

# Methods of Brand Valuation

A case study on Alibaba.com



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## Abstract

Brands are seen as strategic assets whose value is strongly correlated to companies' value. The relevance of brand valuation goes from marketing portfolio optimization and strategic positioning, M&A pricing, to the day-to-day business for royalty rates definition. The difficulty in brand valuation starts from the definition of brand. Each enterprise has a name which defines its identity, but some brands goes beyond a simple label. In some cases, the brands become evocative of a concept, a product and a style, they represent a guarantee. It is difficult to draw a line between which brand should be considerate only the identification of a company/product and which has a value in itself. When this is the case, brands are intangible asset as strategic and valuable as the least identifiable when looking at the financial statement. Moreover, the various methodologies of valuation lead to discrepancies, depending also on the valuator and the valuation variables. Despite the importance of the topic, little literature has been developed on it and there is no consensus in standard practice. The main purpose of this paper is to give a contribution to the literature gathering the various methodologies defined by academics and used by practitioners. The analysis is conducted to shedding light on the main features of each of them. A case study follows. Using the most relevant methods, a brand valuation of the recent e-commerce giant Alibaba.com has been pursued. The study is particularly suitable to grasp the relevance of brands' value because of the magnitude and variability of the valuation results and of the characteristics of the industry of interest, internet-retail.

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## 1. Introduction

Modern accounting systems define goodwill as the measure of financial markets' positive attitude towards the future of a company and allocate it to the specific items that brought to its creation such as brands, patents, databases and know-how. However, only the brands that have been bought individually, or that were included in the price paid for a company can be posted in the balance sheet of the acquiring company because the accounting principle of prudence requires evaluations to be valid, coherent and reproducible. Then, in those cases the overall price paid gives an upper limit to the brand value.

Recent academic literature shows and underlines the advantages of computing and understanding brand value and gives explanations to why it should not be restricted to mergers and acquisitions. First of all, brand valuation is crucial to create a strong brand. It ensures that resources are appropriately channelled to obtain the highest value: specifically, it helps the company to define the correct level of marketing expenses and to impose brand licensing fees that exactly reflect the benefit delivered. Furthermore, brand valuation allows to evaluate the brand manager performance and compensation evolution and to create an incentive scheme helping in decision-making processes and in marketing trainings.

Considering that valuation results are different according to the aims and objectives defined, there cannot exist a single, unique value for a brand. Particularly, value could be defined as the value of liquidity in the case of a forced sale or as the value for partial assets sale; it could be the book value for the company accounts, or the value to be paid in case of a takeover or of a merger. Finally, it could be the value that is needed in order to estimate the price of licenses. Many definitions of brand value are therefore reflected in different brand valuation approaches and methods. All in all, depending on the valuation objective and method, the final result will be more or less reliable, more or less subjective, based on historical or forward-looking.

The aim of this thesis is to present the different approaches to brand valuation, analyse in detail theoretical methods and commercially used models and then evaluate the most important ones with an empirical study.

## 2. Objectives and Consequences of Brand Valuation

### Model of Organizational and Behavioural Implications of Brand Value Accounting- Chris Guilding and Richard Pike

The Model of Organizational and Behavioural Implications of Brand Value Accounting by Chris Guilding and Richard Pike clearly shows the different objectives and consequences of brand valuation.

