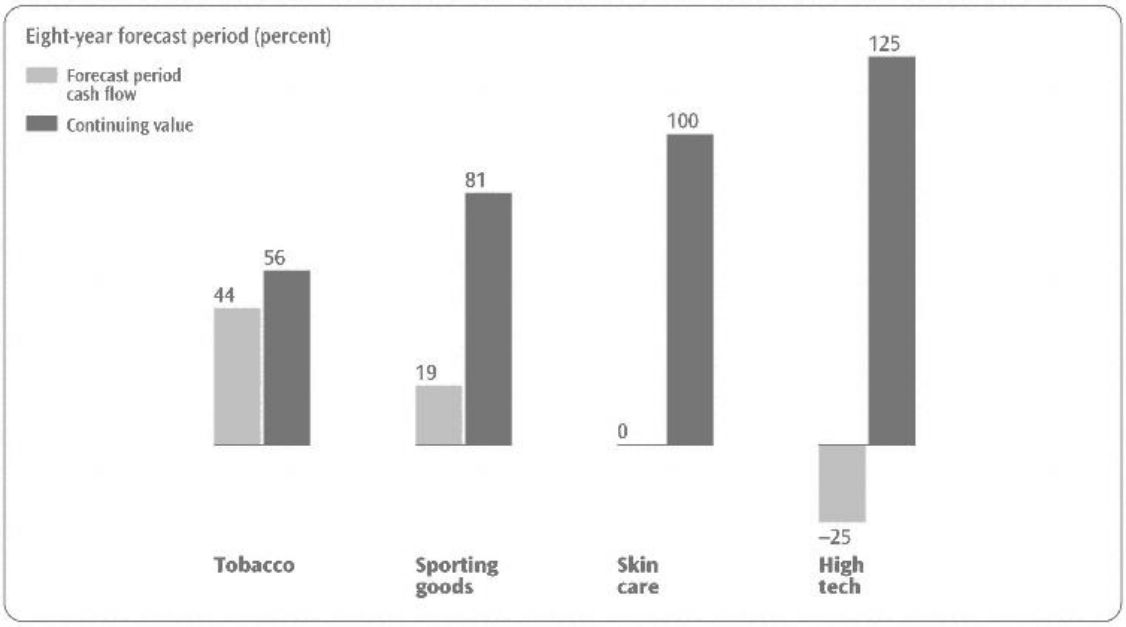
Other question is whether one should use remitted cash flows or earned cash flows. Froot and Kester (1995) argue that to decide on that we should look at the countries involved. In our case, we are facing a company established in the UK, so the recommendation is to use earned cash flows, because even if they are not immediately distributed they should earn an adequate rate of return and so increase the value of the company.

Each situation has different tax treatments but Froot and Kester (1995) recommend the use of the higher of the marginal tax rates paid by companies as a valid assumption.

2.1.1.2. Terminal Value

As time goes by it gets harder and harder to continue estimating cash flows in a reliable way. From a certain point on it is advised to assume that cash flows will grow at a certain growth rate. Copeland, Koller and Murrin (2000) call it terminal value and give it a great deal of

Figure 1: Industry terminal values (Copeland et al. 2000)



attention given the high percentage of firm value that is dependent on it. As we can see in figure 1 we should be especially careful in the analyses of the ARM terminal values given that for the hi-tech industry the terminal values can represent up to 125% of the value of the firm.

However in our case this should not happen given that ARM, despite its growth opportunities, is an already mature company with positive net cash-flows.

Generally terminal values are calculated as a perpetuity, discounting the first cash flow after the explicit period at a discount rate that is the difference between the cost of capital and the expected growth rate of the cash flow used.

It is important to notice that when estimating the cash flow used to calculate the terminal value, the value of the CAPEX must be at least equal to depreciation, otherwise the firm would have no capital to operate in the long run (Kaplan and Ruback, 1996). Another important point is the fact that it is difficult, even more when considering great companies, to keep growth rates above those of the economy for a long period of time, what means that the growth considered in the terminal value should be no higher than the economy expected growth rate (Damodaran, 2008). Other important aspect stressed by Damodaran (2008) is that return on new invested capital is often below the cost of capital which leads to destruction of value through growth.

2.1.1.3 The Discount Rate

The discount rate should represent the opportunity cost of funds invested. This opportunity cost is the return an investor could expect to receive if he invested his money in an asset with similar risk (Froot and Kester, 1995). Opportunity cost can also be seen as a risk premium added to a risk free rate (Luehrman, 1997).

Different discount rates should be used depending on the DCF technique we are using:

Table 1: DCF techniques and discount rates

	DDM	WACC DCF	APV
Type of Cash Flow	EPS or FCFE	FCFF	FCFF
Discount Rate	Cost of Levered Equity	Cost of Capital (Cost of levered equity and cost of debt)	Cost of unlevered Equity and cost of debt

2.1.1.4. Cost of Equity

Table 2: Equity risk premium models (Damodaran, 2010)

	Model	Equity Risk Premium
The CAPM	Expected Return = Riskfree Rate + $Beta_{Asset}$ (Equity Risk Premium)	Risk Premium for investing in the market portfolio, which includes all risky assets, relative to the riskless rate.
Arbitrage Pricing Model (APM)		Risk Premiums for individual (unspecified) market risk factors.
Multi-Factor Model		Risk Premiums for individual (specified) market risk factors.
Proxy Models	Expected Return = a+b (Proxy 1) +c (Proxy 2) (where the proxies are firm characteristics such as market capitalization, price to book ratios or return momentum)	No explicit risk premium computation, but coefficients on proxies reflect risk preferences.

As we can see in table 2 there are several models for estimating equity risk premiums. We will focus our attention on the first one: the Capital Asset Pricing Model (CAPM). The model presented first by Sharpe (1964) and Lintner (1965) is the most widely used in Finance.

The CAPM will use three components to calculate a return on equity (r_e): a risk free rate (r_f), a market risk premium (r_m-r_f) and a β. This will result in the following model:

The model is based on the assumption that an investor can be diversified in the market and that what is really important is the market risk the investor bears and not the specific company risk. This way the β will be a measure of the market exposure that an investor can get through certain asset, and thus the investor should be compensated by such exposure to the market.

2.1.1.5. The Risk Free Rate

The risk free rate is the building block for estimating both the cost of equity and the cost of capital. The risk free rate is the return that an investment delivers in any scenario, no matter what the return on this investment will be uncorrelated with other risky investments. This means that the return will have no variance around the expected return and that the final return will be equal to the expected return.

There are two basic conditions for an investment to be risk free (Damodaran, 2008):

1. There can be no default risk, which means that only government securities can be seen as risk free because governments control the printing of currency which means that they can at least guarantee the payment of the nominal amount promised. Some caution however must be used when stating that government securities are default free because it can be the case that governments refuse to honor their obligations, or in some cases governments issue debt in different currencies that their own, which means that they have no control over the printing of that currency.
2. More subtle is the requirement that there can be no reinvestment risk in the investment for this to be risk free. A bond that pay a fixed amount every six months during five years can be default free, but the fact that one cannot know the interest that the intermediate coupons will earn after being received. A good solution to overcome this problem is to use a zero coupon bond, which only pays the totality of its value in the end of the five year period, giving us an explicit risk free rate for that five year period. This means that risk free rates for different periods must be taken from bonds with different maturities.

Since risk free rates vary depending on time horizons and the cash flows we are discounting come from different periods, Damodaran (2008) suggests the use of an average duration of cash flows (a weighted average of the cash flows and the time remaining for their existence) to calculate the duration of the risk free security used as the risk free asset.

Copeland et al. (2000) suggest the use of a ten year bond rate as the risk free rate. In our case, the US treasury bond will be used as the risk free rate for the home cash flows and the British government bond will be used as the risk free rate for the foreign cash flows.

2.1.1.6. The market risk premium

The market risk premium is the difference between the return on the market and the return on the risk free investment (r_m-r_f). Several ways can be used to estimate risk premiums, Damodaran (2010) points three ways to proceed with this estimation:

1. Survey Premiums – Going directly to investors and ask them about the expected return they require to invest in the market. Despite the increasing number of surveys available few analysts use this method to evaluate risk premiums. Among other reasons for not using this method, Fisher and Statman (2000) found that the relation between this surveys and the real risk premiums has the wrong sign.
2. Historical Risk Premiums – This is the most widely used approach to estimate risk premiums. Three factors must be taken into account when calculating risk premiums. The first is the time period to use. Goetzmann and Ibbotson (2005) suggest the use of a long time series to calculate the risk premium in order to achieve a more accurate estimation. The risk free rate used and the market index used also play a part on the final results that. A broadest market index should be used and the index should be market-weighted and free of survivor bias. Finally the averaging can be arithmetic or geometric but if we accept that returns are uncorrelated over time Damodaran (2010) says that the arithmetic average is the better and most unbiased estimate of the risk premium.
3. Implied Equity Premiums – Implied risk premiums in current dividend yields or risk premiums implied by Option Pricing Models could be used and, if we consider that they are forward looking instead of historical and mean reverting premiums, are very appealing, however the disagreement over their predictive power make this option less used.

2.1.1.7. The Beta (β)

To complete the model, we will use a relative measure of the systematic risk the company is exposed to. The value is standardized around one and a value bigger than one would mean that the company amplifies the market fluctuations. The β is a measure of the covariance of the returns of an asset with the returns of a market portfolio, divided by the variance of the market portfolio (Kothari and Shanken, 2002) and Damodaran (2002) refers that the usual procedure to the estimation is to regress the returns of the asset against the returns on a market index, if possible a market index that is market-weighted and with the largest possible number of securities, however Fama and French (1996) pointed that good proxies for this

market portfolio were yet to find and that could be the reason why βs were not enough to explain expected return. The time period to use in the regression should be reasonable, with a minimum of three years but preferentially five or ten years. One must be careful when calculating betas to understand if in the last years the company suffered important changes that would change the landscape of the firm and this way the beta of the firm. Copeland et al. (2000) suggest the estimation of industry betas to provide information about the reasonability of our company beta. The author also suggests the de-leverage of the betas in order to estimate the industry average beta and the re-leverage of the beta only in the end of the process. Another advanced hypothesis is the use of unlevered industry betas publicly available. The relation of levered and unlevered betas is given by the following expression:

2.1.1.8. Cost of Debt

The cost of debt is composed by a premium on top of the risk free rate. If we assume that the projects we are valuing are of the same risk as the company, a good estimate for the cost of debt are the observed market rates of return on the firm's debt securities (Miles and Ezzel, 1980), Froot and Kester (1995) also agree with the use of market rates of return on the firm's debt securities as long as the firm's debt is "nearly riskless". Another reasonable approach is to use rating agencies' bond ratings to sum up a spread on top of the risk free rate.

2.1.2. APV vs. WACC

Weighted Average Cost of Capital (WACC) and Adjusted Present Value (APV) are the most common DCF methods used. They differ on discount rates used and on how they treat tax shields.

The WACC model discounts the cash flows to the firm as if the firm had no debt or tax shield from interest payments. According to Damodaran (2006) the tax benefits and the bankruptcy costs are implicit in the model through the discount rate:

The equity and debt values used should be the market values.

APV in the other end does not capture the effects of the tax shields and bankruptcy costs on the discount rate. Introduced by Myers (1974), this model sum up two pieces, to get to the company value: the first piece is the FCFF discounted at the unlevered cost of equity (the cost

of equity that would exist if the firm had no debt), and then adds the value of tax savings that arise from the use of debt. This model is used to isolate and understand the effect of taxes in valuation (Copeland et al. 2000). Tax savings are calculated in the following way:

There are different approaches regarding the rate used to discount the tax benefits, Kaplan and Ruback (1995) used a version they named Compressed Adjusted Present Value where they discount the tax benefits at the unlevered cost of equity, arguing that debt was proportional to firm value and so the tax shields were so risky as the firm itself, while Luehrman (1997) and Cooper and Nyborg (2006) prefer to use the cost of debt to discount back the tax benefits, claiming that companies will almost always be capable of paying interest, but sometimes they will not enjoy the benefits of the tax shields. The APV model also requires the estimation of the cost of Bankruptcy, but as Warner (1977) argues that the costs of bankruptcy from increased leverage are low, and in the case of our companies the levels of debt are really low, we will not focus on this question.

Both models have adherents with Luehrman (1997) stating that the APV is a better model because its more flexible than the WACC, less prone to errors and gives much more output than the WACC. By the other side Damodaran (2006) points that the major problem with the APV is that dealing with bankruptcy costs is often difficult when using the model.

To reach equity values both models need to subtract the debt value from the value of the firm.

2.1.3. Relative Valuation – Multiples

Multiples are usually ratios that link firm or equity values to performance indicators. As long as firms have a peer group or an industry to be compared against, multiples is a valid way to go.

Multiples can take several forms: Price/Earnings, Price /Book Equity, Price/Sales, EV/EBITDA, EV/Sales. Any performance measure that seems adequate to infer the value on that relative industry is valid, and specific measures are more suited to specific industries.

Kaplan and Ruback (1996) find evidence that DCF methods explain better market prices but they stress that when used together, “comparable-based estimates added explanatory power to the DCF-based estimates”. Goedhart et al. (2005) refer that multiples are a good way to stress-test the cash-flow valuations done previously. Moreover multiples are forward looking

because they are based on market expectations and in the presence of possible transactions they already include the premiums.

EBITDA based multiples yield the best results on the sample studied by Kaplan and Ruback (1996) and Enterprise Value/EBITDA is one of the most widely used multiple in practice, according to Fernandez (2001).

According to Goedhart et al. (2005) there are some rules to create the right multiple. The Return on Invested Capital (ROIC) should be similar among firms and the same should happen with their growth prospects. The multiples used should be forward looking: the inclusion of expected profits would be the better but if reliable forecasts are not available then it is imperative to use the latest possible data. The use of enterprise value multiples is also advisable because they are not so reactive to the firm financial structure, when comparing with price/earnings ratios for instance. Finally one must adapt the result for nonoperating items as excess cash in the firm.

2.2. M&A Issues

For an acquisition to make sense, the total value creation (synergy) from the deal should be positive (Eckbo, 2009) and this is usually the case. However the acquirer will only increase its value if it can achieve performance improvements that are greater than the premium paid (Dobbs, Huyett and Koller, 2010). There are several possible outcomes in an acquisition attempt: the acquirer may fail to take control of the target, it may lose it to an offer from a rival company or it can be successful. The strategy and the rationale behind the deal, the fit between the companies and even the bidding strategy used by the acquirer play an important defining the final outcome. In this section we will focus on the main M&A issues. Initially we will focus on the different possible types of M&A deals, then there will be a section on the value creation (synergy) that arises from the deal, a third section will be dedicated to how this synergy is shared between the target's and the acquirer's shareholders and in the last section we will address the deal structure.

2.2.1. Types of M&A

For different reasons, acquisitions do not take always the same format. Damodaran (2002) divides them into different categories, depending on the buyer and on the method of execution:

The acquisition can take the form of a **merger**. When this is the case the acquired firm becomes part of the acquiring firm. For this to happen shareholders of both firms must agree with the merger.

Another possible form is a **consolidation**. In this case a new firm is created and the shareholders of both the acquirer and the target receive shares of the new firm.

Tender offer is traditionally used for hostile takeovers. One case where this is usual is when firms find an underperforming target and try to redirect their operations into a more profitable direction (Bruner, 2004). In this procedure the acquiring company bypasses the board of the target and goes directly to its shareholders with an offer. If the acquiring firm is successful in acquiring the totality of the stocks the target ceases is absorbed by the acquirer and a merger happens, otherwise the target firm continues to exist.

There is also the possibility of buying only part of a firm. This can be done through a **purchase of assets**. Despite the firm is not being sold, there is the need for the shareholders of the target firm to vote the deal.

There is also the possibility of the company be bought by its own management or a group of investors. These deals take the form of MBO's when the management buys the firm and LBO's when the operation is largely financed by debt. In both cases the firm ceases to be publicly traded and becomes a private firm. This will not be the case however and we will not focus our attention in these two cases.

2.2.2. Value Creation

The value creation in any acquisition depends on the magnitude of the gains achieved by the new entity born from the deal. The literature refers mainly two types of gains that can be made: Sirower and Sahni (2006) refer to **synergy** as a key factor for the success of an acquisition, stating that, when a company fails to achieve it, acquiring shareholders lose money due to the premium paid. Another source of value referred by the literature is the existence of **inefficiencies in the target company**. Kini, Kracaw and Mian (1994) and Wruck (2008) even refer the market of corporate takeovers as a mean to discipline managerial boards and forcing them to achieve higher shareholder return. While the criteria for overall value creation stated above is usually met, this does not mean that the acquirer company always make money. For the acquirer to create value a stricter restriction must be met and the

acquirer must achieve performance improvements that are greater than the premium paid (Dobbs, Huyett and Koller, 2010).

2.2.3. Synergies

Damodaran (2005) provides a very good framework for synergy analyses. He divides synergy into two general categories and then divides these two categories into several sub-divisions. The broader general categories are **operating synergies** and **financial synergies**. While financial synergies can take the form of higher cash-flows or lower discount rates, operating synergies only appear as increased cash-flows. Operating synergies are sub-divided into four categories:

> **Economies of scale**, which usually arises in horizontal mergers and come from the fact that average costs should go down with dimension.
>
> **Increased market power.** As the first, this synergy is more likely to occur in horizontal mergers and occurs because of the higher market share. This leads to higher profit margins and consequently to higher cash-flows.
>
> **Combination of different functional strengths.** This is a very general synergy that can be applied to any merger.
>
> **Higher growth in existing markets and presence in new markets.** As the previous one, this synergy is very general and can be applied in any kind of merger. A good example of this kind of synergy is the acquisition of established companies in developing economies by companies of developed economies to rapidly enter the market.

Financial Synergies can also take several forms:

> The combination of a firm with high return investment opportunities and no cash available and a firm with vast cash piles and no investment opportunities is a very appealing reason for a merger.
>
> **Increased debt capacity,** potentiated by the decreased variance in the combined firms profits. With higher stability the combined firm should be able to borrow more than the two companies individually.
>
> **Tax benefits.** When firms can take advantage from the merger to reduce the amount of taxes paid. This can be achieved by either acquiring a loss making firm or by being able to increase the depreciation charges with assets bought.
>
> The last reason is **diversification**, however this is not a consensual reason for a merger in the literature.

2.2.4. Inefficiencies on the target company

The other way to create value is through the acquisition of underperforming companies. Wruck (2008) points the case of managers of publicly traded companies with little equity incentives: “focused mainly on growth and diversification, often at the expense of profitability and value”. This kind of companies can be a good target for acquisitions, and then for restructuring. Shivdasani and Zak (2007) point some measures to take when restructuring public companies: their greater focus goes to increasing leverage, as a way to concentrate ownership and tightening the financial discipline of the board; divestitures of the non-core assets, going against those who point business diversification as a synergy and focus on cash-flow and cash distributions. Adding to that, Wruck (2008) also advises companies to change the incentives of boards, specifically giving equity related ownership to management. The adoption of new performance measures and the decentralization of decision making are also referred.

Despite the superior financial performance of private equity firms, the implementation of these measures does not come without costs. Cost of equity does no longer benefit from the risk-bearing economies provided by the capital markets. This creates an incentive for a return to public equity markets, however, companies that return to public ownership do not completely let go the private equity governing rules.

2.2.5. Method of Payment

Acquisitions are usually paid using cash, stocks or a mixed form of both. Additionally tailored agreements (“earnout” contracts) can be made (Zenner et al. 2008). This contracts link a future payment to the performance of the bought asset, with a higher performance resulting in a higher payment. Bruner (2004) refers other risk managing device, the use of collars, a contract that changes a future payout, if the stock of the buyer falls or rises above a certain level. These hypothesis for financing the transaction will lead to a decision that depends on several factors as the type of deal proposed, the type of firm being bought or the risk involved in the deal.

Martynova and Renneboog (2009) present a framework with the reasons for the different payments. When there is asymmetric information regarding the target firm and the valuation cannot be made precisely, acquirers prefer to use equity as payment, sharing the risk of future devaluations with the target’s shareholders. The bigger the value at risk (VAR – premium paid/market value of the acquirer) the greater the incentive for paying with equity (Sirower and Sahni, 2006). Overvalued stock or credit constraints are also an incentive for using equity

as payment, the same happening with taxes, where cash is immediately taxed and equity may be kept and taxed only later. By the other side when the payment in equity may cause changes on firm control, firms tend to use more cash and less equity to finance the deal. In the case of cross-border acquisitions, cash is also preferable because target's shareholders may not have access to information about the acquirer and consequently they will not be available to accept shares as payment. Tender offers are other case where cash is more used than equity increasing the probability of success of the bid and finally, cash is also commonly used when buying unlisted targets due to the fact that their shareholders usually sell with the objective of cash out.

2.2.6. Value Sharing Between Shareholders

Corporate Takeovers deal with a huge amount of money and they usually create value, through synergies or better use of assets. However it is important to understand how the gains from the deal are shared between the two companies' shareholders. The three main findings in research point that target shareholders earn significant positive abnormal returns from all acquisitions, while acquirer's shareholders end up with small or no abnormal returns from tender offers and negative abnormal returns from mergers (Loughran and Vijh, 1997).

Damodaran (2005) highlights the fact that, while in theory the division of value should be made according to the contribution each company would give to the creation of value, what happens in practice is that target's shareholders make much more money on average than acquirer's shareholders. This may be linked with the fact that target companies can create a process where interested companies bid for the target, creating competition among them. Sirower and Sahni (2006) argue that a better initial preparation and presentation is critical for better performance from acquirers, given that, most of the times the negative initial reaction from the market is persistent overtime. They attribute this lack of preparation, in some degree, to excessive self-confidence and consequently to a biased evaluation of the target so that the deal is done. Bruner (2004) adds that in a specific type of deal, the "merger of equals", the evidence is even most striking, with the returns being much smaller than in the other kind of deals, and argues that in these deals target's managers forget value creation in order to have more influence in the outcome or a better position in the new firm.

The mode of acquisition and payment also play a role on the profitability of the deal. Loughran and Vijh (1997) find that cash tender offers create superior returns for the acquirers, while stock mergers have significant lower returns. The replacement of the inefficient management

is one of the reasons for the success of cash tender offers. Additionally when acquisitions are paid in cash, markets are surer about the virtues of the deal, while when they are paid with equity markets become suspicious of overvalued equity and the quality of the deal proposed. Bruner (2004) also points these facts and add some points to this analysis. Credible synergies, mainly cost synergies are better accepted by the market, creating positive reactions, while revenue synergies may be viewed as more risky. Buying during cold M&A markets also pays better than during hot ones. Finally companies which maintain the focus on the core business achieve better results than companies who try business diversification.

3. Industry and Company Analysis

3.1. Industry Analysis

Semiconductors play a crucial role in today's life and have changed society in uncountable ways, during the last forty years. Nowadays semiconductors are present in an incredible large number of devices people use every day, from dishwashers to machine tools, passing through computers and mobile phones. The internet world we know and the last decades innovations would not be possible without the rapid expansion the semiconductors' industry experienced. Even today, the Moore's Law, dated from late 60's, is still valid and the number of transistors that can be placed on a standard processor continues to double every 18 to 24 months. This rule from Gordon Moore, co-founder of Intel, helps to explain the incredibly fast rhythm of change and innovation in this industry.

Within the industry it is possible to identify five main business models:

1. **Integrated Device Manufacturers (IDM)** – This is the business model where Intel Corporation (from now on referred to as Intel) fits in. The companies organized as IDM operate along the entire value chain of the semiconductor industry, including the design and manufacturing of the components. As they operate along the entire production process, these companies are also the responsible for the major part of the market revenue.
2. **Fabless** – These companies do not own their own production facilities. They design the semiconductors and pay other companies to manufacture them. These firms control the sale of the final products. The advantage of this model is to avoid the costs incurred with the construction of the production facilities and also the fixed costs of these factories.
3. **Licensing or Intellectual Property (IP)** – These companies design the products and license them to another companies interested in using the design. There are no sales operations and all the final distribution is done by the companies that buy the designs. ARM operates under this method, licensing their designs to another companies, who manufacture and sell them. As a result of only operate in a small part of the production process, the sales volume from IP companies is a small part of the overall market.

4. **Foundries** – These companies do not design their own products. Instead they operate modern production facilities and manufacture semiconductors for other market participants as fabless companies. The success of these companies highly depends on the capacity to keep high levels of capacity utilization in large factories.
5. **Back-end Processes (Assembly and Testing)** – The specialization in the industry and the increased globalization as led to the creation of companies specialized only in testing and packaging of components. Due to the lower automation of these services, these companies are mostly based in South-East Asia, particularly in Taiwan, Singapore and Malaysia, due to low labor costs.

3.1.1. Market Size and Structure

The market has some large players with market power in the specific segment they operate, as the case of Intel, which largely dominates the picture in the data processing segment, producing mainly microprocessors and the respective chipsets. However no firm has a dominant position in the entire semiconductor market. Intel is the largest firm in the sector, with a market share of approximately 14% while ARM has a much lower market share of only 0.21%. The market was worth approximately 307 billion USD in 2010.

Figure 2: Market Shares in semiconductors (Datamonitor)

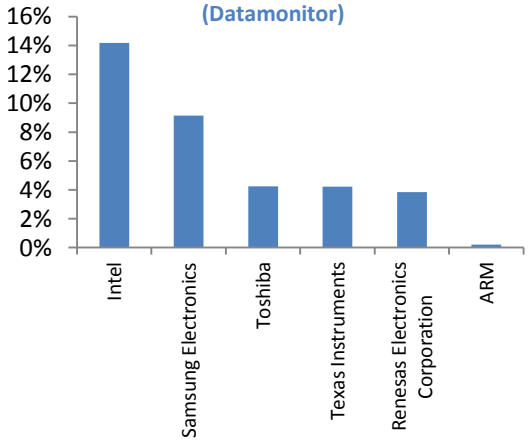
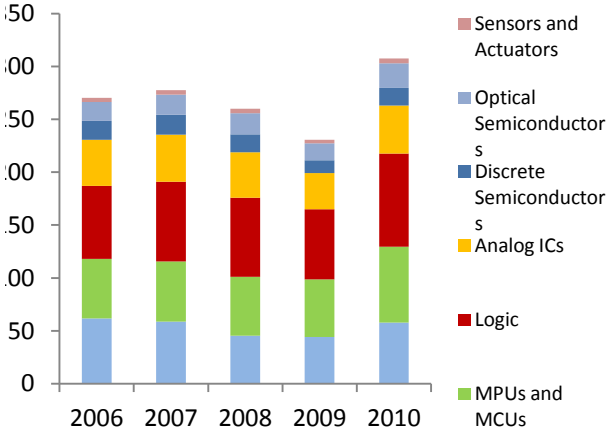


Figure 3: Market size by components (PWC – A change of pace in the semiconductor industry)



Demand in the industry is not driven by final consumers, but instead by the needs of the industrial sectors that interact with the semiconductors industry. The main absorber of semiconductors is the data processing industry, followed by communications and consumer electronics, a wide variety of industrial applications and the automotive industry are the other

sectors that consume a huge amount of semiconductors. The sectors that have the greatest importance for our companies are the Data processing and consumer electronics sectors.

Table 3: Revenue by Final Application (PWC – A change of pace in the semiconductor industry)

Application	2006	2007	2008	2009	2010
Data Processing	39,0%	38,9%	38,2%	39,6%	38,1%
Communications	26,1%	25,4%	25,5%	24,2%	24,4%
Consumer Electronics	17,3%	17,9%	18,2%	19,6%	20,1%
Automotive	7,1%	7,4%	7,7%	5,4%	6,5%
Industrial	10,5%	10,4%	10,4%	11,2%	10,9%

These divisions within the semiconductor market create a variety of small markets, which are the markets we are really interested in.

For instance Samsung, the second biggest player of the industry, produces mainly memories and storage components and also Analog ICs and image sensors, segments where Intel has only a minor presence and ARM does not compete.

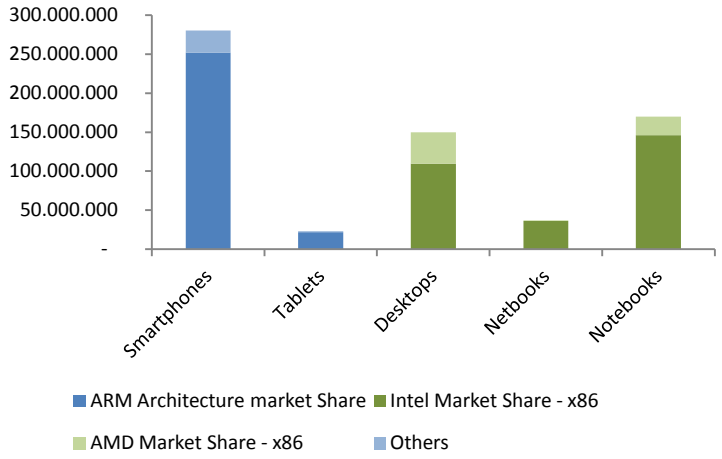
3.1.1.1. Microprocessors

With that in mind it is important to have a closer look at the segment that is really at stake: the microprocessors segment. Historical data for market shares and sales are not readily available but some data from 2010 is known.

The market can be divided into different dimensions, namely the architecture used and the destination platform. The most used architectures are the x86 (Intel and AMD are the main producers); ARM developed by ARM; Cell Broadband Engine Architecture developed jointly by IBM, Sony and Toshiba; Power Architecture developed by IBM and Sun Scalable Processor Architecture developed by Oracle. From all this we will focus our attention on the two most widely used: x86 and ARM. As destination platforms we have desktops, notebooks, netbooks, tablets and smartphones. Servers will not be present in our analysis because we do not expect them to be in the center of the dispute between x86 and ARM architecture.

As one can easily see in the graph below, the x86 architecture dominates the segments where processing power is the final objective: Desktops, notebooks and also the netbooks. ARM architecture is most used in low power devices, given its greater efficiency and lower energy consumption, providing longer battery life for portable devices, like tablets and smartphones.

Figure 4: Unit Sales by platform



A closer look at the notebook, netbooks and desktop segment shows that these segments are dominated by Intel, with market shares always above 70%. AMD also plays an important role in these segments, with market shares that can reach almost 30% in the desktop segment.

By the other side the smartphone and tablet markets are dominated by the various providers of ARM architecture – Qualcomm, Broadcom, Texas Instruments, Nvidia, among others.

This dual market is expected to end in the near future, with both architectures entering the segments of the other one. Notebooks and Netbooks using ARM architecture are already planned for 2012 and Intel already announced mobile phones with Atom processors for the second quarter of 2012. With this said the trend for the future should be for architectures to lose some ground where they are very strong, and on the other side to gain share where they are not present right now. For now, ARM seems to start with a small advantage, because the lower power of their devices is compensated by a larger battery-life, and even if some computers already reach about ten hours of battery life, for sure there is a market for computers than can run for longer than ten hours without the need of external power. However, for Intel to make the other way around, it should be slightly more difficult, as actual smartphones have some troubles running for an entire day if not idle (browsing the web, playing music, receiving e-mail), and Intel processors are believed to be more powerful but also more power hungry.

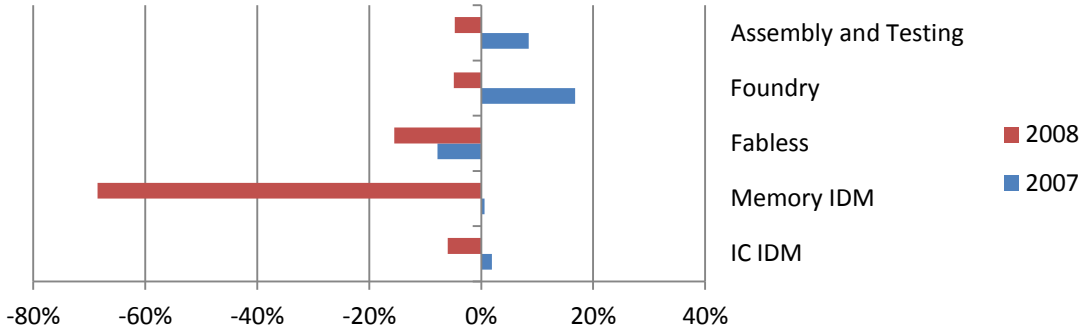
However during the past years Intel has achieved incredible progresses, both on performance and power consumption of his x86 processors for computers and notebooks, giving AMD a secondary role in those markets, and it is difficult to imagine that, with their research

capabilities (more than $6Bn in 2010) and some time, Intel will not be able to fiercely compete with ARM products.

3.1.2. Margins and Growth

The data collected regarding profit margins, across the entire market, is scarce and only accounts for 2007 and 2008.

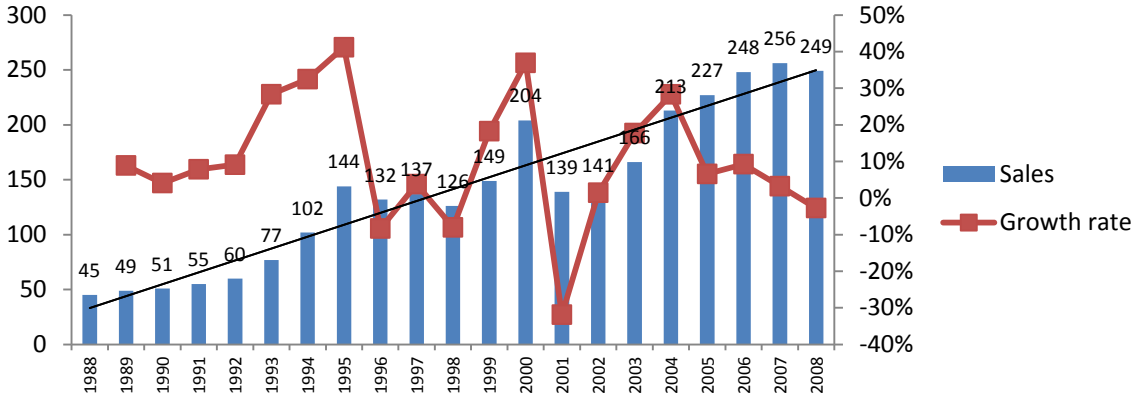
Figure 5: Profit Margins for the Semiconductor Industry (PWC – A change of pace in the semiconductor industry)



The values represented in the graph are the average profit margins collected by Price Waterhouse Coopers (PWC) in their report. The averages for 2008 are all negative with special focus on the memory IDM companies, where high installed capacity and the world economic downturn created a downward pressure on prices, leading to the losses we can see here. It is interesting to note that Intel over perform their IC IDM peers in both 2007 and 2008 and also that ARM does better than the average of the companies presented. The lack of a control group for ARM should also be noticed, as the segment is not relevant enough for PWC to present values on the IP companies.

The values presented for margins can be in part explained by a market with a very cyclical behavior. During periods of high growth operating margins usually assume higher values, as installed capacity is not enough to satisfy all the demand, while in periods of economic contraction, the accumulation of stocks and the excess installed capacity create the conditions for price falls that lead to negative profits. During the last 20 years this process has happened repeatedly, and sometimes with incredible contractions and expansions in the total market size.

Figure 6: Semiconductor Historical Sales (PWC – A change of pace in the semiconductor industry)



As it is possible to see in the graph the growth of almost 40% in 2000 was followed by a sharp downfall of about 30% in 2001, to lower values that the ones from 1999. Due to this characteristic of the market, many firms opted to accumulate a great portion of capital, in order to accommodate some negative years and enjoy the high CAGR this market as proportioned during the last 20 years (8.9% in the 1988-2008 period).

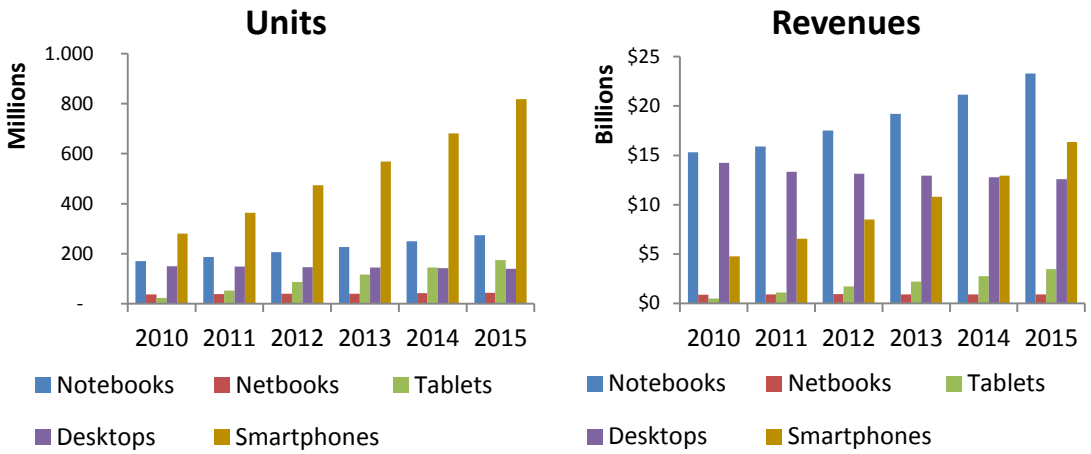
3.1.3. Market Prospects and Trends

The last years saw the semiconductors and microprocessors industry diverging from the historical performance the industry was used to achieve. However the next years should bring a return to high growth and to higher profits. Growth should be achieved by higher unit sales in developing countries and by new products and also increased unit sales in developed economies.

The following years should also experience the following trends in the market:

1. **Platforms are going mobile.** Microprocessor receptors are increasingly portable or mobile equipments – smartphones or tablets. The number of desktop sales should even decrease until 2015 according to Royal Bank of Scotland expectations. This will create the need for more energy efficient microprocessors, which can increase the battery life of these smaller devices. The fourth generation of cellular wireless should also be a factor with positive influence with respect to this factor.

Figures 7a e 7b: Unit's predictions (Royal Bank of Scotland) for microprocessors sales and revenue estimation (using Intel asp predictions) until 2015

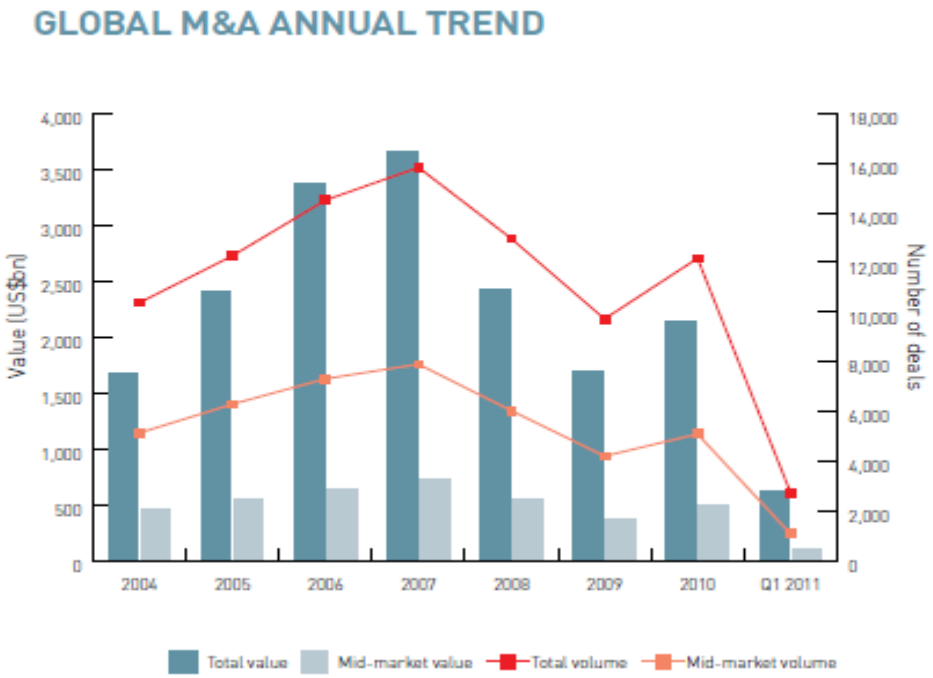


2. **Cloud Computing.** With the increase in the number of small and relatively low power devices, cloud computing is on the next door. This means that the work that is done nowadays in each device, will be done in the future in some datacenter, with enough processing power to run heavy applications, and the mobile device should only be seen as an interface between the end user and the application.
3. **Integration of several semiconductor components into one chip set.** Both Intel and AMD already have solutions that provide both processing and graphic units in only one chip set and more and more similar architectures should reach the market in the near future. This solution provides greater energy efficiency and also better performance than the separate components would provide.