Model of Organisational and Behavioural Implications of Brand Value Accounting

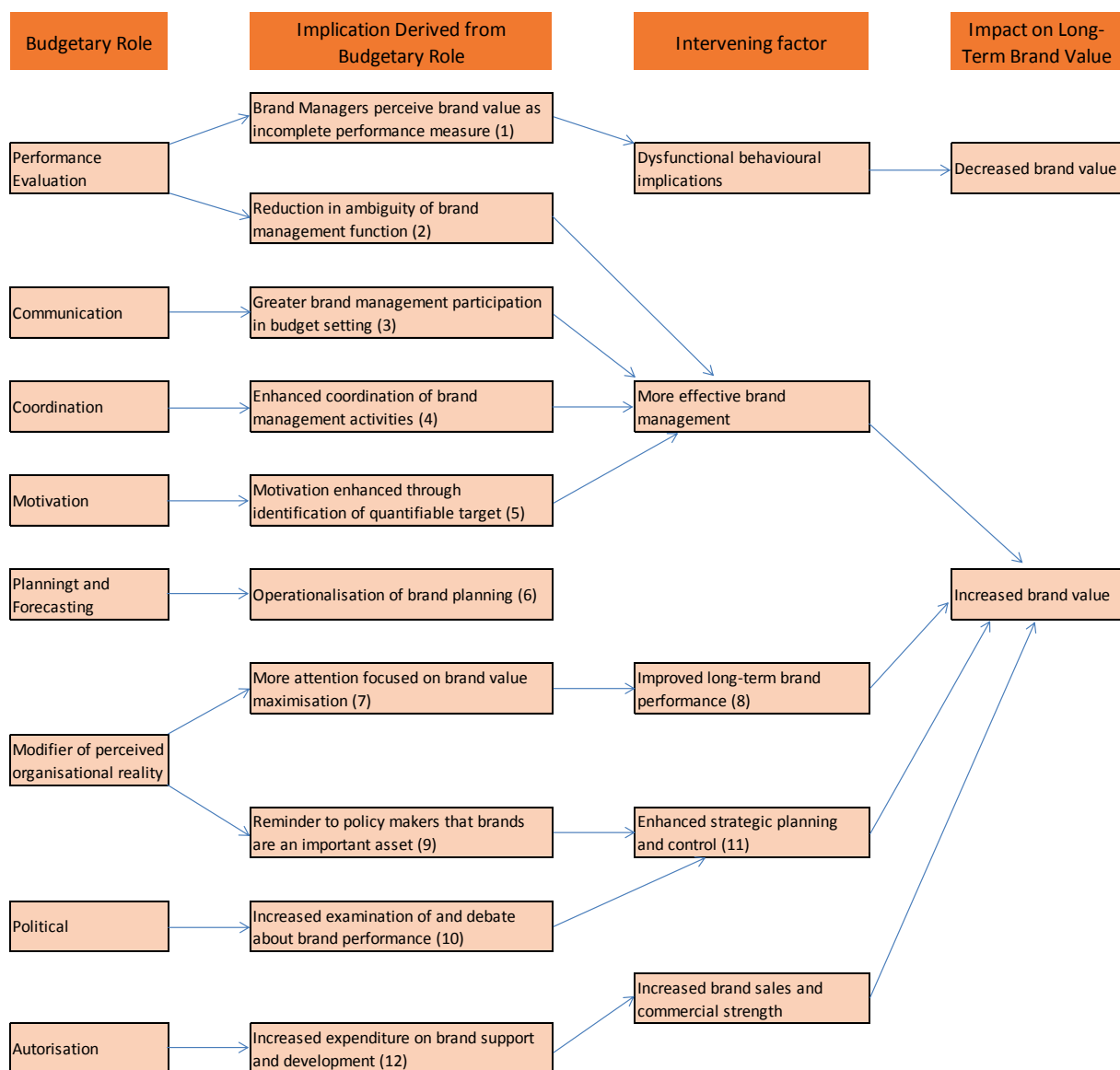


Figure 1: Source: Chris Guilding and Richard Pike, "Brand Valuation: a Model and Empirical study of Organisational Implications"

### 3. Problems in brand valuation

Brands include different potential aspects such as:

- Trademarks
- Trade names
- Product formulations/recipes
- Marketing materials
- Style guides
- Websites and URLs
- Unique packaging/trade dress.

Therefore, the first cause of complexity arises from the fact that more than one element may be present in a purchase. At the beginning of a brand valuation it must be determined whether there is a single unit of account, i.e. an all-inclusive brand asset or multiple separate units requiring individual valuations.

Technical issues such as separating brand equity from other intangibles and assessing the brand's useful life and the required rate of return on intangible assets, further increase the difficulty of valuing brands. We will go into more detail regarding the discount rate determination and the brand lifetime in paragraphs 3.1 and 3.2.

Moreover, the lack of an active market for brands means that models results cannot be tested empirically. The wide range of alternative assumptions and valuation methods yields to very different results in the valuation of a same brand.

#### 3.1 Discount Rate

Literature regarding the discount rate to be applied in brand and intangibles valuation is quite limited.

Reilly and Schweih's (1998) state that the enterprise WACC can be used as a proxy for the required return on intangible assets. However, if the risk of the intangible assets is higher or lower than the overall risk of the company, the WACC will overestimate or underestimate the required return on intangibles.

On the same reasoning, even the unlevered cost of equity suggested by Smith and Parr (2005) cannot perfectly represent the required return on intangible assets. Even if we can assume that in most cases intangible assets are funded with equity, thus the unlevered cost of equity could be a good starting point, the unlevered cost of equity reflects, as the WACC, the business risk of the enterprise as a whole.

When the levered cost of equity is used, the additional risk due to debt financing by the company is also charged on to the intangible assets. However, the required return on intangible assets should only reflect the required compensation for the systematic business risk of the intangible assets.



The build-up method (Smith 1997) defines the types of risks that characterise intangible assets and attributes a return to each type of risk. The final required return thus comprises the components that add up to the total systematic risk.

Brand Finance calculates an adjusted WACC in order to value brands. The cost of debt and the cost of equity are given a discount or premium based on the strength of the brand (thus considering its size, international presence, reputation and brand rating). The underlying principle is that a strong brand should require a lower discount rate in the valuation. The difficulty consists in determining the correct risk discount or premium.

Smith and Parr (2005) propose the WARA (weighted average return on assets) approach. According to the method, the WACC (weighted average cost of capital) is equal to the WARA and from this assumption is then possible to obtain the required return (discount rate) for intangible assets. Schauten (2008) considers the WARA method the most theoretically sound. The Schauten version of the WARA method uses the WACC before taxes and divides the company assets into four different categories: Net Working Capital, Tangible Fixed Assets, Intangible Assets and Tax Shield.