3.2. Recent Trends in M&A market and insights semiconductor industry

In 2011 the global M&A market should still be far from reach the value achieved in 2007. Since then the M&A market faced tough years, with lack of confidence and credit restrictions. 2009 was the year with the least transactions and value transacted. Private equity firms were the ones that contributed the most for this scenario, given that in 2009 the volume they created was almost 10% of the volume transacted in 2007. Corporate transactions also suffered but they sustained the market during 2008 and 2009. It is important to notice that, if M&A volume decreased a lot, the volume as a share of global market capitalization remained fairly stable, which is and indicator that M&A was not as harshly affected as it may seem.

Figure 8: M&A trend (A Global View on M&A 2011 – KPMG)



During the last months the volume of transactions increased and in 2010 the market recovered for 2008 values. The year in progress is expected to continue the recovery and some big deals already happened in the first quarter of the year. Leading the recovery, the energy sector provided some deals early this year (Duke Energy Corporation acquisition of Progress Energy Inc. valuated in more than $25Bn is just an example). Telecommunications is another sector that provided big deals, the most notorious being the acquisition of T-Mobile USA Inc. by AT&T in a deal valuated in $39Bn.

This increase in M&A activity is being fuelled by different objectives, from consolidation in Telecoms, to expansion objectives in Consumers giants. In the technology sector there is also an increase in M&A activity in the first quarter of 2011, with a share of 4,5% in the total M&A activity measured in values, which corresponds to almost $28Bn, $18Bn more than in the same period last year. There are several reasons for this increase in the technology sector. First of all, businesses seek to provide an end-to-end business solution. Intel acquisition of Mcafee and Oracle acquisition of Sun Microsystems are just two examples of companies trying to offer a wider range of products to consumers. Cloud computing is in the next corner and companies are also trying to get ready for what is to come. Virtualization and networking technologies will be the key in this new cloud computing environment, and companies with cutting edge management tools and the most flexible security products will be the most probable acquisition targets. In the end all of this will be possible due to the rich cash balances accumulated during the crisis by technology companies.

3.2.1. Intel and ARM recent acquisitions

Even during the crisis Intel and ARM made several acquisitions, widening their capabilities and providing better offering in their micro processing solutions.

ARM made several acquisitions since the creation of the company. These acquisitions are usually small and intend to use the technologies of these companies. The last acquisition announced was the bought of Obsidian Software, a privately owned firm expert in verification and validation used in the design of increasingly complex processors. Before that, in 2006 the company acquired Falanx, a developer of 3D graphic accelerators and SOISIC, a company specialized in physical IP.

The hottest period of acquisitions by Intel was between 1997 and 2002, when the company acquired about forty companies. In more recent years Intel has not been so active in the market, however in the last year it announced several acquisitions: Wind River, Wireless Solutions Business of Infineon (WLS) and most recently McAfee in a deal valued in $7.68Bn. The most interesting for our case is the acquisition of WLS, which already provides Intel with an access to ARM technology for Smartphones and other mobile applications.

3.2.2. Rational for the deal

Despite the multiple deals Intel conducts every year, few should have the dimension of the proposed one. Most acquisitions are done to get access to small new technologies that can be

incorporated in already existing components. Some others, as the case of McAfee right now, are used to provide more complete solutions in their products.

This particular deal is different from the two previous pointed cases. ARM does not represent some small new technologies that can be incorporated into existing Intel microprocessors, and ARM also does not represent some technologies outside Intel core business, as it is the case of McAfee. ARM is in fact a competitor of Intel, with totally different microprocessor architecture. The particular reasons that make this buying attractive for Intel are the following:

1. Getting rid of the threat ARM represents in the netbook/notebook space, particularly in the low end segment, where performance is not that important, and weight, battery-life and price are key. Nowadays this segment is dominated by Intel, with a small share owned by AMD, but ARM processors are now trying to enter this market, being tablets the entrance door. It is critical for Intel to maintain its position here because the notebook/netbook space represents more than 25% of Intel total revenue.
2. Entering the tablet/smartphone market, which Intel is already trying but without much success. If in 2015 Intel had 15% of market share in smartphones, that would give them about $2.5Bn revenues per year, which is respectable but relatively small when compared to the notebook business that should be worth more than $15Bn by then. However if they could reach a market share more similar to the one ARM is predicted to dominate by then, Intel could collect almost $10Bn in revenues in 2015. The same, even if in a lower degree, scenario is applicable to tablets.

   It will be difficult to get immediate results from this strategy, as the technology that should be used in the next few years is already licensed. However as the time goes by and the licensed technology becomes obsolete, Intel should create and edge that can guarantee the technologic leadership of the market. This should not happen before 2014/2015.
3. Capture a larger share of the added value than ARM does. Nowadays the typical value of a tablet microprocessor rounds $20. This is also the target price for the processors of the most powerful smartphones.

   ARM receives a fee of about 1-2.5% which translates in 20 to 50 cents of dollar for each processor. Intel would be able to receive the entire value of the microprocessor. A simple exercise can exemplify how Intel would put this in practice.

Table 4: Revenue Hypothesis for the smartphones and Tablet markets

Company	Smartphone and Tablet Units/year	Average Selling Price	Revenue/year
ARM	~272M	20 USD * 2% = 0,4 USD	$108M
Intel	50M	20 USD	$1 Bn

Even if Intel could only take about 50M of the current 270M units being sold nowadays by ARM, Intel revenues would be approximately ten times larger.

If Intel manages to keep a gross margin in line with its historical one, about 60%, each chip will be much more valuable for Intel than what they are nowadays for ARM and Intel will be able to extract much more revenue than ARM from this market.

4. Getting return from the cash reserves. Intel has a total of $22Bn ($5.5Bn in cash and $16.4Bn in short-term assets) that can be used to finance new investments and provide better returns to shareholders. With this amount Intel can easily buy ARM and also keep a cash amount that provides liquidity enough to keep the business running without concerns.

The deal would also face some difficulties. If a counter-bid by one company alone does not seem likely (actual ARM customers do not have the dimension to carry the deal easily), a deal from a consortium of several of that companies would not seem so improbable. The actual ARM customers seem to be the ones that can lose the most from this deal and it seems natural that they would try to keep "their" research company working with them instead of losing it for their main competitor.

Another possible barrier would be the approval of the transaction by competition authorities, given that Intel already has such a dominant position in the microprocessor market, and this transaction would just increase that dominance.

3.3. Company Analysis

3.3.1. Intel Corporation

Intel is the largest semiconductor company in the world, with total sales in 2010 totalizing more than 43 billion Dollars. The company was founded in 1968 by Gordon Moore and Robert Noyce, former employees of Fairchild Semiconductors. The company initially focused its business on memory devices, namely in static random access memory (SRAM) chips, before turning its attention to other types of devices.

In 1971 Intel presented the first microprocessor in the history, the Intel 4004, developed for a calculator. In 1972 they followed with one of the first microcomputers and during the seventies Intel developed some more work in the field on microprocessors. It was only during the decade of 1980 that, with reduced profitability in the memories market and the success of the IBM personal computer, Intel changed the business model and focused its attention on microprocessors. During the eighties and the last decade of the 20th century Intel met incredible growth and the Pentium brand became a beacon in the industry.

Turning into the new century Intel faced some challenges, posed by slower growth in demand for high-end microprocessors and increased competition from Advanced Micro Devices (AMD) in Intel main market (x86 architecture microprocessors). AMD entered the market initially through low-end and mid-range processors, but it achieved significant market share across the entire product range.

It was only in 2006 that Intel started to react to the challenge posed to its market position. Faced with declining market shares and profits Intel introduced a new product development program. This program was based on a quicker architecture development regarding microprocessors and it delivered results very quickly. In 2007 Intel launched its Core architecture, which was a huge improvement over the previous generation performance and just like that Intel regained the domination it had enjoyed several years before. Since then Intel continued to improve its products and has nowadays a clear domination of the x86 microprocessor market.

By the end of the decade, Intel has regained his position as the uncontestable leader of the market. In 2010 its main source of revenue continues to be Microprocessors but Intel also has entered into other business areas. Chipsets and motherboards are offered by Intel has a mean to complete their microprocessor offer, given that the entire set is necessary for a computer to work; wired and wireless connectivity solutions are available, both in the form of embedded cards for desktops, notebooks and netbooks or more complex solutions for fixed or mobile networks; NAND flash memory, for use in consumer electronics, as cameras or music players, or in the form of solid-state drives (SSD), is also part of the Intel product portfolio.

3.3.1.1. Business Structure

Figure 9: Intel Revenue by Operating Segment

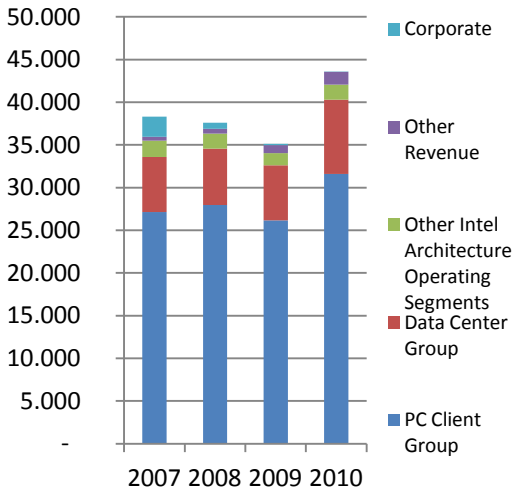
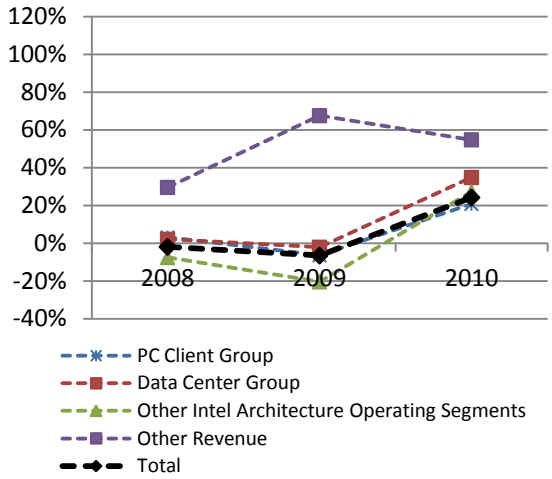


Figure 10: Revenue Growth by Segment



Intel is divided into five operating segments. The PC Client Group offers microprocessors and related chipsets for the desktop, notebook and netbook markets. It also offers motherboards and wireless connectivity products related to this segment. The range of microprocessors available goes from the i7 second generation desktop processor to the energy efficient Atom processor for netbooks. In 2009 more than 75% of the total revenue of this segment was originated by microprocessors sales, and only the rest from all the other components.

The Data Center Group activity is related with the products sold to companies for use on servers, workstations, datacenters or cloud computing environments. Xeon and Itanium are the families of processors now in use in the field. The importance of microprocessors in this segment is even more evident than in the PC Client Group with more than 82% of revenue driven by microprocessors sales.

The Embedded and Communications Group - offers processors and chipsets for embedded components for industrial, medical and in-vehicle applications - together with the Ultra-Mobility Group - supplies Atom processors for handsets - and the Digital Home Group - supply several products for applications in consumer electronics (digital TVs, Blu-ray devices, Hard-Disk Drives, among others) - form the Other Intel Architecture Operating Segment. This is the group where the new revenues by increased sales from ARM processors should be included.

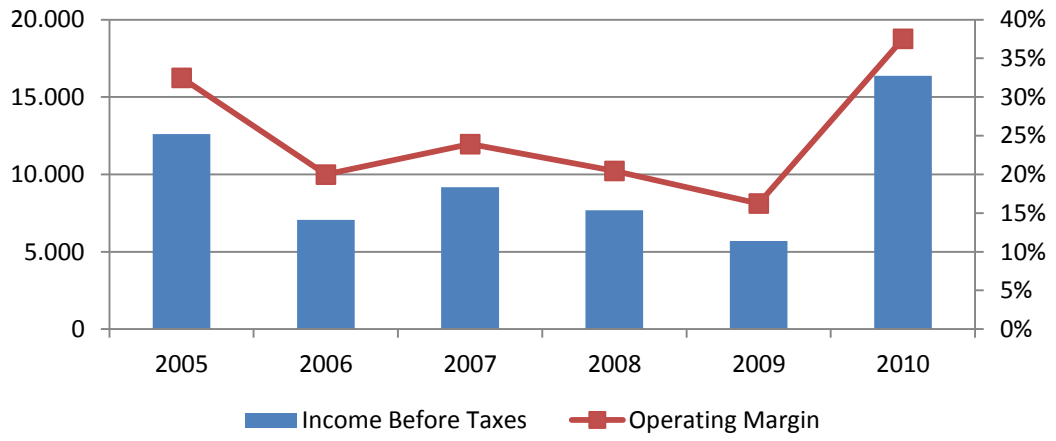
Other revenue comes from the NAND solutions group and the Wind River Software Group, which offers software solutions for embedded and handset segments.

Revenues on the PC Client Group are due to sales of processors to desktops, notebooks and netbooks. Jointly with the sales of MCUs and other components, this group is responsible for the greatest share of Intel revenue. A future increase of revenue from microprocessors for smartphones and tablets would increase the dimension of the Ultra Mobility Group and create another representative segment in Intel revenues, together with the PC Client Group and the Data Center Group.

3.3.1.2. Margins and Profits

Despite being in a very cyclical industry, and the 2008 and 2009 world crisis, Intel managed to achieve positive profits in the last years. In 2010 with the economy starting to recover from the worst slump, in the developed economies, since the great depression Intel achieved its best results ever, with high increases in its operating margin.

Figure 11: Intel Historic Net Income and Operating Margin



3.3.2. ARM

Advanced RISC Machines (ARM) was born in 1990 in a spin off from Acorn. At that time Acorn was working with Apple to create a new microprocessor standard. In 1991 the company licensed its first design: the ARM6 microprocessor. Right from the beginning the company was focused on low cost processors for applications in low cost PCs or small devices. In 1992 Apple used the ARM 610 based on the ARM6 architecture as the basis for its Newton PDA. Two years later, Acorn launched the RISC PC, with the same ARM 610 processor.

During the nineties ARM continued to grow and in 1997 acquired Palmchip Corporation in order to enter the disk drive market. In 1998 the company entered the stock market, becoming listed on the London Stock Exchange and on the NASDAQ. From then on ARM conducted a

series of acquisitions in a variety of fields, from software to companies specialized in the development of physical IP.

Nowadays the company based in Cambridge, employ about 1900 people, 63% of them engineers. In 2010 total revenue was 631 Million Dollars, more than half of them from royalties.

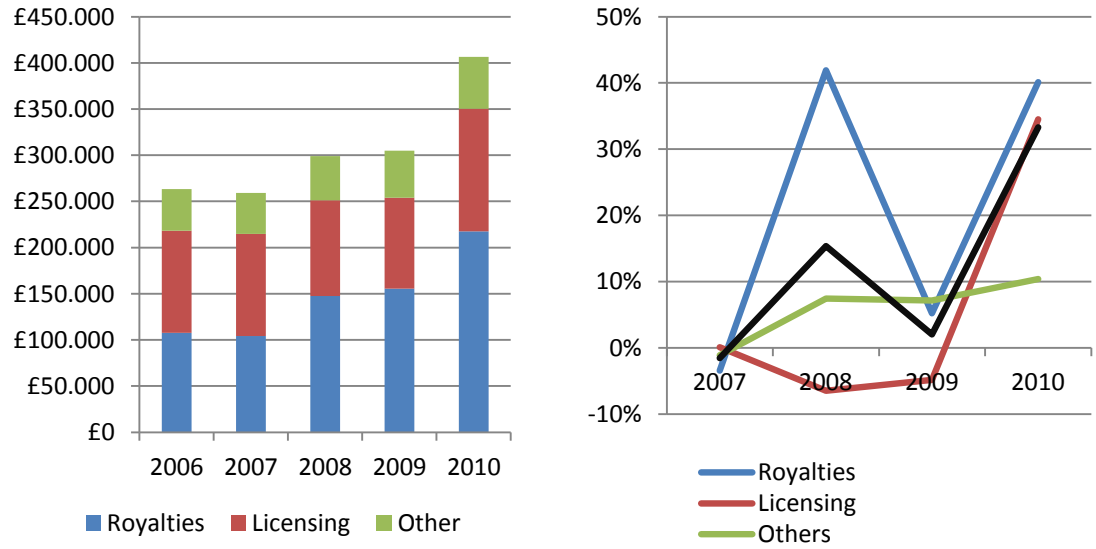
3.3.2.1. Business Structure

ARM operates a very particular business model in the industry. Being an Intellectual Property Supplier firm means that ARM does not produce the products it designs. Instead ARM licenses them to another semiconductor firms which may be interested in developing and commercialize them.

ARM projects usually go through three phases during its life. In the first phase new products are created by ARM through research and development. During this period of two to three years the totally of the costs are supported by ARM. During the next three/four years, ARM licenses its products to companies which are interested in commercialize them. The product is then developed further by the companies who are interested in producing them, according to ARM specifications, and ARM receives a license fee.

The last phase is related with the production of the products. During this phase ARM no longer has contact with the projects but it has the right to receive a fee for each device produced. ARM usually receives fees of about 1 to 2% of the value of the chip, what points for a royalty of about 1.50$ for each processor produced for nowadays smart phones. The amount ARM receives depends a lot on the sophistication of the processor but the trend seen in the last years is for mobile devices to get smarter and that means that chips are getting more powerful and more expensive, which means increased revenue by device for ARM. ARM also has additional revenue from sales of development systems and services but this area is not the main focus of the company.

Figure 12a and 12b: Revenue by type and Revenue growth by type



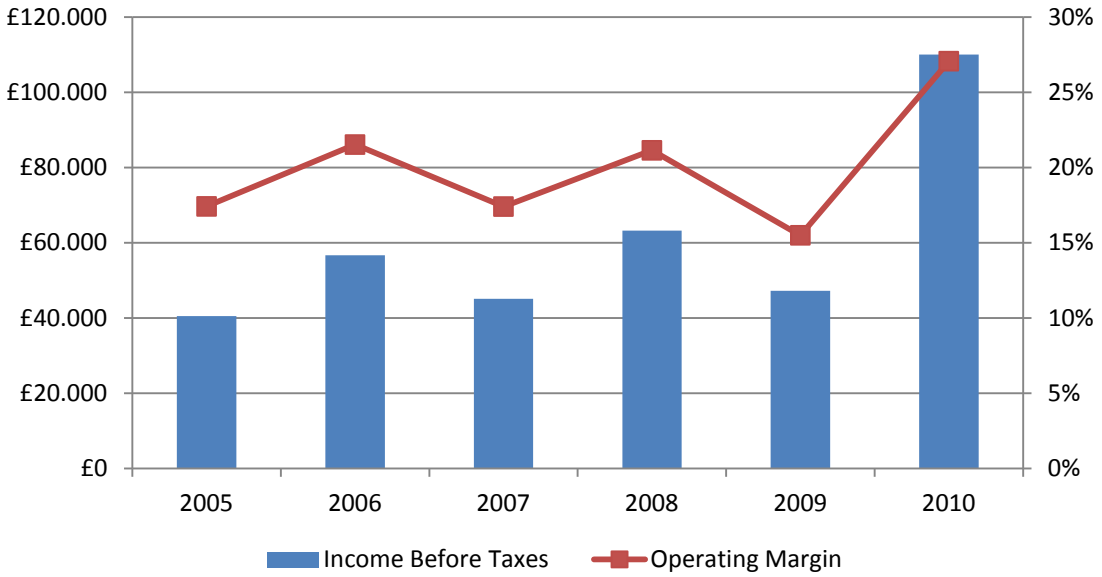
During the last years ARM revenues have been increasing, benefiting from the increasing number of features in nowadays mobile phones and from the increasing of the computerization of various aspects of today's life, from car systems, to industrial applications.

The sales of licenses was relatively flat in the last years, only booming during 2010 with firms trying to re-positioning themselves after a couple years of savings in investments. However, the accumulation of licenses sold is providing ARM with a large and increasing source of revenue from royalties. ARM covers about 90% of the mobile phone market and it has already licensed the technology that should appear during the next 2/3 years in the top mobile phones. This also applies, however not in a so dominant scale, in other markets, with ARM holding significant market share and already placed to earn royalties during the next years.