Schauten separates the Tax Shield from the other assets in order not to underestimate the discount rate of the intangible assets as he uses the residual method to compute the value of intangible assets. The residual method considers the tax shield as part of the intangible assets if not otherwise stated, so the discount rate of the intangible assets would include the risk of tax shield (which is usually approximated by the cost of debt), thus would be underestimated.

At the same time, applying the WACC after taxes leads to an underestimation of the discount rate of all the assets, intangibles included.

So, the WARA method (Schauten's version) equalizes the WACC before taxes to the WARA as follows:

$$WACC = R_e \frac{E}{E + D} + R_d \frac{D}{E + D} = WARA = R_{NWC} \frac{NWC}{V_L} + R_{TFA} \frac{TFA}{V_L} + R_{IA} \frac{IA}{V_L} + R_{PVTS} \frac{PVTS}{V_L}$$

Where WACC is the WACC before taxes,  $R_e$  is the levered cost of equity and  $R_d$  is the cost of debt.  $R_{NWC}$ ,  $R_{TFA}$ ,  $R_{IA}$  and  $R_{PVTS}$  are the returns on Net Working Capital, Fixed Tangible Assets, Intangible Assets and Present value of Tax Shield respectively.

$V_L$  is the market value of the levered company, thus the sum of  $R_{NWC}$ ,  $R_{TFA}$ ,  $R_{IA}$  and  $R_{PVTS}$ .

Thus the required return on intangible assets (as if they were financed with equity) can be derived as follows:

$$R_{IA} = \frac{WACC - R_{NWC} \frac{NWC}{V_L} - R_{TFA} \frac{TFA}{V_L} - R_{PVTS} \frac{PVTS}{V_L}}{\frac{IA}{V_L}}$$

The rates of return of the Net Working Capital and of the Tangible Fixed Assets are either provided by the company or estimated using indexes (ex. leasing rate for Tangible Fixed Assets). Finally, the WARA obtained has to be consistent with the discount rates quoted in the company' annual reports for goodwill and intangible assets impairment tests.

## 3.2 Brand Lifetime<sup>1</sup>

IAS 38 considers brands to have an indefinite economic life.

Brands are long term assets that generate future economic benefits. They are rarely created to have a finite life, with the exception of pharmaceutical drugs, cinema movies and some other examples. Salinas (2009) and Sinclair (2011) state that the valuator should model the economic life of the brand, during which it will be able to create value for the company. In particular, the life cycle of the product and the risks of technological, cultural and functional obsolescence should be taken into account in order to estimate the expected lifetime.

## 4. Consumer-based Approach to brand valuation

The first macro differentiation between brand valuation methods distinguishes between consumer-based approaches and financial approaches.

The Consumer-based school of thoughts considers that brand value exists whenever customers' preferences expressed for a brand are greater than what the simple assessment of the utility of the product' attributes would have suggested. Brand equity is therefore defined as a residual:

$$\text{Brand Equity} = \text{declared Preference} - \text{Preferences predicted by product utilities}$$

Keller<sup>2</sup>, taking a cognitive approach, sees the brand as a collection of memory associations that generate different reactions, and speaks of positive customer-based brand equity when identification of the brand produces favourable reactions. He also defines a negative customer-based brand equity that appears when identification of the brand leads to unfavourable reactions.

The customer-oriented brand valuation assumes that a brand's purchasers are the ultimate generators of value, since their decision to commit themselves to a product system determines the level of future earnings. Consequently, the earning-capacity of a brand is defined by the average customer contribution margin and by the churn rate in the customer base: the customer commitment is the competitive factor that will determine the level of future earnings promised by a newly acquired customer (customer value). Brand value is therefore a function of the following quantities<sup>3</sup>:

$$\begin{aligned} \text{Brand value}^4 \\ = f(\text{customer contribution margin, initial customer base, churn rate, interest rate, time}) \end{aligned}$$

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1 Roger Sinclair, "A rationale and proposed set of principles for brand valuation", 2011

2 Keller (1998)

3 Fisher, Hermann and Huber (2001)

4 While brand equity refers to the importance of the brand to a customer of the company, brand value refers to the financial asset that the company might record on its balance sheet

## 4.1 Models

### 4.1.1 Conversion Model

The Conversion Model estimates the brand value considering the level of awareness that should be generated in order to achieve the current sales. However, in brand theory, brand awareness is only one of the possible attributes that characterize a brand. In the *Young & Rubicam "Brand Asset Valuator"*, differentiation, relevance and esteem are the other three 1 factors that a strong brand should have in addition to knowledge. Moreover, *Mizik and Jacobson (2008)* add energy as a fifth factor to capture the brand's innovativeness and dynamism.

### 4.1.2 Customer Preference Model

The Customer Preference's Model<sup>5</sup> calculates the value of the brand by matching the increase in awareness to the corresponding increase in the market share. *Aaker (1991)* identified the problem as being "*how much of the increased market share is attributable to the brand's awareness increase and how much to other factors*". However, a possible pitfall of this view is that there might not be a linear relation between awareness and market share.