3.3.2.2. Margins and profits

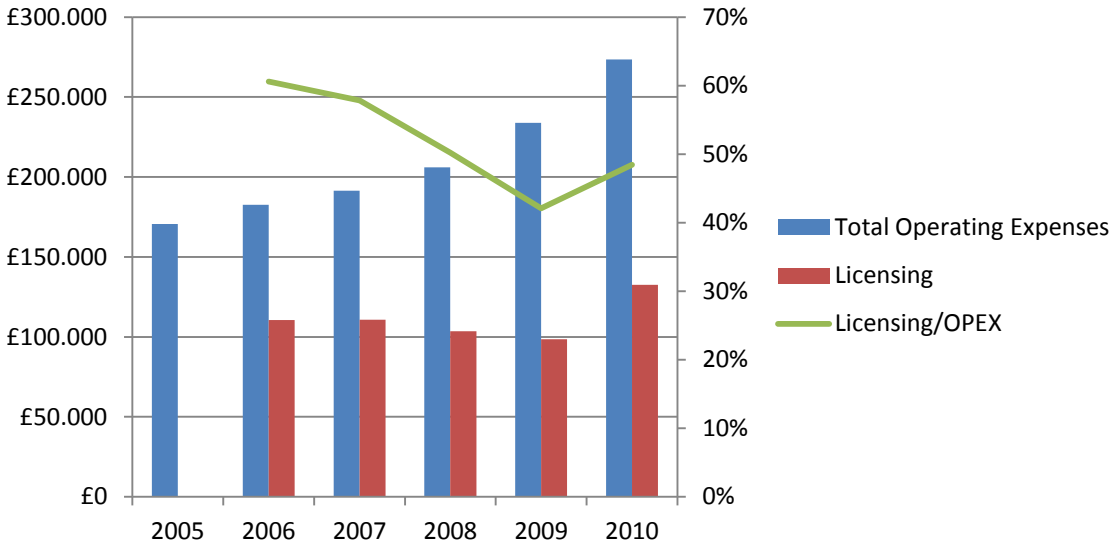
ARM, as Intel, also achieved profits during the last years despite the crisis in the sector in 2008 and 2009. ARM business model also distinguishes itself by presenting a very high gross margin, with the cost of sales being very low. This structure would be very appealing in the case ARM increased its sales, keeping staff and administrative costs under control. This is indeed the case made by ARM board of directors, claiming that in the future they intend to pay its costs with licensing activities and keep revenues from royalties entirely as profits.

Figure 13: ARM Net Income (in thousands of GBP) and Operating Margin



As it is possible to check, the pattern in the last three years is quite similar to Intel, mainly in 2010 with a large boom both in the operating margin and Net Income.

Figure 14: Licensing Revenues vs. OPEX (in thousands of GBP)



Comparing Licensing revenues with OPEX is easy to understand that the objective stated before, covering for costs with licensing revenues, will not be easily achieved. Actually looking at the graph the idea one gets is that, in the best of the cases, licensing are covering a relatively stable portion of the costs – about 50%.

4. Company Valuation

4.1. Intel

Intel will be evaluated using a WACC Discounted Cash Flow model with a 5 year explicit period. The estimation of FCFF will be made in steps. The first consist in the estimation of Net Income, and only then it will be done the estimation of FCFF. We will estimate revenues, merging two different components. One component is estimated with unit sales, prices and market shares estimations, this component is supposed to represent the most significant part of the business we are interested in, namely the microprocessor business. The other component represents the remaining business of Intel, from Servers to other services provided by Intel, where estimations will not present the same detail we have in the first component. Then assumptions will be made regarding gross margin. R&D and Administrative costs will also be estimated to reach net income. Then we need some assumptions regarding Depreciation, Capex and Working Capital to reach FCFF.

Until 2010 the values used are the ones reported in Intel annual report. From then on estimations were made, using data from Goldman Sachs (GS) and Royal Bank of Scotland (RBS) to estimate market size and market shares in the microprocessors market; historical growth rates and Price Waterhouse Coopers predictions were used to estimate revenue growth in the other areas of the business.

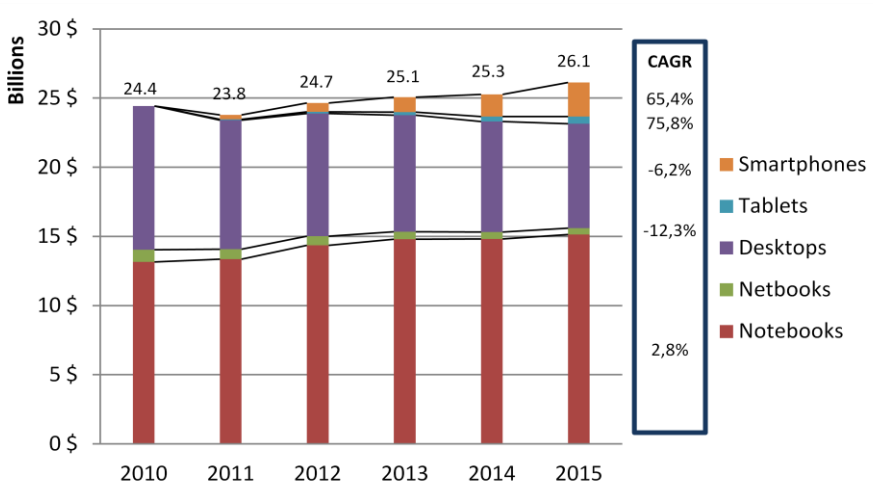
4.1.1. Revenues and Gross Margin

Intel revenues were estimated by groups. As presented earlier the business is divided into several groups: the PC Client Group, the Data Center Group, Other Intel Architecture Operating Segments and Other Revenues that aggregate some small groups inside Intel. We will focus our attention in the PC client group, where estimations for processor sales will be made, and also in Other Intel Architecture Operating Segments, where the Ultra Mobility Group is included.

To construct the analysis we took numbers from RBS report on ARM and Goldman Sachs report on Intel to get estimated unit sales until 2015. On top of that we made estimations for Intel market shares, based on Goldman Sachs figures until 2012 and then until 2015 based on the estimated market share for ARM by RBS, while also accommodating the presence of AMD in the market. We then used the actual figures of average selling prices (ASP) for each type of

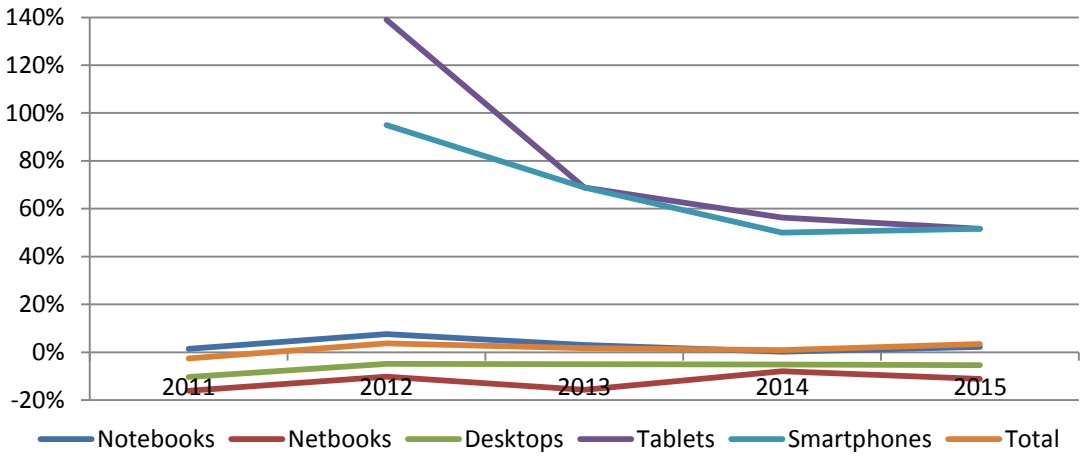
microprocessor and added the trend predicted by RBS. The final result was estimated revenues from the sales of microprocessors for several types of platforms. This procedure was conducted for Desktops, Notebooks, Netbooks, Tablets and Smartphones. Revenues from Desktops, Notebooks and Netbooks were then included in the PC Client Group, and revenues from Smartphones and Tablets were included in the Other Intel Architecture Operating Segments. We tried to match the sales for 2010 using these numbers. As we obviously did not match exactly the sales value, reaching lower values than the reported ones, we calculated a delta (the difference between the reported values and our calculations).

Figure 15: Microprocessor revenue estimations for Intel 2010-2015



Intel revenues totalize about $45Bn a year, what means that we are estimating about 50% of total revenue. Regarding microprocessors however we are estimating almost all of Intel revenue, being servers the only platform missing the analysis. Those were not included because we do not think ARM will have an active role in that market, at least until 2015.

Figure 16: Microprocessor revenue growth estimations for Intel 2011-2015



The most important fact to retain from this analysis is the fact that we are not predicting high growth for Intel in the microprocessor market for our period, in fact we are even predicting a negative evolution in 2011, mainly due to reduced revenue in the desktop segment, and then modest growth. The CAGR for the total prediction is less than 2% per year, and this is explained by the expected decrease in Desktop market size and Intel market share and also for the loss of market share notebooks and netbooks. The penetration of ARM territory in Smartphones and tablets is really the most positive point in our predictions, with average growth of about 70% per year from 2012 to 2015, however these segments should continue a small share of total revenues.

For the remaining revenue we assumed a constant growth rate until 2015. The growth rate used is the Price Waterhouse Coopers prediction for the next two years in the semiconductor industry: 9.2%. We used this value, even if it seems too high, because Asia is providing the industry with very high growth rates, and it is in line with the growth achieved by the industry in the last 20 years (1988-2008): CAGR of 8.9%.

With respect to gross margins we also followed the Goldman Sachs belief that the high value achieved in 2010 is not sustainable, both because it is not in line with historical values and also because the change to a 22nm technology should increase costs in the near future. Adding to these factors, increased competition in some platforms by ARM providers should also create downward pressure on prices.

Table 5: Intel Gross Margin Predictions

Year	2010	2011	2012	2013	2014	2015
Intel Gross Margin	65%	61%	59%	57%	55%	54%

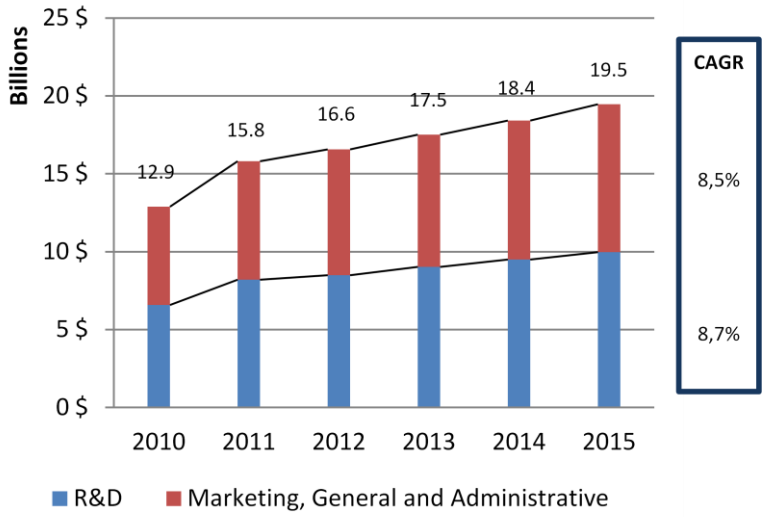
4.1.2. Administrative Costs and R&D

Operating expenses account for almost as much as cost of sales. Operating Expenses are mainly composed by Administrative Costs and R&D. Intel expenditure with these items is historically high, having spent something as $6.7Bn in R&D in 2010.

As competition should became stronger in the next few years there is no reason for spending with these items to decrease. AMD continues to push prices down, bringing competition to the low end desktop/notebook market; by the other side ARM promises to continue developing performance in the Smartphone/Tablet space and already made public its intentions of enter the netbook/notebook space. With all these factors known, Intel already announced its intention of spending $8.2Bn in R&D during 2011. This figure is justified with the efforts of

implementing the 22nm technology and also increased efforts to enter the mobile space, developing more efficient processors.

Figure 17: R&D and Administrative costs estimations for Intel 2011-2015



Given the market conditions, it is not expectable that Intel can reduce expenditures with these items. We calculated R&D as 19% of the previous year revenues. This value is in line with the last two years spending and is an effort for Intel to keep its technological advantage in the x86 market, and also to penetrate the mobile segment.

Administrative costs include marketing, general and administrative costs and they are generally constant. Given this there is no reason to think that big differences from the previous years should arise here, so he simply used the average of the last five years with relation to revenues to estimate the future numbers. 17% of total revenue was the value used to estimate administrative costs.

4.1.3. Taxes

Intel 2010 Annual report states that Intel effective average tax rate is about 29%. Despite the marginal tax rate in the United States being about 40%, Intel benefits from deductions due to R&D expenses and other exceptions. Given that the tax rate of 29% is assumed for the entire period of analysis and also for the terminal value.

4.1.4. Capex, Depreciation and Working Capital

Capital expenditures were quite high during the last few years, more than doubling depreciation in 2007 and 2010. Capex should continue higher than depreciation during the next years, to accommodate the necessary investments for the implementation of 22nm technology and for increasing the installed capacity during next years. For 2011 Capex was taken from 2010 Intel Annual Report and for the following years it was calculated as the

amount necessary to keep an adequate level of fixed and intangible assets. We estimated a total of $37Bn Dollars of Capex for the next five years, what compares with the $39Bn of the last five. The main reason for the lower value is the absence of any peak, as we had in 2007 ($10Bn) and 2010 ($10.5Bn).

Regarding depreciation and amortization we do not have separate data for both series, and only a joint value is available. This value averages 9% of the representative assets and this is the percentage that will be applied to calculate depreciation and amortization for the next five years.

Working capital is the difference between some short term assets, as accounts receivable and inventory, and short term liabilities. In average the evolution should be favorable to Intel given that Liabilities should increase faster than this group of assets.

4.1.5. Cost of Capital

Intel cost of capital is a result of the combination of its various components. Cost of equity was calculated with three components: the risk free rate (US 10 year bond – 3,42%); the market risk premium for the US, taken from Fernandez and Del Campo (2010) in a paper which collects evidence on the rates used by several companies and institutions during 2010 as the market risk premium for several countries, the value for the US is 5,1%, a value very close to the one advanced by Damodaran for the advanced economies – 5%; and the beta for the company is the average between the Damodaran database beta and my calculations (respectively 1,15 and 1,095) - own calculations using monthly returns for Intel since 2006, the market return index was S&P 500. Altogether, the value reached was 9,15% for cost of equity. Cost of debt was calculated summing a spread on the US risk free rate. The spread was calculated using S&P rating for long term debt: Intel debt is rated as A+, which translates in a 0,85% spread. The total cost of debt is 4,27%.

Intel has almost no debt, as only 2% of its capital structure is debt. This is a usual structure within technology companies, which tend to accumulate a vast amount of cash and no debt to survive the cyclicality of the sector. The final value for cost of equity was estimated at 9,02%.

All the values used for calculations are from the 29th of April 2011.

Table 6: Cost of Capital Details for Intel

Levered Beta	US 10Y	Spread	Risk Premium	Tax Rate	Cost of Debt	Cost of Equity	Cost of Capital
1,122605	3,42%	0,85% (A+)	5,10%	29%	4,27%	9,15%	9,02%

4.1.6. Company valuation and Multiples Valuation

The final value for Intel using our estimates is approximately $127.5Bn. This is the result of the sum of the first four years of discounted cash flows and the Terminal Value which assumes a perpetual growth rate of 3,5%. If we subtract the debt value, $2.39Bn, the equity value of Intel is about $125.1Bn (the complete valuation can be found in the Appendix 4). This value compares with a market cap of approximately $122.5Bn. The values are from the 29th of April 2011. Trying to find if this value is in line with the market we conducted a peer analysis using multiples (the data for control group can be found in the Appendix 5).

Table 7: Estimated Free Cash Flow and Company Value for Intel

Intel Valuation	2011	2012	2013	2014	2015 and TV
FCFF	$5.484.521.841	$6.801.225.059	$7.847.808.694	$7.160.964.506	$8.249.002.643
Discounted Value	$5.030.645.927	$5.722.121.939	$6.056.243.817	$5.068.873.412	$105.584.608.248
Company Value	$127.462.493.344	Debt Value	$2.393.000.000	Equity Value	$125.069.493.344

Our analysis for Intel uses data from eight mature technology companies and our multiples are focused on sales and EBITDA. We estimated a multiple of 2,68 for sales and 12,14 for EBITDA. The sales multiple for Intel returns a market value of $123Bn and for the EBITDA multiple the value is $195Bn.The multiple for sales almost gets the exact value of our Valuation however the Earnings Multiple gets us a much greater value than our valuation.

Table 8: Multiples Valuation for Intel

Price/Sales Multiplier	2,68	Value Sales	$123.315.573.422
Price/Earnings Multiplier	12,14	Value Earnings	$195.921.190.633

There may be several reasons for these results but there seems to be one main reason to explain these findings. The most plausible factor we found explaining these results is the fact that Intel margin is expected to decrease during the next few years. It can also be the fact that margins of the control group are expected to increase or some mix with Intel margins decreasing and control group margins increasing, which would explain why Intel is trading in such a low multiple on earnings while trading at a more normal multiple on sales.

4.2. ARM

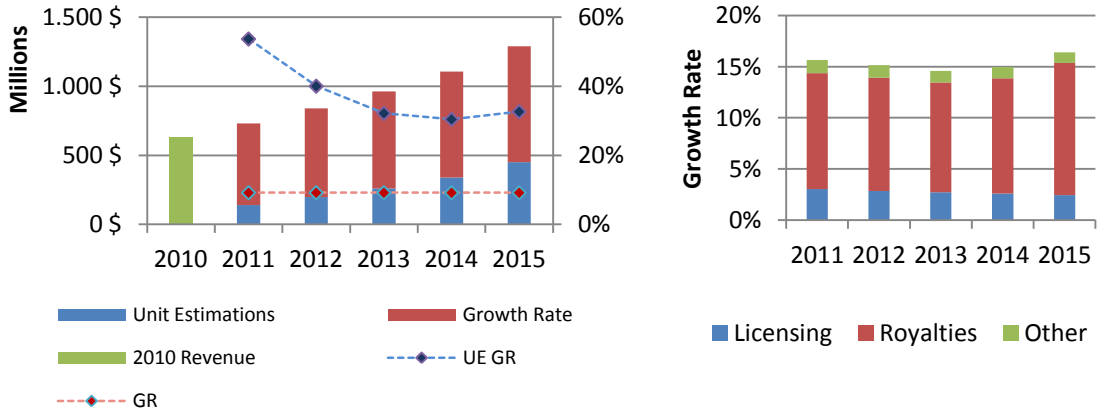
The model used to evaluate ARM will be similar to the one used to evaluate Intel: a WACC Discounted Cash Flow model with a 5 year explicit period. The method used will also be the

same. The estimation of Net income will be followed by estimations of Depreciation and Amortization, Capex and Changes in Net Working Capital to get FCFF. Revenues are estimated using two components, one of them respects to licensing and a share of royalties' revenues, using historical growth rates and PWC predictions, the second component estimates the remaining share of royalties' revenues using market share predictions, unitary prices, market sizes and the fees received by ARM.

4.2.1. Revenues and Gross Margin

Detailed revenues for ARM were estimated in USD, given that the most detailed information provided by ARM concerning revenues is in USD and also because market prices are set in USD. Once the estimation was done the value was converted to GBP. The estimation was done using two components, the first one estimated revenues arising from licensing activities, a share of royalties' revenues and other revenues, the second one is responsible for the remaining share of royalties' revenues, namely the share correspondent to microprocessors, and is responsible for about one third of total revenues.

Figure 18a and 18b: Revenue by estimation method and revenue growth breakdown by source

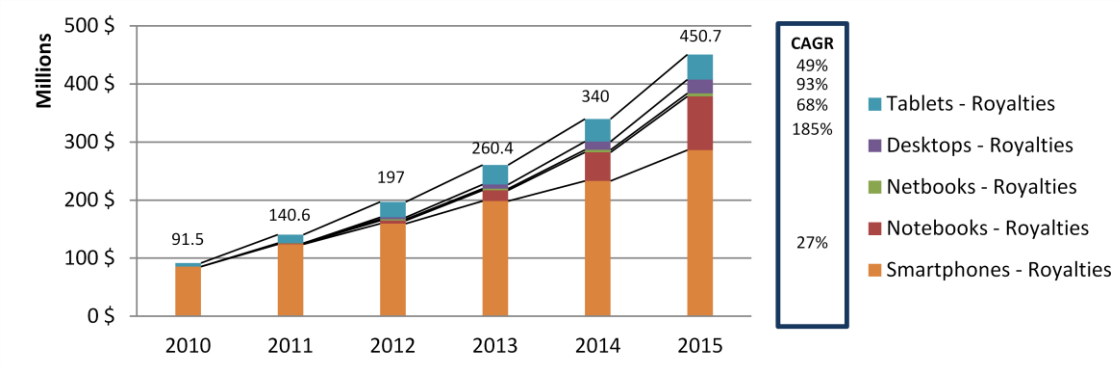


The first component was calculated using the PWC prediction of 9.2% growth in the semiconductor industry for the near future, which is in line with the historic growth rate of the industry during the last 20 years (and well below ARM growth predictions by industry analysts).

The second component is the most important and should reflect the royalties' revenues from microprocessors sales in the next few years. Market size estimations are the same used for Intel, market shares are derived from RBS and Goldman Sachs numbers, and unit prices are from RBS. ARM is expected to be present in the entire field in a few years, from smartphones

to desktops. In smartphones the prediction is for ARM to lose share, from its current 90% share to 70% in 2015, however given the huge increase in market size, unit sales using ARM architecture will more than double, from the current 250 million units to 570 million units. This alone should represent the biggest share of royalties. The remaining revenues should come from tablets, netbooks, notebooks and desktops and other royalties (controllers, memories, and other kinds of components).

Figure 19: ARM unit estimation revenue detail (Blue bars in the graphic 11)



Notebooks will become the second largest source of revenue despite the low penetration ARM should achieve in that market, by the other side ARM should continue to be the dominant firm in the tablets market, however given the small size of the tablets market, revenue from tablets will not achieve relevant values.

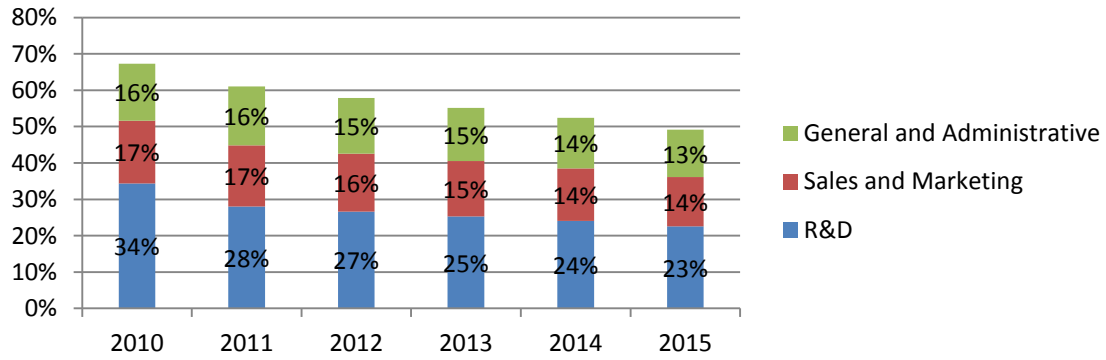
The growth expectations presented here, despite amazing, are explained by the growth expected in the smartphones market, the licensing done in the last years, which should create more royalty revenues in the years to come and the announcement in December 2010 by Microsoft, that Windows 8 will be compatible with ARM architecture, which is a tremendous opportunity for ARM to penetrate x86 market, namely notebooks.

Product and Service costs were estimated as a share of licensing revenue. This is so because royalties by principle should not be accountable for any costs, and sources for what ARM consider “other revenue” are not easily identifiable. Product costs were set at 19% and service costs at 7% of licensing revenue. As licensing is becoming less relevant for total revenue this should increase gross margin as time goes by. In our estimation gross margin increases from 92% in 2011 to 93% in 2015, not matching, however, the margin from 2010, 94%.

4.2.2. Administrative Costs and R&D

ARM has been able to keep costs under control, maintaining costs as a stable share of licensing revenues. Using that assumption we assumed costs as a fixed percentage of licensing revenue. This assumption has a positive and a negative aspect. If by one side we keep estimations in line with historical costs, by the other side, using shares of licensing revenue to estimate costs, we cannot achieve the results intended by ARM board – paying all the costs with licensing revenue. Summing up, General and Administrative costs were set at 52% of licensing revenues, Sales and Marketing at 54% of the same revenue and R&D were set at 90%. This totalizes 196% of licensing revenue, highlighting our previous comments. Once again, as royalties are assumed to have an increased impact in revenue, net margin should continue to increase in the next few years, reaching 45% in 2015 from 27% in 2010.

Figure 20: Cost as a percentage of total revenue



4.2.3. Taxes

The conviction in the UK is that government should decrease taxes on profits until they reach 24% in 2014, from the actual value of 28%. We assumed they would decrease 1% every year, which will yield 24% in 2014. Adding to this we also included in our estimation a benefit of 5% of the amount spent in R&D, according to ARM 2010 annual report indications.

4.2.4. Capex, Depreciation and Working Capital

As we had already done for Intel, Capex was calculated as the amount needed to compensate Depreciation and keep fixed and intangible assets in an appropriate level for the ARM sales volume.

Data for depreciations and amortizations is given jointly by ARM and we have no means to isolate them. We used the historical rate we could observe to calculate future rates and we

applied 10% for both depreciation and amortization for the relevant assets. In order to calculate the Terminal Value we equalized both values.

Working capital is calculated as the difference between accounts receivable and payable and inventory. Working capital turns out to be negative in ARM, which in turn yields that with an increasing business, working capital will also increase as a negative value, benefiting ARM evaluation, as more and more cash flow can be extracted every year from the company.

4.2.5. Cost of Capital

Cost of capital, in the case of ARM, is equal to the cost of equity, given that ARM capital structure does not contemplate any debt. To calculate ARM cost of equity we needed a risk free rate for GBP. We used the British government 10 year bond to establish the risk free rate. The rate used is 3,69%. The market risk premium was taken from Fernandez and Del Campo (2010). This paper collects evidence on the rates used by several companies and institutions during 2010 as the market risk premium for several countries. The rate for Great Britain is 5,2% and once again is very close to the rate Damodaran suggests for the developed economies – 5%. The beta for ARM was calculated as the average between Damodaran data and my own calculations (respectively 0,82 and 0,68) using five years of monthly returns for ARM and the Footsie 100. Altogether the cost of capital for ARM is about 7,58%.

Once again all the values collected are from the 29th of April 2010.

Table 9: Cost of Capital Details for ARM

Levered Beta	UK 10Y	Risk Premium	Cost of Equity	Cost of Capital
0,74852	3,69%	5,20%	7,58%	7,58%

4.2.6. Exchange Rate

In the valuation of ARM we need exchange rates between USD and GBP. These rates will be used to convert ARM estimated revenues into GBP, and also for the conversion of the final company value to USD. In order to do that we need exchange rates from 2011 until 2015. We calculated that exchange rates using interest rate parity. As rates for GBP are higher than rates for USD, the GBP is expected to devaluate when compared with the USD during the next few years. It is also important to notice here the fact that ARM is exposed to exchange rate risk. This arises from the fact that almost all the revenues made are in USD, which is the currency used in the marketplace to determine prices, while the major part of costs are denominated in GBP, due to the fact of ARM having headquarters in Great Britain. ARM in its 2010 Annual

Report states that this should not be a problem in the near future, both because the currencies are not expected to fluctuate that much from current valuations, and also because ARM partially hedges its position. For our valuation we disregarded this aspect because the exchange rate fluctuations we got were small and, we think, ignorable.

Table 10: Interest Rates and Exchange Rate Calculation (GBP/USD)

Interest Yields	Spot (2010)	1 Year	2 Years	3 Years	4 Years	5 Years
UK	-	0,66%	1,20%	1,56%	2,02%	2,20%
US	-	0,22%	0,61%	1,01%	1,49%	1,97%
GBP/USD	1,671	1,663	1,651	1,644	1,636	1,652

4.2.7. Company Valuation and Multiples Valuation

The final value for ARM using our estimates is approximately $11.9Bn and, as ARM has no debt in its capital structure this value already represents the ARM equity value. Our calculation uses four years of discounted cash flows and a Terminal Value in the end which assumes a perpetual growth rate of 4% (the complete valuation can be found in the Appendix 6). This value compares with a market cap of approximately $13.8Bn. The values are from the 29th of April 2011. As we already did for Intel we compared our values with valuations using multiples.

Table 11: ARM Estimated FCFF and Company Value

Intel Valuation	2011	2012	2013	2014	2015 and TV
FCFF	$178.447.095	$251.034.266	$305.370.533	$378.966.451	$521.289.416
Discounted Value	$166.598.455	$219.447.002	$249.275.140	$288.858.312	$10.985.977.128
Company Value	$11.910.156.036	**Debt Value**	$0	**Equity Value**	$11.910.156.036

Applying multiples this time yields results completely out of line with our estimations and the company market value. We used a different set of companies for ARM, which consists on small and fast growing technology companies but even with this peer group we could not reach satisfactory results (see Appendix 7). Using the sales multiple of 3,89 on 2010 ARM Sales we get a company value of approximately $2.4Bn. The Price/Earnings multiple works a little bit better but still far away from the intended result. Multiplying ARM earnings by 25,37 we get a value of $4.3Bn. As our estimated value is $13Bn we are incredibly away from our estimates.

Table 12: ARM Multiples Valuation

Price/Sales Multiplier	3,89	**Value Sales**	$2.447.817.533
Price/Earnings Multiplier	25,37	**Value Earnings**	$4.321.559.803

It is interesting to analyze these results however, as we get for and ARM very poor results. ARM is trading at a multiple of 18,8 on sales and 69 on earnings, these growth expectations are incredibly high, largely surpassing the growth expected for the sector as a whole and even the growth expected for some of the companies in the sector that should grow faster. This, of course, results in this amazing difference between valuations using detailed estimations of cash flow and those ones just relying on multiples.

As a final note, I would like to stress that I think our valuation using DCF is correct, despite the values obtained using multiples, as the assumptions made seemed quite reasonable all the time and we do not even reach the market value of the company.

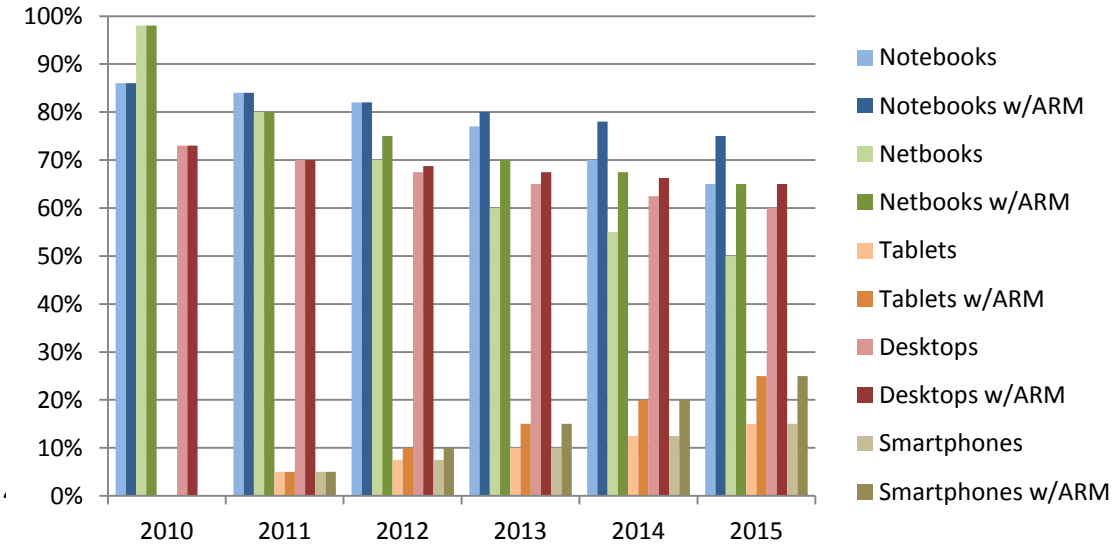
4.3. Value of the Merged Company

Our exercise for the calculation of the value of the merged entity is a bit different than the usual in M&A thesis. Instead of calculating the revenues and costs of both firms this approach will be focused on the absorption of ARM by Intel. What this means in practice is that ARM is basically being dismantled, and their research will not be sold anymore. This knowledge will be appropriated by Intel and used to developed new offers in the field of microprocessors and controllers. What I expect with this exercise is for Intel to gain (or not to lose so much) market share until 2015. ARM licenses are already sold for designs that will be state of the art by 2013 at least, but after that, the currently available designs should start losing space in the performance field, and by then Intel should be capable of gaining space in the low power processors segment. This movement should be gradual and I reflected it in Intel market shares evolution. Another difference between this and the usual approach is the fact that I am relying basically on additional revenue for Intel instead of cost synergies. In fact I think that this deal will reduce the overall well being of the society and reduce output and market efficiency. The gains I estimate for Intel will be born from decreased profits from competitors and reduced competition in the market place. Actually I am not even sure if this deal would be approved by competition authorities, namely the European Commission, as it would incredibly increase Intel dominance in the market.

4.3.1. Revenues and Gross Margin

Revenues are the supreme contributor for gains in this deal. My projections are for Intel to increase much more their market share in the mobile space. Additionally I assumed Intel will be able to better defend its position on the desktop, notebook and netbook segment, where

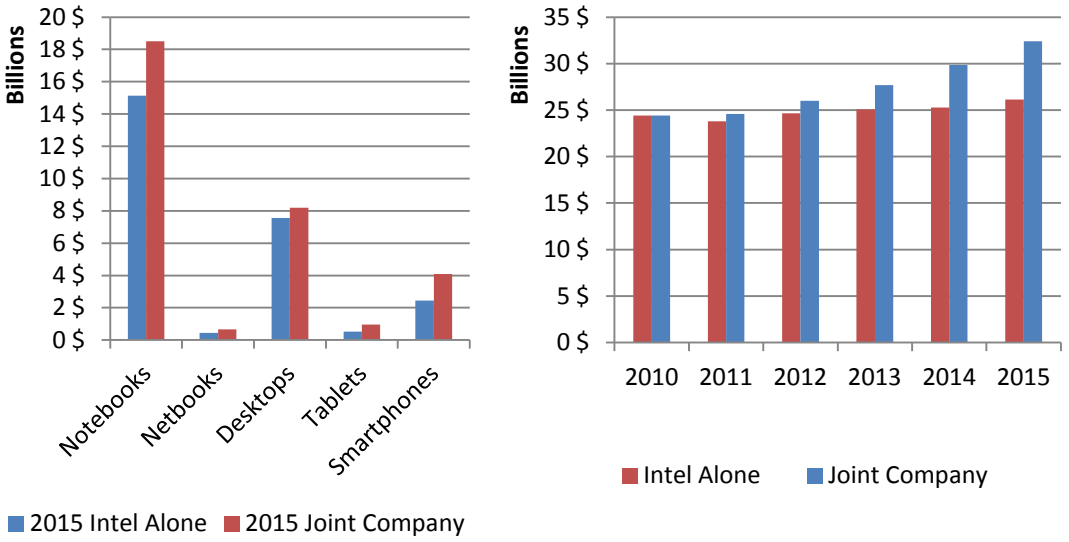
Figure 21: Intel Market Shares by Microprocessor Structure (2011-2015) with and without ARM



Intel would lose significant market share in the following years.

In figure 13 one can understand the differences between the predictions made for Intel alone and the new predictions considering that Intel absorbs ARM. For 2011 the predictions are the same and the differences only start in 2012, becoming more severe as time goes by. The Desktop segment is where we have the smallest difference between the predictions for Intel and for the merged entity, as we do not expect ARM to have such an impact in the desktop segment, at least in such a short period of time.

Figure 22a and 22b: Comparison between Joint company and Intel alone revenue from unit estimations



The main changes in the revenue breakdown for Intel are the increase of revenue from notebooks, which previously was about $15Bn and now amount to more than $18Bn, and the biggest share of revenues from the Smartphone segment, which amount to $4Bn now in 2015. Prices are also higher in average, given Intel increased market power. This higher prices reflect lower price decreases, as Intel should face much less pressure from competitors, namely in the low power, mobile segment.

Regarding margins we assumed a slightly higher margin from 2013 onwards (57%, 55% and 54% for 2013, 2014 and 2015 respectively). This higher margin is a reflex of higher prices charged by Intel. The difference is so small (1%) because we assumed Intel would be very aggressive in the ultra mobile segment, not increasing prices, to rapidly increase its market share.

4.3.2. Administrative Costs and R&D

Regarding costs our assumptions kept Intel costs structure unchanged and added part of the ARM cost structure to Intel costs.

Research and development costs from ARM were kept in full, as we regard this component as the most important contribution ARM will give Intel.

For Marketing and sales we made different assumptions. In 2011 the expenses we had estimated for ARM would be fully assumed by Intel, from then on the estimated ARM expenses would be reduced in 25% every year. This assumption translates in no more expenses with these ARM departments from 2015 on (75% in 2012, 50% in 2013, 25% in 2014).

4.3.3. Taxes

For taxes we kept our previous assumption of a 29% average tax rate for Intel earnings.

4.3.4. Capex, Depreciation and Working Capital

As for taxes, we kept our methodologies in line with the estimations done for Intel. Depreciation and Amortization are 9% of the representative assets and Capex and Changes in Working Capital were calculated as before.

4.3.5. Cost of Capital

Intel cost of capital suffered a minor change, as we adapted it to the new capital structure leaving the beta unchanged. The inclusion of ARM in the capital decreased the weight of debt marginally in the capital structure. As a result the final cost of capital for Intel is now 8,90% instead of 8,89%. The difference for the final valuation is negligible.

Table 13: Cost of Capital Details for the Merged Entity

Levered Beta	US 10Y	Spread	Risk Premium	Tax Rate	Cost of Debt	Cost of Equity	Cost of Capital
1,122605	3,42%	0,85% (A+)	5,10%	29%	4,27%	9,15%	9,04%

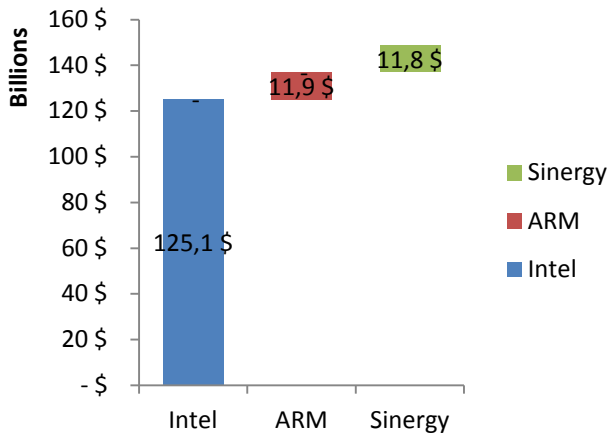
4.3.6. Synergy

Synergies in our specific case are quite difficult to measure. Usually synergies are incurred when two similar companies join together and they create more revenue or decrease costs as a result. Our specific case is different. The companies are not that similar, even though they operate is the same industry. What we estimated as source of gains basically increased

revenues. As pointed earlier, when we made the case for the acquisition, Intel should appropriate a much bigger share of added value than ARM does nowadays, given that Intel will conduct the entire process of designing, producing and selling the processor. Given Intel margins this will create great value for Intel even, as it is likely, they cannot capture all the market ARM controls nowadays.

Our estimations give us a market value of more than $125Bn for Intel and about $11.9Bn for ARM. The sum of both is almost $137Bn. The value of the joint company amounts to almost $149Bn, which yields a total synergy of about $11.8Bn. This represents 99% of ARM market value which is an amazing value, however partly explained by the fact that much of the ability to create value comes from Intel huge capabilities.

Figure 23: Decomposition of Value and Synergy Value



This synergy is explained by a much higher growth rate in the next five years for Intel, with much higher revenues, but also much higher costs. This balance however will be greatly positive in the end, given that Intel net margin on each unit sold will be much greater than ARM 2% fee.

When we try to estimate revenue synergy, we get a value of more than $84Bn which is an incredible value, and way above the total benefits from the merger, what means that we will also have much higher costs. Despite the increase in costs, there are also some synergies regarding costs, namely regarding costs previously incurred by ARM.

Trying to disaggregate that synergy we went through a deeper analysis. First of all we subtracted all the expenses calculated as a percentage from the value we considered revenue synergy. This way instead of gross revenue increase, we get a net revenue increase, which better translates the added value of increased sales derived from the deal. Instead of a revenue synergy of more than $84Bn we end up with a synergy of $6.2Bn.

We also have some cost synergies, as Sales and Marketing and General and Administrative Expenses from ARM were reduced through time, as the company gets integrated in a much bigger Intel structure. These reductions yield a gain of $4.6Bn.

The last gain from the merger arises from higher gross margins. These higher margins are not the result of decreased costs, which should not be happening in the near future, but instead from higher average selling prices due to an increase in market power from Intel.