## 5. Financial-based Approach to brand valuation

The Financial-based approach prompts the idea of brand as a conditional asset. In order for a brand to produce a profit or EVA (Economic Value Added), a tangible base and product or service are needed. The brand is seen as an added value after having allowed for the capital required for its production and for the cost of other intangible assets that have contributed to the business. Once all the directly valuable assets have been factored in, the residual derived will create the economic value of the brand and of other intangibles that cannot easily be evaluated directly.

A financial-based approach needs to define a useful life for the brand. However, by feeding on new products that replace the old ones, the brand passes the product life cycles and acquires from them an apparently indefinite lifespan. Since a lifespan cannot be determined in advance, there is no justification for depreciation in a financial approach.

Three different financial approaches to brand valuation can be identified:

1. **Cost-based Approach:** the brand is valued according to the cost of developing it. This is an analysis of the past and relies on hard facts. Overall, the cost approach is more appropriate to value those assets that can be easily replaceable, such as softwares or customer databases.

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5 Aaker (1991)

2. **Market-based Approach:** the brand value is estimated by reference to open market values. This analysis is based on estimates or hard facts about the present.
3. **Income-based Approach:** the value of the brand is dictated by the future expected cash flows that will be attributable to the brand itself. This analysis is based on estimates about the future.

The Cost and Market approaches are acceptable when the asset is not unique and there are sufficient comparable transactions in the market place.

## 5.1 The Cost-based approach

The Cost-based approach includes the following different methods:

### 5.1.1 Historical Cost of Creation Method

The Historical Cost of Creation Method uses the historical cost of creating the brand as the actual brand value. It is often used at the initial stages of brand creation when specific market application and benefits cannot yet be identified.

*Qualities:* In addition to providing a floor minimum value for the brand, this method isolates the direct costs associated with the brand and allows to also attribute indirect costs such as sale force and general expenses.

*Drawbacks:* It is sometimes difficult to recapture all the historical development costs and to understand which past advertising could still have an effect today. Moreover, investments in advertising generate both extra sales in the present and build brand awareness and image in the future: a decision must be taken regarding which costs to consider and which period to take into account. This method does not consider long-term investments that do not involve cash outlay such as quality controls, specific expertise and involvement of personnel, opportunity costs of launching the upgraded products without any price premium over competitors' prices. Brand earnings potential and the value added or lost by the management are not considered. Finally, the cost of creating the brand might actually have little to do with its present value.

Reilly and Schweih's<sup>6</sup> propose to adjust the actual cost of launching the brand by inflation every year and to consider the inflation-adjusted launch cost as the brand value.

### 5.1.2 Cost to recreate Method

The Cost to Recreate Method uses current prices in order to estimate the cost of recreating the brand today. As the Historical Cost of Creation Method, the Cost to Recreate Method is optimal to obtain a minimum value and when dealing with a newly created brand.

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<sup>6</sup> Reilly and Schweih's (1999)

*Qualities:* This method tries to overcome the difficulties arising from the historical cost by focusing on the present instead of on the past.

*Drawbacks:* However, the main issue is that some brands cannot be realistically recreated because they might have been created in a period when advertising expenditure was negligible and when brands were nurtured over time by word-of-mouth, which is not possible today anymore. It could also be difficult to define the cost of recreation of the brand because it is not easy to delineate the performance of brand leaders.

The value obtained with this method will include the same pitfalls and obsolescence as the company's intangible assets. The final issue is that the cost to recreate method is still not a good indicator for the future.

### 5.1.3 Replacement Cost Method

The Replacement Cost Method values the brand considering the expenditures and investments necessary to replace the brand with a new one that has an equivalent utility to the company. Contrary to the Cost of Recreation Method, the value computed through the Replacement Cost Method excludes obsolescent intangible assets.

Aaker<sup>7</sup> proposes that the value is computed by dividing the cost of launching a new brand by the probability of success.

### 5.1.4 Capitalization of Brand-Attributable Expenses Method

The Capitalization of Brand-Attributable Expenses Method defines the brand value as the business value attributable to the brand, which depends on the proportion of accumulated advertising expense over the total marketing expenses incurred, including other selling and distribution costs.

### 5.1.5 Residual Value Method

The Residual Value Method<sup>8</sup> states that the value of the brand is the discounted residual value obtained subtracting the cumulative brand costs from the cumulative revenues attributable to the brand.

$$\text{Brand value} = PV\left(\sum \text{Brand revenues} - \sum \text{Brand costs}\right)$$

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7 Aaker (1991)

8 Bekmeier-Feuerhahn (1998)

## 5.2. The Market-based Approach

### 5.2.1 Brand Sale Comparison Method

The Brand Sale Comparison Method values the brand by looking at recent transactions involving similar brands in the same industry and referring to comparable multiples.