Table 14: Decomposition Synergy contribuution

Revenues	Notebooks	28%	Costs	Sales and Marketing	20%
	Netbooks	2%		General and Administrative	19%
	Desktops	5%		Total Cost Synergy	39%
	Tablets	4%	Increase in Gross Margin		9%
	Smartphones	13%			
	Total Revenue Synergy	52%			

The higher revenues are the result if an increased growth rate in the different platforms, which can be measured by the increase in CAGRs by platform: 4% on notebooks, 7% on netbooks, 2% on desktops, 26% on tablets and 23% on smartphones. The average increase in CAGRs is 4%, as notebooks have a very large impact on the total revenues.

The lower costs come from the fact that we assumed that ARM costs in these areas could be reduced by 25% 2012, 50% in 2013, 75% in 2014 and 100% in 2015, when the entire structure should be fully integrated with Intel divisions.

Table 15: Estimated FCFF and Company Value for the Merged Entity

Year	2011	2012	2013	2014	2015
FCFF	$4.922.832.349	$6.343.095.976	$7.523.445.945	$6.762.333.667	$11.126.872.236
Discounted Value	$4.514.824.439	$5.335.227.287	$5.803.557.202	$4.784.095.955	$130.734.000.262
Company Value	$151.171.705.145	Debt Value	$2.393.000.000	Equity Value	$148.778.705.145

We assumed integration costs to be about 10% of actual ARM sales, evenly split through the first three years. We used this number based on historical numbers from M&A which points to values ranging from 4% until 7/8%. The lack of information of this kind of costs from Intel forced us to use an estimate from the remaining market. We used 10% as a conservative number. Anyway given the dimension of Intel, and the kind of acquisition we are talking about, this $60M will not make great difference in our final numbers.

5. Deal Structure

5.1. Defining the price to offer

Table 16: ARM Value, Estimated Value and Synergy

ARM	Value	%
Market Cap on 28th February 2010	$ 13.7Bn	100%
DCF Valuation	$ 11.9Bn	87%
Synergy	$ 11.7Bn	86%
Value With Synergy	$ 23.7Bn	173%

On the 28th of February of 2011 ARM shares closed at 617p. This means that compared to our estimations, ARM shares are 15% overvalued. As our valuation already included some amazing growth perspectives, it is amazing the market expectations about ARM growth, supporting the price at incredible multiples.

The value with synergy we calculated is about 73% above the actual market price and this leaves room for Intel to pay a decent premium and also keep some value for its shareholders.

The final price will be dependent on several factors apart from the company value. Among those factors the most important are the existence of other bidders, the shareholder structure of ARM and how are the capabilities to create synergies distributed among both companies.

5.1.1. Other potential bidders

ARM is a very desirable company, which a large range of companies would like to buy. However the actual context, with very restrictive credit markets, makes it difficult for smaller firms to finance the acquisition.

Looking at tech firms with dimension enough to conduct the acquisition we find Apple, Qualcomm, Samsung Electronics, and maybe Toshiba.

There is also another type of tech companies that definitely have the dimension but we do not regard them as interested in the business. For example Google, which was already pointed as interested by some media, definitely has the dimension and cash needed for the deal, IBM, Oracle, Toshiba and Nokia would also have the dimension, but all these companies are in a separated business which we do not think would be interested in acquire a company as ARM.

For other companies to compete, they would be probably to join efforts to be able to come up with a large enough offer. There are a lot of companies in this group, however I do not think a joint offer is very likely. This group of companies would also include the vast majority of actual

ARM clients (apart from Apple and Qualcomm): Broadcom, Nvidia, Texas Instruments, Hynix Semiconductors and also AMD, which is not an ARM client but is Intel main competitor in the microprocessor space

Analyzing the competitors we would say that an acquisition from a company like Apple or Samsung would be very difficult to accept by everyone else: current ARM customers would be taken out of this market gradually, and the remaining mobile phones and tablet vendors would be forced to acquire components to their rival or someone else with not so good products. This would create and enormous pressure for ARM to be sold to someone else than one mobile phone company.

An offer from a hardware vendor like Qualcomm would be less prone to resistance. The companies affected by a movement like this would be the other hardware companies, however, apart from Intel, there is really no one else with the required dimension to buy a company as ARM. Companies like Apple and Samsung would probably face higher prices, due to reduced competition but it would affect all of them and not create competitive differences between companies. Given these conditions we think that a counter offer from Qualcomm is likely to happen, at least if Intel initial offer is not high enough.

The other hypothesis is a joint offer from the remaining Qualcomm competitors. There are pros and cons about this kind of proposal. The biggest reason for them to join the race would be that, if they do not, they would lose one of their main contributors for revenues in the medium term. However we have some difficulties in understanding the way ARM would be managed by a consortium of rival companies.

Given all this we would say that a Qualcomm offer is likely to happen because it is the company alone that has the reasons and the resources to do it. All the other possibilities seem unlikely to happen, due to the combinations of the various factors.

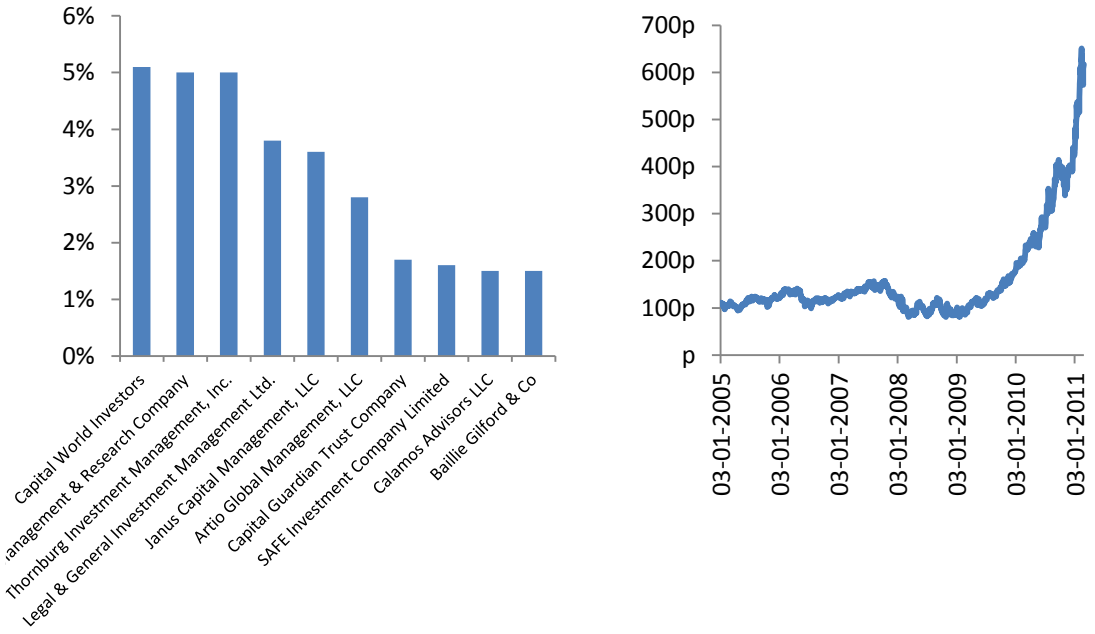
5.1.2. Target Shareholders

The 10 biggest ARM's Shareholders control about 31,5% of the company. With this low amount of shares owned by large shareholders, there should be no strategic barriers to the acquisition. Furthermore the existent shareholders are hedge funds and investment companies who should also not be that much interested in strategic questions about the semiconductors market. So as long as the offer made by Intel provides a good return for

current ARM shareholders there should be no barriers to the deal. Defining what a good return may be is not so simple.

However In the last five years these shareholders had a return of about 35% per year, even in a global recession, where almost all shares suffered a severe slump. This very strong performance, namely in the two last years, when shares rose from 95 pence to more than 600 pence, will certainly increase the amount requested by ARM shareholders when facing a proposal for their shares.

Figure 24a and 24b: Shareholder Structure and Share Price Evolution for ARM



5.1.3. Synergy Sharing and Takeover offer

Intel two latest acquisitions paid a premium of 44% and 60% for Wind River Systems and McAfee respectively. These acquisitions are in line with the normal price paid for technological companies, which normally rounds or surpasses 50%. The 44% premium paid for Wind River Systems may also be explained by current market situation, with credit difficulties making it difficult for other companies to come up with counter-bids.

Given what we said before, we will suggest a higher premium than the one paid in these two deals. First of all this deal will face strong opposition from actual ARM clients, who will lose their R&D "department" and should be forced to proceed on their own and against Intel, a rival they do not want to face. In second place shareholders expectations are incredibly high with recent growth by ARM and the predictions for next the years support this high

expectations. In third place, if the offer is low, it would be quite probable for Qualcomm to present a counter-bid. Qualcomm has about $20Bn is cash and short-term assets, what gives them the possibility of considering this deal.

Given the framework, we propose a premium of 55% paid by Intel, which amounts to a total of around $21.27Bn or £12.74Bn. This value corresponds to 956,35p per share, compared to a market value of 617p per share.

At this price point we think the offer is very hard to deny and for Qualcomm would be very difficult to surpass this price tag, given that they do not share Intel capabilities, which are what create possibilities for this high level of synergy. Even with this offer, Intel would keep almost $2.5Bn of the synergy to itself, around 21% of total synergy, while eliminating its biggest threat in the medium term.

5.2. Financing the Acquisition

The merged entity would have available more than $22Bn between cash and short-term investments.

Financing the acquisition entirely with capital is not possible. The alternatives would be to issue shares or raise debt. As we already know issuing shares would dilute the returns of current shareholders, as we think this deal will deliver the promised value. It would also be a sign of weak confidence for the market and could lead ARM shareholders to ask for higher values to insure the risk of Intel shares devaluate. Issuing debt would make possible to offer only cash to ARM shareholders. Historically this is better accepted by target shareholders and could ease the process.

The data available suggests Intel never worked with less than $4Bn in cash. To finance the acquisition Intel will have no trouble in issuing debt, even in the present conditions. This is so because Intel has maintained positive financial results for several years in a row and these results allow the financing of a much higher volume of debt than the one Intel has nowadays. Total debt at Intel amounts to a little less than $2Bn. Our proposal would be to raise $5Bn of additional debt. The deal could be entirely financed with cash and the resulting entity would end up with approximately $6Bn in cash, which is slightly above the minimum level Intel kept during the last years.

The resulting firm would have about $7Bn in debt for a total company value of $148.8Bn. Furthermore with a yearly net income of approximately $9Bn for the next several years, Intel should have no problem in keeping the proposed level of debt.

6. Conclusions

When I decided to write my thesis (about October 2010) about a possible acquisition of ARM by Intel, the hypothesis of ARM being bought by Intel or some other giant as Apple, Google or Samsung, among others, was very much on the table. Since then, the speculation of a possible takeover has decreased and right now that possibility is not so present anymore.

The share value of ARM during all this time has fluctuated around 600p, very close to the price point I used to write my thesis and this value seems acceptable for the actual growth predictions being used. This gives me some confidence that my evaluations are credible and that I am not using less credible growth predictions to justify the deal.

Also good to point is that, by now, it is completely clear that Intel decided to proceed in a complete different direction. Intel is right now pushing into ARM land, with tablets already launched and smartphones set to launch on April/May 2012. ARM is also planning to enter the notebook space but only in the end of 2012/beginning of 2013.

7. Appendix

Appendix 1: Basic Valuation Formulas

Free Cash Flow to the Firm and Free Cash Flow to Equity are generally calculated with the following formulas:

Formula used for converting Unlevered to Levered Beta:

APV Valuation with fixed level of Debt:

WACC Valuation for fixed ratio of debt to equity:

ECF valuation for fixed ratio of debt to equity:

or , with

CAPM unlevered cost of equity:

, with

Appendix 2: ARM and Intel Shareholder Structure

ARM Top 10 Shareholders

Holder	Ownership
Capital World Investors	5,1%
Fidelity Management & Research Company	5%
Thornburg Investment Management, Inc.	5%
Legal & General Investment Management Ltd.	3,8%
Janus Capital Management, LLC	3,6%
Artio Global Management, LLC	2,8%
Capital Guardian Trust Company	1,7%
SAFE Investment Company Limited	1,6%
Calamos Advisors LLC	1,5%
Baillie Gilford & Co	1,5%
Subtotal	31,6%

Intel Corporation Top 10 Shareholders

Holder	Ownership
Vanguard Group, Inc.	4,1%
State Street Corporation	4,0%
BlackRock Institutional Trust Company, N.A.	2,8%
Bank of New York Mellon Corporation	1,9%
Invesco Ltd.	1,5%
Northern Trust Corporation	1,3%
Capital Research Global Investors	1,3%
Harris Associates L.P.	1,2%
Wellington Magagement Company, LLP	1,1%
State Farm Mutual Automobile Insurance CO	1,0%
Subtotal	20,3%

Appendix 3: Predictions for Unit Sales, prices and market shares in Microprocessor Markets

Estimations for Worldwide sales of Microprocessors:

Worldwide Unit Sales	2010	2011	2012	2013	2014	2015
Notebooks	170.000.000	187.000.000	206.000.000	226.000.000	249.000.000	274.000.000
Netbooks	37.000.000	38.000.000	39.000.000	40.000.000	42.000.000	43.000.000
Tablets	23.000.000	52.000.000	87.000.000	116.000.000	145.000.000	174.000.000
Desktops	150.000.000	148.000.000	146.000.000	144.000.000	142.000.000	140.000.000
Smartphones	280.000.000	364.000.000	473.200.000	567.840.000	681.408.000	817.689.600

The estimations were done having RBS report on ARM and Goldman Sachs report on Intel as base cases. The most important facts to retain from the estimations are the huge growth of unit sales expected for Smartphones and tablets, which really are the support for ARM value. For the other side it is interesting to notice that desktops should actually experience decreased sales.

Market Shares and Average Selling Prices for Intel Processors:

Intel Market Shares	2010	2011	2012	2013	2014	2015
Notebooks	86,0%	84,0%	82,0%	77,0%	70,0%	65,0%
Netbooks	98,0%	80,0%	70,0%	60,0%	55,0%	50,0%
Tablets	0,0%	5,0%	7,5%	10,0%	12,5%	15,0%
Desktops	73,0%	70,0%	67,5%	65,0%	62,5%	60,0%
Smartphones	0,0%	5,0%	7,5%	10,0%	12,5%	15,0%

CPU ASP Intel DOL	2010	2011	2012	2013	2014	2015
Notebooks	90	85	85	85	85	85
Netbooks	24	24	24	23	22	21
Tablets	22	21	20	19	19	20
Desktops	95	90	90	90	90	90
Smartphones	17	18	18	19	19	20

Intel main revenues should continue arising from the notebook segment for a while yet. This is the segment where Intel sells more units nowadays and its relatively high Average Selling Price helps creating the major part of Intel revenues. However with huge increases in Smartphone's market size and with Intel gaining market share in the future this segment may become much more relevant in Intel revenue mix.

Market Shares and Average Selling Prices for ARM Processors:

ARM Market Shares	2010	2011	2012	2013	2014	2015
Notebooks	0,0%	1,0%	3,0%	8,0%	15,0%	20,0%
Netbooks	0,0%	5,0%	15,0%	20,0%	25,0%	30,0%
Tablets	96,0%	90,0%	85,0%	80,0%	75,0%	70,0%
Desktops	0,0%	0,0%	2,5%	5,0%	7,5%	10,0%
Smartphones	90,0%	90,0%	85,0%	80,0%	75,0%	70,0%

CPU ASP ARM DOL	2010	2011	2012	2013	2014	2015
Notebooks	50	50	50	50	60	70
Netbooks	25	24	24	23	22	21
Tablets	22	21	20	19	18	17
Desktops	50	50	50	50	60	70
Smartphones	17	18	18	19	19	20

ARM major revenues should arise from Smartphone's processors sales. Tablets are also a great source of revenue for ARM nowadays but should be surpassed in the future by the notebook segment, as Windows becomes compatible with ARM architecture and ARM starts competing against Intel and AMD in the low power and cheap segment.

Market Shares and Average Selling Prices for the Joint Company:

JC Market Shares	2010	2011	2012	2013	2014	2015
Notebooks	86,0%	84,0%	82,0%	80,0%	78,0%	75,0%
Netbooks	98,0%	80,0%	75,0%	70,0%	67,5%	65,0%
Tablets	0,0%	5,0%	10,0%	15,0%	20,0%	25,0%
Desktops	73,0%	70,0%	68,8%	67,5%	66,3%	65,0%
Smartphones	0,0%	5,0%	10,0%	15,0%	20,0%	25,0%

JC CPU ASP DOL	2010	2011	2012	2013	2014	2015
Notebooks	90	90	90	90	90	90
Netbooks	24	24	24	24	24	24
Tablets	22	22	22	22	22	22
Desktops	95	90	90	90	90	90
Smartphones	17	18	18	19	19	20

The acquisition of ARM by Intel is reflected here by larger market shares, either by more aggressive penetration of new markets (smartphones and tablets) and by higher retention rates in the segments where Intel dominates nowadays. Furthermore, with the exception of Smartphones, where Intel should be very aggressive, and the desktop segment, where the ARM impact should be reduced, we reviewed up the ASP for the Joint Company, being the most significant the increase in the notebook segment, given its high unit sales.

Appendix 4: Intel DCF Valuation and Balance Sheet

Intel Income Statement, Cash Flow and Valuation:

	Actual Values		Predictions				
Intel FCFF	2009	2010	2011	2012	2013	2014	2015
Net Revenue	**35.127.000.000**	**43.623.000.000**	**44.694.223.920**	**47.482.253.321**	**49.997.392.386**	**52.497.911.854**	**55.853.668.996**
PC Client Group	26.175.000.000	31.598.000.000	31.232.047.920	32.429.599.529	33.100.695.885	33.502.831.507	34.279.261.605
Microprocessor	19.914.000.000	24.721.000.000	23.722.363.920	24.229.024.601	24.145.668.064	23.723.941.126	23.600.713.309
Unit Estimations		24.430.740.000	23.405.400.000	23.882.900.000	23.767.700.000	23.311.200.000	23.150.000.000
Growth Rate		290.260.000	316.963.920	346.124.601	377.968.064	412.741.126	450.713.309
Chipset, Motherboard and other	6.261.000.000	6.877.000.000	7.509.684.000	8.200.574.928	8.955.027.821	9.778.890.381	10.678.548.296
Data Center Group	6.450.000.000	8.693.000.000	9.492.756.000	10.366.089.552	11.319.769.791	12.361.188.612	13.498.417.964
Microprocessor	5.301.000.000	7.361.000.000	8.038.212.000	8.777.727.504	9.585.278.434	10.467.124.050	11.430.099.463
Chipset, Motherboard and other	1.149.000.000	1.332.000.000	1.454.544.000	1.588.362.048	1.734.491.356	1.894.064.561	2.068.318.501
Other Intel Architecture Operating Segm	1.402.000.000	1.784.000.000	2.330.328.000	2.896.675.776	3.622.368.507	4.499.514.178	5.745.249.134
Unit Estimations		-	382.200.000	769.320.000	1.299.296.000	1.962.719.000	2.975.068.800
Growth Rate		1.784.000.000	1.948.128.000	2.127.355.776	2.323.072.507	2.536.795.178	2.770.180.334
Other Revenue	970.000.000	1.501.000.000	1.639.092.000	1.789.888.464	1.954.558.203	2.134.377.557	2.330.740.293
Corporate	130.000.000	47.000.000	-	-	-	-	-
Cost of Sales	**15.566.000.000**	**15.132.000.000**	**17.430.747.329**	**19.467.723.861**	**21.498.878.726**	**23.624.060.334**	**25.692.687.738**
Gross Margin	**19.561.000.000**	**28.491.000.000**	**27.263.476.591**	**28.014.529.459**	**28.498.513.660**	**28.873.851.520**	**30.160.981.258**
Gross Margin (%)	**56%**	**65%**	**61%**	**59%**	**57%**	**55%**	**54%**
Operating Expenses	**13.850.000.000**	**12.903.000.000**	**15.798.018.066**	**16.563.885.609**	**17.521.184.837**	**18.424.149.568**	**19.469.726.982**
R&D	5.653.000.000	6.576.000.000	8.200.000.000	8.491.902.545	9.021.628.131	9.499.504.553	9.974.603.252
Marketing, General and Administrative	7.931.000.000	6.309.000.000	7.598.018.066	8.071.983.065	8.499.556.706	8.924.645.015	9.495.123.729
Restructuring and Impairment Charges	231.000.000	-	-	-	-	-	-
Amortization and Impairment of intangib	35.000.000	18.000.000	-	-	-	-	-
Operating Income	**5.711.000.000**	**15.588.000.000**	**11.465.458.525**	**11.450.643.850**	**10.977.328.824**	**10.449.701.951**	**10.691.254.276**
Gains on Equity Securities, net	- 170.000.000	348.000.000	348.000.000	348.000.000	348.000.000	348.000.000	348.000.000
Interest and Other, net	163.000.000	109.000.000	109.000.000	109.000.000	109.000.000	109.000.000	109.000.000
Income Before Taxes	**5.704.000.000**	**16.045.000.000**	**11.922.458.525**	**11.907.643.850**	**11.434.328.824**	**10.906.701.951**	**11.148.254.276**
Operating Margin	16%	37%	27%	25%	23%	21%	20%
Provision for Taxes	1.335.000.000	4.581.000.000	3.457.512.972	3.453.216.716	3.315.955.359	3.162.943.566	3.232.993.740
Net Income	**4.369.000.000**	**11.464.000.000**	**8.464.945.553**	**8.454.427.133**	**8.118.373.465**	**7.743.758.385**	**7.915.260.536**
Profit Margin	12%	26%	19%	18%	16%	15%	14%
Dep & Amort	4.744.000.000	4.398.000.000	5.005.858.981	5.239.101.275	5.368.952.459	5.531.009.515	6.000.000.000
Other Losses, Impairments and Provisior	1.997.000.000	765.000.000	782.148.919	830.939.433	874.954.367	918.713.457	977.439.207
Changes WC	60.000.000	65.000.000	- 364.917.285	107.439.532	297.271.798	299.126.619	87.569.669
Cash from Operating Activities	**11.170.000.000**	**16.692.000.000**	**13.888.036.167**	**14.631.907.373**	**14.659.552.088**	**14.492.607.977**	**14.980.269.413**
CAPEX	- 7.965.000.000	- 10.539.000.000	- 8.403.514.326	- 7.830.682.315	- 6.811.743.394	- 7.331.643.471	- 6.000.000.000
Other	-	-	-	-	-	-	-
FCFF	**3.205.000.000**	**6.153.000.000**	**5.484.521.841**	**6.801.225.059**	**7.847.808.694**	**7.160.964.506**	**8.980.269.413**
Terminal Value							162.620.655.550
Discounted Values			5.030.645.927	5.722.121.939	6.056.243.817	5.068.873.412	105.584.608.248
Company Value		Company Value	**127.462.493.344**	Devt Value	**2.393.000.000**	Equity Value	**125.069.493.344**

Intel Balance Sheet:

	Actual Values		Predictions				
Intel Balance Sheet	2009	2010	2011	2012	2013	2014	2015
Cash & Equivalents	3.987.000.000	5.498.000.000	5.498.000.000	5.498.000.000	5.498.000.000	5.498.000.000	5.498.000.000
Short Term Investments	9.933.000.000	16.387.000.000	16.387.000.000	16.387.000.000	16.387.000.000	16.387.000.000	16.387.000.000
Cash and Short Term Investments	**13.920.000.000**	**21.885.000.000**	**21.885.000.000**	**21.885.000.000**	**21.885.000.000**	**21.885.000.000**	**21.885.000.000**
Accounts Receivable - Trade, Gross	2.292.000.000	2.895.000.000	2.681.653.435	2.848.935.199	2.999.843.543	3.149.874.711	3.351.220.140
Provision for Doubtful Accounts	- 19.000.000	- 28.000.000	- 26.816.534	- 28.489.352	- 29.998.435	- 31.498.747	- 33.512.201
Trade Accounts Receivable - Net	**2.273.000.000**	**2.867.000.000**	**2.654.836.901**	**2.820.445.847**	**2.969.845.108**	**3.118.375.964**	**3.317.707.938**
Total Receivables, Net	**2.273.000.000**	**2.867.000.000**	**2.654.836.901**	**2.820.445.847**	**2.969.845.108**	**3.118.375.964**	**3.317.707.938**
Inventories - Finished Goods	1.029.000.000	1.399.000.000	1.787.768.957	1.899.290.133	1.999.895.695	2.099.916.474	2.234.146.760
Inventories - Work In Progress	1.469.000.000	1.887.000.000	2.011.240.076	2.136.701.399	2.249.882.657	2.362.406.033	2.513.415.105
Inventories - Raw Materials	437.000.000	471.000.000	670.413.359	712.233.800	749.960.886	787.468.678	837.805.035
Total Inventory	**2.935.000.000**	**3.757.000.000**	**4.469.422.392**	**4.748.225.332**	**4.999.739.239**	**5.249.791.185**	**5.585.366.900**
Deferred Income Tax - Current Asset	1.216.000.000	1.488.000.000	1.728.756.486	1.726.608.358	1.657.977.679	1.581.471.783	1.616.496.870
Other Current Assets	813.000.000	1.614.000.000	1.340.826.718	1.424.467.600	1.499.921.772	1.574.937.356	1.675.610.070
Other Current Assets, Total	**2.029.000.000**	**3.102.000.000**	**3.069.583.204**	**3.151.075.958**	**3.157.899.451**	**3.156.409.139**	**3.292.106.940**
Total Current Assets	**21.157.000.000**	**31.611.000.000**	**32.078.842.497**	**32.604.747.137**	**33.012.483.797**	**33.409.576.288**	**34.080.181.778**
Land/Improvements	16.687.000.000	17.421.000.000	17.430.747.329	18.518.078.795	18.999.009.107	19.949.206.504	20.665.857.529
Machinery/Equipment	28.339.000.000	30.421.000.000	33.744.139.060	35.136.867.457	35.998.122.518	36.748.538.298	38.539.031.607
Construction in Progress	2.796.000.000	2.639.000.000	2.658.000.000	2.658.000.000	2.658.000.000	2.658.000.000	2.658.000.000
Property/Plant/Equipment - Gross	**47.822.000.000**	**50.481.000.000**	**53.832.886.388**	**56.312.946.252**	**57.655.131.625**	**59.355.744.802**	**61.862.889.136**
Accumulated Depreciation	-30.597.000.000	-32.582.000.000	-34.453.047.289	-36.040.285.601	-36.899.284.240	-37.987.676.673	-39.592.249.047
Property/Plant/Equipment - Net	**17.225.000.000**	**17.899.000.000**	**19.379.839.100**	**20.272.660.651**	**20.755.847.385**	**21.368.068.129**	**22.270.640.089**
Goodwill, Net	4.421.000.000	4.531.000.000	4.916.364.631	5.223.047.865	5.499.713.162	5.774.770.304	6.143.903.590
Intangibles - Gross	1.865.000.000	1.742.000.000	1.787.768.957	1.899.290.133	1.999.895.695	2.099.916.474	2.234.146.760
Accumulated Intangible Amortization	- 982.000.000	- 882.000.000	- 1.042.899.206	- 1.213.835.318	- 1.393.825.931	- 1.582.818.413	- 1.783.891.622
Intangibles, Net	**883.000.000**	**860.000.000**	**744.869.751**	**685.454.815**	**606.069.765**	**517.098.061**	**450.255.138**
LT Investment - Affiliate Companies	3.411.000.000	2.663.000.000	2.663.000.000	2.663.000.000	2.663.000.000	2.663.000.000	2.663.000.000
LT Investments - Other	4.952.000.000	4.034.000.000	4.034.000.000	4.034.000.000	4.034.000.000	4.034.000.000	4.034.000.000
Long Term Investments	**8.363.000.000**	**6.697.000.000**	**6.697.000.000**	**6.697.000.000**	**6.697.000.000**	**6.697.000.000**	**6.697.000.000**
Note Receivable - Long Term	249.000.000	741.000.000	741.000.000	741.000.000	741.000.000	741.000.000	741.000.000
Deferred Income Tax - Long Term Asset	278.000.000	289.000.000	289.000.000	289.000.000	289.000.000	289.000.000	289.000.000
Other Long Term Assets	519.000.000	558.000.000	558.000.000	558.000.000	558.000.000	558.000.000	558.000.000
Other Long Term Assets, Total	**797.000.000**	**847.000.000**	**847.000.000**	**847.000.000**	**847.000.000**	**847.000.000**	**847.000.000**
Total Assets	**53.095.000.000**	**63.186.000.000**	**65.404.915.978**	**67.070.910.468**	**68.159.114.110**	**69.354.512.781**	**71.229.980.595**
Accounts Payable	1.883.000.000	2.290.000.000	2.440.304.626	2.725.481.341	3.009.843.022	3.307.368.447	3.596.976.283
Accrued Expenses	4.857.000.000	6.377.000.000	6.319.207.227	6.625.554.244	7.008.473.935	7.369.659.827	7.787.890.793
Notes Payable/Short Term Debt	172.000.000	38.000.000	-	-	-	-	-
Customer Advances	593.000.000	622.000.000	670.413.359	712.233.800	749.960.886	787.468.678	837.805.035
Income Taxes Payable	86.000.000	-	-	-	-	-	-
Other Current liabilities, Total	**679.000.000**	**622.000.000**	**670.413.359**	**712.233.800**	**749.960.886**	**787.468.678**	**837.805.035**
Total Current Liabilities	**7.591.000.000**	**9.327.000.000**	**9.429.925.211**	**10.063.269.384**	**10.768.277.842**	**11.464.496.952**	**12.222.672.111**
Long Term Debt	2.049.000.000	2.077.000.000	1.962.147.479	2.012.127.314	2.044.773.423	2.080.635.383	2.136.899.418
Total Long Term Debt	**2.049.000.000**	**2.077.000.000**	**1.962.147.479**	**2.012.127.314**	**2.044.773.423**	**2.080.635.383**	**2.136.899.418**
Total Debt	**2.221.000.000**	**2.115.000.000**	**1.962.147.479**	**2.012.127.314**	**2.044.773.423**	**2.080.635.383**	**2.136.899.418**
Deferred Income Tax - LT Liability	555.000.000	926.000.000	691.502.594	690.643.343	663.191.072	632.588.713	646.598.748
Deferred Income Tax	**555.000.000**	**926.000.000**	**691.502.594**	**690.643.343**	**663.191.072**	**632.588.713**	**646.598.748**
Other Long Term Liabilities	1.196.000.000	1.426.000.000	1.895.762.168	1.987.666.273	2.102.542.180	2.210.897.948	2.336.367.238
Other Liabilities, Total	**1.196.000.000**	**1.426.000.000**	**1.895.762.168**	**1.987.666.273**	**2.102.542.180**	**2.210.897.948**	**2.336.367.238**
Total Liabilities	**11.391.000.000**	**13.756.000.000**	**13.979.337.453**	**14.753.706.315**	**15.578.784.518**	**16.388.618.997**	**17.342.537.515**
Common Stock	14.993.000.000	16.178.000.000	18.173.578.525	19.065.204.153	19.328.329.592	19.713.893.785	20.635.443.080
Common Stock	**14.993.000.000**	**16.178.000.000**	**18.173.578.525**	**19.065.204.153**	**19.328.329.592**	**19.713.893.785**	**20.635.443.080**
Retained Earnings (Accumulated Deficit)	26.318.000.000	32.919.000.000	32.919.000.000	32.919.000.000	32.919.000.000	32.919.000.000	32.919.000.000
Other Comprehensive Income	393.000.000	333.000.000	333.000.000	333.000.000	333.000.000	333.000.000	333.000.000
Other Equity, Total	393.000.000	333.000.000	333.000.000	333.000.000	333.000.000	333.000.000	333.000.000
Total Equity	**41.704.000.000**	**49.430.000.000**	**51.425.578.525**	**52.317.204.153**	**52.580.329.592**	**52.965.893.785**	**53.887.443.080**
Total Liabilities and Shareholders Equity	53.095.000.000	63.186.000.000	65.404.915.978	67.070.910.468	68.159.114.110	69.354.512.781	71.229.980.595

Appendix 5: ARM DCF Valuation and Balance Sheet

ARM Income Statement, Cash Flow and Valuation:

	Actual Values		Predictions				
ARM FCFF	2009	2010	2011	2012	2013	2014	2015
Revenues (USD)	**489.500.000**	**631.300.000**	**730.112.941**	**840.675.712**	**963.325.526**	**1.107.276.185**	**1.288.858.741**
Licensing	164.100.000	208.200.000	227.354.400	248.271.005	271.111.937	296.054.235	323.291.225
Royalties	244.300.000	335.300.000	406.880.941	487.706.368	577.883.002	686.372.949	829.232.407
Unit Estimations		91.509.120	140.661.300	196.994.520	260.425.664	339.709.536	450.675.960
Growth Rate		243.790.880	266.219.641	290.711.848	317.457.338	346.663.413	378.556.447
Other	81.100.000	87.800.000	95.877.600	104.698.339	114.330.586	124.849.000	136.335.108
Exchange Rate GBP/USD	1,60	1,55	1,66	1,65	1,64	1,64	1,65
Revenues (GBP)	**305.000.000**	**406.600.000**	**438.928.824**	**509.106.632**	**586.070.091**	**676.714.923**	**780.187.937**
Licensing	98.500.000	132.500.000	136.680.771	150.350.978	164.939.674	180.934.370	195.698.649
Royalties	155.400.000	217.700.000	244.608.420	295.351.160	351.573.725	419.478.738	501.961.232
Other	51.100.000	56.400.000	57.639.633	63.404.495	69.556.692	76.301.814	82.528.056
Total Costs of Revenues	**25.471.000**	**26.071.000**	**35.537.000**	**39.091.254**	**42.884.315**	**47.042.936**	**50.881.649**
Product Costs	16.645.000	26.071.000	25.969.346	28.566.686	31.338.538	34.377.530	37.182.743
Service Costs	8.826.000	-	9.567.654	10.524.568	11.545.777	12.665.406	13.698.905
Gross Profit	**279.529.000**	**380.529.000**	**403.391.823**	**470.015.378**	**543.185.776**	**629.671.986**	**729.306.288**
Gross Margin (%)	92%	94%	92%	92%	93%	93%	93%
Total Operating Expenses	**233.937.000**	**273.565.000**	**267.894.310**	**294.687.916**	**323.281.760**	**354.631.365**	**383.569.351**
R&D	112.215.000	139.750.000	123.012.694	135.315.880	148.445.706	162.840.933	176.128.784
Sales and Marketing	61.723.000	70.108.000	73.807.616	81.189.528	89.067.424	97.704.560	105.677.270
General and Administrative	59.999.000	63.707.000	71.074.001	78.182.508	85.768.630	94.085.872	101.763.297
Profit on Disposal of Available-for-Sale Investment	-	-	-	-	-	-	-
Profit From Operations	**45.592.000**	**106.964.000**	**135.497.513**	**175.327.462**	**219.904.016**	**275.040.621**	**345.736.937**
Investment Income	1.788.000	3.634.000	3.634.000	3.634.000	3.634.000	3.634.000	3.634.000
Interest Payable	- 143.000	- 566.000	-	-	-	-	-
Income Before Taxes	**47.237.000**	**110.032.000**	**139.131.513**	**178.961.462**	**223.538.016**	**278.674.621**	**349.370.937**
Net Margin	**15%**	**27%**	**32%**	**35%**	**38%**	**41%**	**45%**
Taxes	6.820.000	24.053.000	31.414.874	41.553.801	52.932.979	67.100.101	85.523.714
Net Income	**40.417.000**	**85.979.000**	**107.716.639**	**137.407.661**	**170.605.037**	**211.574.520**	**263.847.223**
Dep & Amort	24.953.000	19.949.000	21.518.720	23.242.658	25.245.543	27.237.434	40.000.000
Other Losses, Impairments and Provisions	11.401.000	27.076.000	27.336.154	30.070.196	32.987.935	36.186.874	39.139.730
Changes WC	30.142.000	45.807.000	- 12.825.977	7.649.607	8.485.577	10.277.551	12.566.413
Cash from Operating Activities	**113.733.000**	**202.864.000**	**175.160.409**	**239.923.923**	**290.257.070**	**352.376.479**	**441.077.080**
Tax	- 6.820.000	- 24.053.000	- 31.414.874	- 41.553.801	- 52.932.979	- 67.100.101	- 85.523.714
CAPEX	- 122.510.000	- 153.264.000	- 36.466.827	- 46.345.735	- 51.542.098	- 53.669.977	- 40.000.000
Other	-	-	-	-	-	-	-
FCFF	**- 15.597.000**	**25.547.000**	**107.278.709**	**152.024.387**	**185.781.993**	**231.606.401**	**315.553.366**
Terminal Value							8.808.549.125
Discounted Values			99.717.756	131.350.334	149.204.010	172.896.577	6.575.673.148
Company Value		Equity Value GBP	**7.128.841.824**	Equity Value DOL	**11.910.156.036**		

ARM Balance Sheet:

	Actual Values		Predictions				
ARM Balance Sheet GBP	2009	2010	2011	2012	2013	2014	2015
Cash	32.489.000	29.363.000	29.363.000	29.363.000	29.363.000	29.363.000	29.363.000
Short Term Investments	109.319.000	247.466.000	247.466.000	247.466.000	247.466.000	247.466.000	247.466.000
Cash and Short Term Investments	141.808.000	276.829.000	276.829.000	276.829.000	276.829.000	276.829.000	276.829.000
Accounts Receivable - Trade, Gross	55.289.000	99.068.000	83.396.477	96.730.260	111.353.317	128.575.835	148.235.708
Provision for Doubtful Accounts	- 2.395.000	- 2.091.000	- 3.335.859	- 3.869.210	- 4.454.133	- 5.143.033	- 5.929.428
Trade Accounts Receivable - Net	52.894.000	96.977.000	80.060.617	92.861.050	106.899.185	123.432.802	142.306.280
Other Receivables	21.767.000	14.659.000	36.027.278	41.787.472	48.104.633	55.544.761	64.037.826
Total Receivables, Net	74.661.000	111.636.000	116.087.895	134.648.522	155.003.818	178.977.563	206.344.106
Inventories - Finished Goods	2.138.000	2.043.000	2.733.615	3.007.020	3.298.793	3.618.687	3.913.973
Inventories - Other	- 458.000	- 259.000	- 328.034	- 360.842	- 395.855	- 434.242	- 469.677
Total Inventory	1.680.000	1.784.000	2.405.582	2.646.177	2.902.938	3.184.445	3.444.296
Prepaid Expenses	14.221.000	12.463.000	15.280.910	16.809.239	18.440.256	20.228.463	21.879.109
Other Current Assets	3.287.000	5.949.000	8.778.576	10.182.133	11.721.402	13.534.298	15.603.759
Other Current Assets, Total	3.287.000	5.949.000	8.778.576	10.182.133	11.721.402	13.534.298	15.603.759
Total Current Assets	235.657.000	408.661.000	419.381.964	441.115.071	464.897.413	492.753.769	524.100.269
Buildings	20.899.000	17.873.000	23.235.731	24.056.156	26.390.348	27.140.156	29.354.797
Machinery/Equipment	27.364.000	31.252.000	32.803.385	34.580.725	36.286.728	37.996.218	39.139.730
Construction in Progress	-	-	-	-	-	-	-
Property/Plant/Equipment - Gross	48.263.000	49.125.000	56.039.116	58.636.881	62.677.076	65.136.373	68.494.527
Accumulated Depreciation	- 34.698.000	- 35.278.000	- 40.348.163	- 42.218.555	- 45.127.495	- 46.898.189	- 49.316.059
Property/Plant/Equipment - Net	13.565.000	13.847.000	15.690.952	16.418.327	17.549.581	18.238.185	19.178.468
Goodwill, Net	516.798.000	532.285.000	715.453.983	829.843.811	955.294.249	1.103.045.324	1.271.706.337
Intangibles - Gross	154.091.000	156.718.000	159.148.080	173.789.703	189.778.356	207.237.965	226.303.858
Accumulated Intangible Amortization	- 129.395.000	- 144.619.000	- 160.533.808	- 177.912.778	- 196.890.614	- 217.614.410	- 240.244.796
Intangibles, Net	24.696.000	12.099.000	- 1.385.728	- 4.123.075	- 7.112.258	- 10.376.446	- 13.940.939
LT Investments - Other	9.432.000	20.329.000	20.329.000	20.329.000	20.329.000	20.329.000	20.329.000
Long Term Investments	9.432.000	20.329.000	20.329.000	20.329.000	20.329.000	20.329.000	20.329.000
Note Receivable - Long Term	-	1.934.000	1.934.000	1.934.000	1.934.000	1.934.000	1.934.000
Deferred Income Tax - Long Term Asset	42.724.000	78.587.000	78.587.000	78.587.000	78.587.000	78.587.000	78.587.000
Other Long Term Assets	1.611.000	16.920.000	16.920.000	16.920.000	16.920.000	16.920.000	16.920.000
Other Long Term Assets, Total	44.335.000	95.507.000	95.507.000	95.507.000	95.507.000	95.507.000	95.507.000
Total Assets	844.483.000	1.084.662.000	1.266.911.171	1.401.024.134	1.548.398.986	1.721.430.831	1.918.814.135
Accounts Payable	2.280.000	4.305.000	4.264.440	4.690.951	5.146.118	5.645.152	6.105.798
Accrued Expenses	42.727.000	68.003.000	45.542.033	50.096.946	54.957.899	60.287.332	65.206.790
Notes Payable/Short Term Debt	-	-	-	-	-	-	-
Customer Advances	39.562.000	72.049.000	74.617.900	86.548.127	99.631.916	115.041.537	132.631.949
Income Taxes Payable	16.536.000	20.216.000	31.414.874	41.553.801	52.932.979	67.100.101	85.523.714
Other Payables	3.961.000	4.025.000	8.036.829	8.840.637	9.698.453	10.638.941	11.507.081
Other Current Liabilities	-	201.000	-	-	-	-	-
Other Current liabilities, Total	60.059.000	96.491.000	114.069.603	136.942.566	162.263.347	192.780.579	229.662.743
Total Current Liabilities	105.066.000	168.799.000	163.876.076	191.730.462	222.367.364	258.713.063	300.975.331
Total Long Term Debt	-	-	-	-	-	-	-
Total Debt	-	-	-	-	-	-	-
Deferred Income Tax - LT Liability	720.000	301.000	-	-	-	-	-
Deferred Income Tax	720.000	301.000	-	-	-	-	-
Other Long Term Liabilities	-	20.657.000	-	-	-	-	-
Other Liabilities, Total	-	20.657.000	-	-	-	-	-
Total Liabilities	105.786.000	189.757.000	163.876.076	191.730.462	222.367.364	258.713.063	300.975.331
Common Stock	672.000	672.000	172.335.268	232.248.109	297.443.961	380.460.130	495.581.166
Common Stock	672.000	672.000	172.335.268	232.248.109	297.443.961	380.460.130	495.581.166
Additional Paid-In Capital	351.578.000	351.578.000	351.578.000	351.578.000	351.578.000	351.578.000	351.578.000
Retained Earnings (Accumulated Deficit)	303.424.000	442.853.000	479.319.827	525.665.562	577.207.661	630.877.638	670.877.638
Unrealized Gain (Loss)	- 155.000	-	-	-	-	-	-
Translation Adjustment	83.178.000	99.802.000	99.802.000	99.802.000	99.802.000	99.802.000	99.802.000
Other Equity, Total	83.178.000	99.802.000	99.802.000	99.802.000	99.802.000	99.802.000	99.802.000
Total Equity	738.697.000	894.905.000	1.103.035.095	1.209.293.672	1.326.031.621	1.462.717.768	1.617.838.804
Total Liabilities and Shareholders Equity	844.483.000	1.084.662.000	1.266.911.171	1.401.024.134	1.548.398.986	1.721.430.831	1.918.814.135