Considering that there exist few acquisitions or sales of brands, this method is not applicable in all cases where comparable data are too scarce. Moreover, the price paid for a similar brand includes the synergies and the specific objectives of the buyer and for this reason is not exactly comparable and applicable to the value of the brand at issue.

### 5.2.2 Brand Equity Based on Equity Valuation Method

The Brand Equity Based on Equity Valuation<sup>9</sup> Method defines the brand value as the sum of two components: the returns of “demand-enhancing” investments and the expected savings in marketing costs resulting from the promotion of branded products.

Simon and Sullivan (1993) believe that brand equity can be divided into two parts:

- 1) the “demand-enhancing” component, which includes advertising and results in price premium profits,
- 2) the cost advantage component, which is obtained thanks to the brand during new product introductions and through economies of scale in distribution.

Firstly, Simon and Sullivan (1993) compute the value of intangible assets by subtracting the replacement value of the firm's tangible assets from the firm's cash flow.

Afterwards, they divide intangible assets into three categories:

- 1) the value of brand equity,
- 2) the value of non-brand factors that reduce the firm's costs relative to competitors (R&D, patents, technology and know-how),
- 3) the value of industry-wide factors which permit monopoly profits (regulation).

*Qualities:* Using objective market-based measures this method allows comparisons over time and across companies. Being based on the firm's cash flow, it implicitly considers future profitability. Finally, it accounts for both the revenue-enhancing and the cost-reducing capabilities of brand equity.

*Drawbacks:* The shortcoming is that it assumes a strong state of efficient markets (EMH), not observable in reality.

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9 Simon and Sullivan (1993)

### 5.2.3 Residual Method

The Residual Method<sup>10</sup> values intangibles as the residual value obtained when the net asset value is subtracted from the market capitalization. So when shares trade below their net asset value, a negative value for intangibles is derived and a negative brand equity value is implied.

When the equity value results negative, its capitalisation on the balance sheet would create accounting problems. As the Brand Equity Based on Equity Valuation Method, the Residual Method assumes that markets are efficient in the strong form and that the assets are used to their full potential.

## 5.3 The Income-based Approach

The Income-based Approach is the most popular among financial analysts and it comprehends many different methods.

### 5.3.1 Price Premium Method

The Price Premium Method calculates the brand value by multiplying the price differential of the branded product with respect to a generic product by the total volume of branded sales. It assumes that the brand generates an additional benefit for consumers, for which they are willing to pay a little extra. There are, at least, two ways to calculate the price premium statistically:

- 1) *Conjoint Analysis*: It is a statistical technique that is used to determine the importance that consumers assign to different product characteristics. By asking to consumers how much of a certain attribute they would give up in order to obtain more of another attribute, an indication of consumers' willingness to pay for specific product characteristics is obtained. Being the brand one of the product characteristics, the brand value can be computed.

The advantage of statistical methods is that they can reduce the degree of subjectivity inherent in the valuation. However, conjoint analysis is based on the assumption that there are no influences between the brand, the other product characteristics and the price. In reality, if the brand premium changes continuously it can create confusion in customers' minds and this will impact on its positioning.

- 2) *Hedonic Analysis*: It considers the price as a function of the different product attributes and quantifies the impact of each of them. The product price can therefore be calculated as the sum of the values created by each product trait including or excluding the brand. Subtracting the price that excludes the value of the brand from the price including it, the unit revenue generated by the brand is obtained. By

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10 Keller (1998)

considering the specific brand expenses is then possible to compute the net income attributable to the brand.

The Hedonic method is said to be very complex and the process of selecting the product's variables risks bringing back the subjectivity that statistical models should eliminate.

*Drawbacks:* The Price Premium Method could be difficult to apply for those companies that sell bundled products because they are difficult to compare with the competitors' offer. Moreover, this method ignores that branded products that do not have a price premium likely generate profit through cost savings and number of units produced. Moreover, using statistical methods that calculate price differentials do not completely remove subjectivity because the selection of product attributes still requires personal judgment. Finally, it might be difficult to maintain a premium price if it is based solely on brand: therefore, the price premium might not be a profit attributable exclusively to the brand.

### 5.3.2 Demand Driver/Brand Strength Analysis Method

The Demand Driver/Brand Strength Analysis Method (also called the "Reasons-to-Buy" Method) considers the effects of brand equity on demand and supply in order to determine how much influence the brand has on consumer decision making and value creation.

Absolute or Relative techniques can be used to estimate the brand's contribution to profit generation. *Absolute techniques* consider the proportion of brand-related factors relative to the total number of factors considered during the buying process.

*Relative techniques* either consider the brand as a quality that influences all the product's attributes or consider the brand as an independent attribute. More specifically, the first type of relative technique ranks the demand drivers according to their importance and then determines the brand contribution to each of them. The second type of relative technique determines the importance of each demand driver, where the brand is a separate demand driver.

The relative and absolute approaches give as a result a number/percentage that can be applied to sales, earnings, cash flow or EVA to find the brand related portion of these measures.

*Qualities:* The Demand Driver/Brand Strength Analysis Method can be very useful to understand which are the demand drivers that create value for the company.