Appendix 6: Intel and ARM Multiples Valuation

Intel Multiples Control Group:

Company Name	Sales DOL (mil)	Profit DOL (mil)	Value DOL (mil)	P/Sales	P/E
Advanced Micro Devices, Inc.	6.494,0	971,0	5.440,1	0,84	5,60
International Business Machines Corp.	100.012,5	19.751,1	189.074,3	1,89	9,57
Oracle Corporation	25.350,5	7.791,4	158.937,6	6,27	20,40
QUALCOMM, Inc.	10.757,4	3.948,3	89.233,9	8,30	22,60
Samsung Electronics Co., Ltd.	134.054,0	16.756,6	124.695,7	0,93	7,44
SONY CORPORATION	84.282,3	2.406,1	25.058,0	0,30	10,41
TOSHIBA CORPORATION	75.095,4	2.295,0	20.485,5	0,27	8,93
Microsoft	62.484,0	18.760,0	238.784,5	3,82	12,73
Average				2,83	12,21

ARM Multiples Control Group:

Company Name	Sales DOL (mil)	Profit DOL (mil)	Value DOL (mil)	P/Sales	P/E
ARM Holdings plc	629,5	170,3	11.818,1	18,78	69,38
Atheros Communications, Inc.	928,2	66,1	3.130,2	3,37	47,38
Broadcom Corporation	6.828,0	1.098,9	17.965,5	2,63	16,35
Hynix Semiconductor Inc.	10.488,7	2.337,4	15.957,0	1,52	6,83
MediaTek Inc.	3.610,6	1.026,9	11.008,9	3,05	10,72
Micron Technology, Inc.	8.240,2	1.865,3	9.352,1	1,13	5,01
NVIDIA Corporation	3.568,5	273,1	10.815,5	3,03	39,60
SanDisk Corporation	4.835,5	1.460,1	10.228,0	2,12	7,01
Silicon Integrated Systems Corp.	84,0	5,4	320,6	3,82	58,93
STMicroelectronics N.V.	10.360,8	692,0	6.660,1	0,64	9,62
Texas Instruments Incorporated	13.985,9	4.557,5	37.573,1	2,69	8,24
Average				3,89	25,37

Appendix 7: Joint Company DCF Valuation and Balance Sheet

Joint Company Income Statement, Cash Flow and Valuation:

	Actual Values		Predictions				
Joint Company FCFF	2009	2010	2011	2012	2013	2014	2015
Net Revenue	**35.127.000.000**	**43.623.000.000**	**45.482.223.920**	**48.811.743.321**	**52.623.540.386**	**57.078.293.254**	**62.129.848.196**
PC Client Group	26.175.000.000	31.598.000.000	32.017.447.920	33.485.249.529	35.024.995.885	36.818.581.507	38.485.061.605
Microprocessor	19.914.000.000	24.721.000.000	24.507.763.920	25.284.674.601	26.069.968.064	27.039.691.126	27.806.513.309
Unit Estimations		24.430.740.000	24.190.800.000	24.938.550.000	25.692.000.000	26.626.950.000	27.355.800.000
Growth Rate		290.260.000	316.963.920	346.124.601	377.968.064	412.741.126	450.713.309
Chipset, Motherboard and other	6.261.000.000	6.877.000.000	7.509.684.000	8.200.574.928	8.955.027.821	9.778.890.381	10.678.548.296
Data Center Group	6.450.000.000	8.693.000.000	9.492.756.000	10.366.089.552	11.319.769.791	12.361.188.612	13.498.417.964
Microprocessor	5.301.000.000	7.361.000.000	8.038.212.000	8.777.727.504	9.585.278.434	10.467.124.050	11.430.099.463
Chipset, Motherboard and other	1.149.000.000	1.332.000.000	1.454.544.000	1.588.362.048	1.734.491.356	1.894.064.561	2.068.318.501
Other Intel Architecture Operating Segments	1.402.000.000	1.784.000.000	2.332.928.000	3.170.515.776	4.324.216.507	5.764.145.578	7.815.628.334
Unit Estimations		-	384.800.000	1.043.160.000	2.001.144.000	3.227.350.400	5.045.448.000
Growth Rate		1.784.000.000	1.948.128.000	2.127.355.776	2.323.072.507	2.536.795.178	2.770.180.334
Other Revenue	970.000.000	1.501.000.000	1.639.092.000	1.789.888.464	1.954.558.203	2.134.377.557	2.330.740.293
Corporate	130.000.000	47.000.000	-	-	-	-	-
Cost of Sales	**15.566.000.000**	**15.132.000.000**	**17.738.067.329**	**20.012.814.761**	**22.101.886.962**	**25.114.449.032**	**27.958.431.688**
Gross Margin	**19.561.000.000**	**28.491.000.000**	**27.744.156.591**	**28.798.928.559**	**30.521.653.424**	**31.963.844.222**	**34.171.416.508**
Gross Margin (%)	**56%**	**65%**	**61%**	**59%**	**58%**	**56%**	**55%**
Operating Expenses	**14.216.204.980**	**13.325.876.777**	**16.397.592.690**	**16.470.793.784**	**17.651.688.300**	**18.994.214.903**	**20.556.346.149**
R&D	5.828.661.361	6.792.025.550	8.404.618.960	7.955.421.971	8.541.997.108	9.212.450.678	9.994.271.956
Marketing, General and Administrative	8.121.543.619	6.515.851.227	7.972.973.730	8.495.371.813	9.089.691.192	9.781.764.226	10.562.074.193
Restructuring and Impairment Charges	231.000.000	-	-	-	-	-	-
Amortization and Impairment of intangibles and Cos	35.000.000	18.000.000	-	-	-	-	-
Integration Costs			20.000.000	20.000.000	20.000.000		
Operating Income	**5.344.795.020**	**15.165.123.223**	**11.346.563.901**	**12.328.134.775**	**12.869.965.124**	**12.969.629.319**	**13.615.070.359**
Gains on Equity Securities, net	- 170.000.000	348.000.000	348.000.000	348.000.000	348.000.000	348.000.000	348.000.000
Interest and Other, net	163.000.000	109.000.000	109.000.000	109.000.000	109.000.000	109.000.000	109.000.000
Income Before Taxes	**5.337.795.020**	**15.622.123.223**	**11.803.563.901**	**12.785.134.775**	**13.326.965.124**	**13.426.629.319**	**14.072.070.359**
Operating Margin	15%	36%	26%	26%	25%	24%	23%
Provision for Taxes	1.335.000.000	4.581.000.000	3.423.033.531	3.707.689.085	3.864.819.886	3.893.722.502	4.080.900.404
Net Income	**4.002.795.020**	**11.041.123.223**	**8.380.530.370**	**9.077.445.690**	**9.462.145.238**	**9.532.906.816**	**9.991.169.955**
Profit Margin	11%	25%	18%	19%	18%	17%	16%
Dep & Amort	4.744.000.000	4.398.000.000	5.088.189.181	5.377.386.572	5.636.685.244	5.991.001.960	7.000.000.000
Other Losses, Impairments and Provisions	1.997.000.000	765.000.000	795.938.919	854.205.508	920.911.957	998.870.132	1.087.272.343
Changes WC	60.000.000	65.000.000	- 259.393.704	- 375.250.882	21.485.106	167.409.122	48.429.938
Cash from Operating Activities	**10.803.795.020**	**16.269.123.223**	**14.005.264.766**	**14.933.786.888**	**16.041.227.544**	**16.690.188.031**	**18.126.872.236**
CAPEX	- 7.965.000.000	- 10.539.000.000	- 9.082.432.417	- 8.590.690.912	- 8.517.781.599	- 9.927.854.364	- 7.000.000.000
FCFF	**2.838.795.020**	**5.730.123.223**	**4.922.832.349**	**6.343.095.976**	**7.523.445.945**	**6.762.333.667**	**11.126.872.236**
Terminal Value							201.492.758.632
Discounted Values			4.514.824.439	5.335.227.287	5.803.557.202	4.784.095.955	130.734.000.262
Company Value		Company Value	**151.171.705.145**	Debt Value	**2.393.000.000**	Equity Value	**148.778.705.145**

Joint Company Balance Sheet:

	Actual Values		Predictions				
Intel Balance Sheet	2009	2010	2011	2012	2013	2014	2015
Cash & Equivalents	4.037.858.281	5.543.389.325	5.543.389.325	5.543.389.325	5.543.389.325	5.543.389.325	5.543.389.325
Short Term Investments	10.104.127.963	16.769.532.943	16.769.532.943	16.769.532.943	16.769.532.943	16.769.532.943	16.769.532.943
Cash and Short Term Investments	**14.141.986.243**	**22.312.922.268**	**22.312.922.268**	**22.312.922.268**	**22.312.922.268**	**22.312.922.268**	**22.312.922.268**
Accounts Receivable - Trade, Gross	2.412.623.462	3.070.799.197	2.728.933.435	2.928.704.599	3.157.412.423	3.424.697.595	3.727.790.892
Provision for Doubtful Accounts	- 22.749.133	- 31.232.268	- 27.289.334	- 29.287.046	- 31.574.124	- 34.246.976	- 37.277.909
Trade Accounts Receivable - Net	**2.389.874.329**	**3.039.566.929**	**2.701.644.101**	**2.899.417.553**	**3.125.838.299**	**3.390.450.619**	**3.690.512.983**
Total Receivables, Net	**2.389.874.329**	**3.039.566.929**	**2.701.644.101**	**2.899.417.553**	**3.125.838.299**	**3.390.450.619**	**3.690.512.983**
Inventories - Finished Goods	1.032.346.825	1.402.158.069	1.819.288.957	1.952.469.733	2.104.941.615	2.283.131.730	2.485.193.928
Inventories - Work In Progress	1.468.283.047	1.886.599.638	2.046.700.076	2.196.528.449	2.368.059.317	2.568.523.196	2.795.843.169
Inventories - Raw Materials	437.000.000	471.000.000	682.233.359	732.176.150	789.353.106	856.174.399	931.947.723
Total Inventory	**2.937.629.872**	**3.759.757.707**	**4.548.222.392**	**4.881.174.332**	**5.262.354.039**	**5.707.829.325**	**6.212.984.820**
Deferred Income Tax - Current Asset	1.238.261.553	1.507.265.305	1.711.516.766	1.853.844.542	1.932.409.943	1.946.861.251	2.040.450.202
Other Current Assets	818.145.470	1.623.195.964	1.364.466.718	1.464.352.300	1.578.706.212	1.712.348.798	1.863.895.446
Other Current Assets, Total	**2.056.407.023**	**3.130.461.270**	**3.075.983.483**	**3.318.196.842**	**3.511.116.154**	**3.659.210.049**	**3.904.345.648**
Total Current Assets	**21.525.897.468**	**32.242.708.174**	**32.638.772.244**	**33.411.710.996**	**34.212.230.760**	**35.070.412.262**	**36.120.765.719**
Land/Improvements	16.719.715.295	17.448.628.083	17.738.067.329	19.036.579.895	19.996.945.347	21.689.751.436	22.988.043.833
Machinery/Equipment	28.381.835.606	30.469.309.342	34.339.079.060	36.120.690.057	37.888.949.078	39.954.805.278	42.869.595.255
Construction in Progress	2.796.000.000	2.639.000.000	2.639.000.000	2.639.000.000	2.639.000.000	2.639.000.000	2.639.000.000
Property/Plant/Equipment - Gross	**47.897.550.900**	**50.556.937.425**	**54.716.146.388**	**57.796.269.952**	**60.524.894.425**	**64.283.556.714**	**68.496.639.088**
Accumulated Depreciation	- 30.651.316.249	- 32.636.532.732	- 35.018.333.689	- 36.989.612.769	- 38.735.932.432	- 41.141.476.297	- 43.837.849.016
Property/Plant/Equipment - Net	**17.246.234.651**	**17.920.404.693**	**19.697.812.700**	**20.806.657.183**	**21.788.961.993**	**23.142.080.417**	**24.658.790.072**
Goodw ill, Net	5.229.995.589	5.353.806.153	5.003.044.631	5.369.291.765	5.788.589.442	6.278.612.258	6.834.283.302
Intangibles - Gross	2.106.214.051	1.984.254.684	1.819.288.957	1.952.469.733	2.104.941.615	2.283.131.730	2.485.193.928
Accumulated Intangible Amortization	- 1.184.554.933	- 1.105.552.050	- 1.269.288.056	- 1.445.010.332	- 1.634.455.078	- 1.839.936.933	- 2.063.604.387
Intangibles, Net	**921.659.118**	**878.702.634**	**550.000.900**	**507.459.401**	**470.486.538**	**443.194.797**	**421.589.541**
LT Investment - Affiliate Companies	3.411.000.000	2.663.000.000	2.663.000.000	2.663.000.000	2.663.000.000	2.663.000.000	2.663.000.000
LT Investments - Other	4.966.764.853	4.065.424.568	4.065.424.568	4.065.424.568	4.065.424.568	4.065.424.568	4.065.424.568
Long Term Investments	**8.377.764.853**	**6.728.424.568**	**6.728.424.568**	**6.728.424.568**	**6.728.424.568**	**6.728.424.568**	**6.728.424.568**
Note Receivable - Long Term	249.000.000	743.989.577	743.989.577	743.989.577	743.989.577	743.989.577	743.989.577
Deferred Income Tax - Long Term Asset	344.880.150	410.479.785	410.479.785	410.479.785	410.479.785	410.479.785	410.479.785
Other Long Term Assets	521.521.859	584.154.936	584.154.936	584.154.936	584.154.936	584.154.936	584.154.936
Other Long Term Assets, Total	**866.402.009**	**994.634.721**	**994.634.721**	**994.634.721**	**994.634.721**	**994.634.721**	**994.634.721**
Total Assets	**54.416.953.688**	**64.862.670.520**	**66.356.679.342**	**68.562.168.210**	**70.727.317.599**	**73.401.348.599**	**76.502.477.499**
Accounts Payable	1.886.569.112	2.296.654.669	2.483.329.426	2.801.794.067	3.094.264.175	3.516.022.864	3.914.180.436
Accrued Expenses	4.923.884.846	6.482.119.037	6.559.037.076	6.588.317.514	7.060.675.320	7.597.685.961	8.222.538.460
Notes Payable/Short Term Debt	172.000.000	38.000.000	-	-	-	-	-
Customer Advances	661.130.904	739.905.895	682.233.359	732.176.150	789.353.106	856.174.399	931.947.723
Income Taxes Payable	111.885.454	31.249.893	-	-	-	-	-
Other Current liabilities, Total	**773.016.359**	**771.155.788**	**682.233.359**	**732.176.150**	**789.353.106**	**856.174.399**	**931.947.723**
Total Current Liabilities	**7.755.470.316**	**9.587.929.494**	**9.724.599.861**	**10.122.287.730**	**10.944.292.601**	**11.969.883.224**	**13.068.666.619**
Long Term Debt	2.049.000.000	2.077.000.000	1.990.700.380	2.056.865.046	2.121.819.528	2.202.040.458	2.295.074.325
Total Long Term Debt	**2.049.000.000**	**2.077.000.000**	**1.990.700.380**	**2.056.865.046**	**2.121.819.528**	**2.202.040.458**	**2.295.074.325**
Total Debt	**2.221.000.000**	**2.115.000.000**	**1.990.700.380**	**2.056.865.046**	**2.121.819.528**	**2.202.040.458**	**2.295.074.325**
Deferred Income Tax - LT Liability	556.127.088	926.465.286	684.606.706	741.537.817	772.963.977	778.744.500	816.180.081
Deferred Income Tax	**556.127.088**	**926.465.286**	**684.606.706**	**741.537.817**	**772.963.977**	**778.744.500**	**816.180.081**
Other Long Term Liabilities	1.196.000.000	1.457.931.591	1.967.711.123	1.976.495.254	2.118.202.596	2.279.305.788	2.466.761.538
Other Liabilities, Total	**1.196.000.000**	**1.457.931.591**	**1.967.711.123**	**1.976.495.254**	**2.118.202.596**	**2.279.305.788**	**2.466.761.538**
Total Liabilities	**11.556.597.404**	**14.049.326.371**	**14.367.618.070**	**14.897.185.847**	**15.957.278.702**	**17.229.973.971**	**18.646.682.563**
Common Stock	14.994.051.949	16.179.038.778	17.509.029.832	19.184.950.923	20.290.007.458	21.691.343.188	23.375.763.496
Common Stock	**14.994.051.949**	**16.179.038.778**	**17.509.029.832**	**19.184.950.923**	**20.290.007.458**	**21.691.343.188**	**23.375.763.496**
Retained Earnings (Accumulated Deficit	27.343.340.131	34.147.031.440	34.147.031.440	34.147.031.440	34.147.031.440	34.147.031.440	34.147.031.440
Other Comprehensive Income	522.964.204	487.273.932	333.000.000	333.000.000	333.000.000	333.000.000	333.000.000
Other Equity, Total	522.964.204	487.273.932	333.000.000	333.000.000	333.000.000	333.000.000	333.000.000
Total Equity	**42.860.356.284**	**50.813.344.149**	**51.989.061.271**	**53.664.982.363**	**54.770.038.898**	**56.171.374.628**	**57.855.794.936**
Total Liabilities and Shareholders Equity	54.416.953.688	64.862.670.520	66.356.679.342	68.562.168.210	70.727.317.599	73.401.348.599	76.502.477.499

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