*Drawbacks:* However, measuring the interaction between the brand and the other attributes can be a difficult task. Finally, since it is applied by companies on a case-by-case basis and depending on the availability of information the results obtained may not be comparable.



### **5.3.3 Gross Margin Comparison or Economy of Scale Technique**

The Gross Margin Comparison or Economy of Scale Technique computes the brand value by multiplying the gross margin difference between the branded product and the average gross margin of competitors by the sales of the branded company.

This method allows to value both brands that enjoy a price premium and brands that bring a cost advantage through economies of scale in production or procurement. This method assumes that all the difference between gross margins can be explained by the brand.

### **5.3.4 Operating Profit Comparison Method**

The Operating Profit Comparison Method computes the brand value multiplying the difference between the branded EBIT and the average EBIT of comparables by the sales of the branded company. It is similar to the Gross Margin Comparison Method but it uses the EBIT instead of the gross margin. In this way it takes into account more brand advantages than the Gross margin comparison method and the Price Premium method because a strong brand can increase profitability not only through a price advantage or a cost of sales saving but also through lowering promotion costs, administration expenses and other expenses which are not included in the cost of sales. Still other variables apart from the brand can influence the operating earnings but the brand value obtained with this method would not take that into account.

### **5.3.5 Royalty Relief Method**

The Royalty Relief Method computes the value of the brand by discounting back to present the stream of royalty fees that the company should pay if it did not own the brand. The process works as follow:

1. Estimate the branded net sales for the next 3 to 5 years.
2. Determine a reasonable royalty rate that two unrelated parties would have set for the transfer of a comparable brand. The royalty rate depends on the brand strength, the duration of the agreement, the exclusivity, the negotiating power between the parties, the product's life cycle and the margins earned in the local market. Following Robert Goldsheider's rule, it could be defined as the 25% of the licensee's operating profit or as the 5% of his sales.
3. Multiply the estimated royalty rate by the projected sales of the branded company to obtain the annual royalty savings.
4. Estimate the after-tax royalty savings.

5. Estimate the brand's perpetual growth rate, economic useful life and discount rate and discount the after tax royalty fees to present.

The brand value obtained through this method is related to the specific industry characteristics and is based on current brand licensing practices. So, even if the starting point is made of projected sales (peculiarity of the Income Approach), the Royalty Relief Method can also be classified as following the Market Approach. It is in fact less subjective than the methods which estimate the profit and risk differential of branded products with respect to unbranded ones. Consequently, the Royalty Relief Method has been accepted by numerous fiscal authorities. However, considering that the brand owner has to supply some materials, know-how and services in addition to supplying the brand, it follows that the royalty rate includes both the compensation for the brand and the compensation for those services, thus is not an exact estimate for the brand value.

Smith and Parr (2005) and Lasinski and Pavri (1999) accuse this method for not considering the added value of owning the brand instead of licensing it. In fact, a license only transfers a portion of rights to the licensee, while the licensor is left with the right to exploit the intellectual property himself and to decide when and where a mark can be used and for which product lines.

There are five methodological options to estimate the royalty rate:

- 1) Brand Strength and Market Comparables Method

Royalty rates are estimated by looking at the industry while brand strength is measured comparing its attributes to of the relevant competitors. Smith and Parr (2000) question "*whether the royalty rates at the bottom of the bracket really correspond to brands with low margins, low awareness and low growth or merely to disadvantageous contracts*".

- 2) Operating Margin Differential

The theoretical value of the royalty rate is defined as the annual differences in operating margin.

- 3) The Knoppe Formula

Introduced by Helmut Knoppe in 1967, the formula is based on the German administrative principle by which a business manager should only pay the royalty rate that leaves him with an appropriate operating profit. For Knoppe, the optimum corresponds to a royalty rate of 25% to 33.33% of the licensor's profits before taxes. This formula is generally employed for auditing purposes.

- 4) Cluster or Group Analysis

It consists in collecting data on licensing contracts and grouping them according to different contractual characteristics and measures of profitability. The royalty rate is determined using the cluster with data on the brand and its competitors. Royalty Rates might be quite difficult to assess, hence the need to make some sensitivity analysis.

- 5) Other models such as Kleineidam, Kuebart and Contractor Benchmarks

These models are focused on the negotiation process between the licensor and the licensee.

### 5.3.6 Excess Cash Flow Method

The Excess Cash Flow Method estimates the free cash flows attributable to the brand by deducting all the cash flows related to other tangible and intangible assets from the free cash flow of the firm. The discounting rate is adjusted for risk and future expected inflation and is also subject to sensitivities.

Kapferer (2012) identifies a nine steps method to evaluate the brand.

1. Divide the brand into strategic units.
2. Forecast profit accounts using the business plan and define the EVA=  $EBIT - Taxes - WACC * (Tangible\ assets + WCR) = WACC * (Intangible\ Assets)$
3. Deduct from the EVA the contributions of all the intangible assets that are directly evaluable (patents, portfolios of customers).
4. Through an expert jury or a customers' survey, allocate the residual value to the brand and to the other potential intangible assets. A typical study would be measuring the impact of each product's traits in the customer's decision making and evaluate the brand's impact in the perception of each criterion.
5. Calculate the excess profit attributable to the brand for each cash-generating unit and for every year.
6. Evaluate risks through a thoughtful strategic analysis on market growth, long-term expectations on the brand, competition, commoditization, elasticity to prices, brand innovation and brand R&D development.
7. Define the discount rate based on the risks analysed.
8. Discount the cash flows attributable to the brand and create sensitivity tables depending on the discount rate.
9. Cross-check the result obtained using other methods such as the Royalty Relief Method (calculate which royalty rate would, when applied to forecasted turnover, give the same overall current royalty value after discounting).

### 5.3.7 Marginal Cash Flow Model

The Marginal Cash Flow Model values the brand looking at the marginal cash flows that are generated by its exploitation, compared to an unbranded firm. Unfortunately, it is difficult to find a perfectly comparable company so the cash flow differentials cannot reasonably be attributed exclusively to the brand. In practice, in fact, the unbranded comparable company might even have higher cash flows than those of the branded company.

### 5.3.8 Company Value With and Without Brand Method

The Company Value With and Without Brand Method, as the name suggests, computes the income attributable to the brand by looking at the value of the company with brand and checking what it would have been without the brand. The brand effect can be reflected in an increased growth rate, increased advertising expenses or in a lower risk.

### 5.3.9 Excess Margin Model

The Excess Margin Model finds the intangible returns by subtracting the returns on tangible and financial assets from the firm's total return rate and then calculates the proportion of the excess margin which is attributable exclusively to the brand.

Salinas (2007) affirms that *“in the case of companies with strong brands and many obsolete tangible assets, the brand would be undervalued due to the high technical yield that would be allocated to the tangible and financial assets of the company”*.

There are three variations of this technique:

- a) The excess earnings technique U.S. Revenue Ruling 68-609

Also known as “The Formula Approach”, it values the intangible assets by determining the earnings in excess of a fair rate of return on net tangible assets. A reasonable return on tangible assets is considered to be the normal return in the industry or 8%-10% according to the business risk. The capitalization rate is 15% or 20% according to the business risk.

- b) Baruch Lev's Intangible Scoreboard

Instead of setting the reasonable rate of return for tangible assets at 8% or 10% as suggested by the U.S. Revenue Ruling 68-609, it sets the after tax fair rate of return at 7% for tangible assets and at 4.5% for financial assets. The margin produced by intangible assets is the margin in excess of those two targets. The allocation of the margin to each intangible asset is somehow subjective.

- c) Analysis of required return on investment

Once the intellectual property earnings are estimated, it isolates the ones relating to the brand.

### 5.3.10 Competitive Equilibria Analysis Model

The Competitive Equilibria Analysis Model derives the brand earnings from the differential market share of the branded company with respect to the unbranded peers which is not explained by objective factors such as distribution, marketing investment and price. Then it discounts them to find the brand value.

### **5.3.11 Corebrand Value plus the Value of Other Related Assets Method**

The Corebrand Value plus the Value of Other Related Assets Method calculates the brand value as the sum of the value of the core brand and the value of the product brands. On the one hand it recognizes the two main areas of value of the corporate brand, but on the other hand it is quite subjective.

### **5.3.12 Customer Lifetime Value method**

The Customer Lifetime Value Method computes the brand value by estimating how much of a customer lifetime value is attributable to the brand and then expanding the value obtained to all customers. Being based on statistical analysis, it could be subject to measurement errors. According to Fischer, it is cost-effective.

### **5.3.13 Brand equity based on differences in ROI, ROA and EVA Model**

The Brand equity based on differences in ROI, ROA and EVA Model considers the difference in returns between a branded company and an unbranded one<sup>11</sup>. It does not separate the brand from the other intangibles and does not adjust by their volatility the earnings of the two companies compared, possibly taking it into account in the discount rate.

The advantages of this model are that it is easy to apply and the information needed is readily available.

### **5.3.14 Differential of Price to Sale ratios Method**

The Differential of Price to Sale ratios Method calculates brand value as the difference between the estimated price to sales ratio for a branded company and the price to sales ratio for an unbranded company and multiplies it by the sales of the branded company.

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11 Aaker (1991)

## 6. Other Brand Valuation Approaches

### 6.1 Interbrand Approach

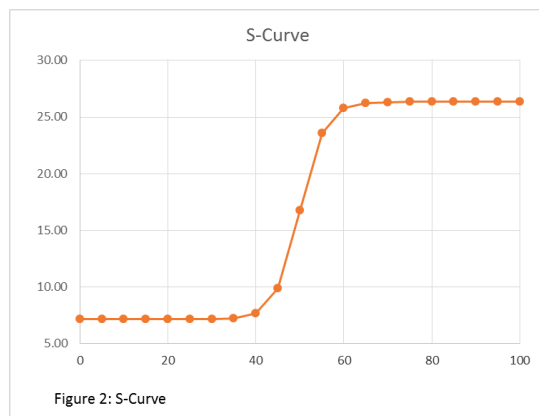
The Interbrand Approach determines the brand's earnings by defining the "Brand Index" seven factors:

1. Market (with weight of 10%): considers whether the market is growing and if there are strong barriers to entry.
2. Stability (15%): values customer loyalty.
3. Leadership (25%): looks at the position of the brand in the sector;
4. Trend (10%): gives an indication of where the brand is moving;
5. Support (10%): evaluates the support that the brand has received;
6. Internationalization/Geography (25%): considers the strength of the brand internationally (it should not be applied on local brand earnings);
7. Protection (5%): looks at the ability of the company to protect the brand.

This approach is widely appreciated for its ability to take all aspects of branding into account. In fact, also the risks usually included into the discount rate are taken into account in the Brand Index score and as a consequence it might be difficult to determine the discount rate. Aaker (1996 pag; 314) reveals that "...the Interbrand system does not consider the potential of the brand to support extensions into other product classes. Brand support may be ineffective; spending money on advertising does not necessarily indicate effective brand building. Trademark protection, although necessary, does not of itself create brand value."

Applying the Price/Earnings logic, Interbrand defines the Brand Multiple as the Brand Value to be calculated divided by the Net Profits of the Brand. The applicable brand net profits are computed through a weighted average of the net profits of the last three years where the weight corresponds to the importance given to the year. They are discounted taking into account inflation.

Based on comparable past brand transactions, Interbrand's S-curve Model explains the relationship between the brand multiple defined above and the strength of the brand. By multiplying the applicable net brand profit by the brand multiple it is possible to arrive to the brand value.



The S-curve should show a confidence interval in order to underline the intrinsic uncertainty and the inexact relationship between the brand strength and the multiple: in fact, even a small variation in the multiple can hugely impact the final brand value. Interbrand associates the shape of the S-curve to the brand life cycle: at the beginning of its life, a new brand grows slowly, then it exponentially increases its potential passing from a national to an international arena, and finally decelerates its growth as long as it has reached a worldwide expansion. Theoretically, the relationship between the brand strength and the multiple could also have a stepped shape instead of an S-shape. Often brands are inclined to have “threshold effects” and grow in value only after having reached a certain threshold (of aided awareness, for example) while remaining with very little value otherwise.

The Interbrand Method might not lead to the exact value of the brand at issue in that the S-curve is based on market multiples that include the price premium that was paid on precedent transactions. Even if there were no overbidding, multiples still measure the value of the brand from the point of view of the acquirer so express his strategy and the synergies that he expects.

## **6.2 Cost of Creation and Development plus a Percentage of Historical Income Method**

The Cost of Creation and Development plus a Percentage of Historical Income Method estimates the brand value as the sum of the creation and development costs plus a 10% of the average annual revenues of the past 5 years. This method has the same disadvantages of the cost approach and may be arbitrary.

## **6.3 Formula Based on Accounting Data Method**

The Formula Based on Accounting Data Method, only relying on publicly available information, computes the brand value discounting the brand earnings in perpetuity with no growth. Brand earnings depend on prestige, expansion and loyalty and contain an intrinsic risk: for this reason, using a risk free rate is a pitfall of this method.

## **6.4 Multiples Based on Proprietary Research Data Method**

The Multiples Based on Proprietary Research Data Method calculates brand value by multiplying the intangibles EVA by the brand contribution to it and by the brand multiple. Considering that the brand contribution to the intangibles EVA is based on an evaluation of the current client relationships, and that the brand multiple is based on a short-term growth, it might be that the final value is not really forward-looking.

## 6.5 Percentage of Market cap Attributable to the Brand Method

The Percentage of Market cap Attributable to the Brand Method derives the brand value looking at financial data and making surveys to corporate executives. It may be the only method that do not solely rely on customers.

## 6.6 Real Options Method

The Real Options Method applies financial options to non-financial assets. According to Pablo Fernández, opportunities of geographical growth, new distribution systems, new formats and new categories are the real options provided by a brand.

The structure of the brand development lifecycle can be seen as a multi-stage option. The launch of a brand creates a follow-on reinforcement option which then creates a subsequent option to leverage the brand equity. Finally, the launch and reinforcement phases enable the brand to be leveraged via exercise of brand expansion or extension options. *Expansion* of the existing branded portfolio allows the firm to grow in new geographic regions, in new market segments, or via new distribution channels. *Brand extension* involves options to expand the parent brand with new products into existing or new markets. There are two types of brand extension: *line extension*, which extends the existing parent brand to a new product version, and *category extension*, which constitutes expansion to an entirely new product category.

Luehrman (1998) states that the traditional discounted cash flow underestimates the value of flexibility, which is the ability to increase or decrease brand extension investments according to future circumstances. Real options are a tool from finance that enables to calculate by how much flexibility increases the value of an investment.

A financial option is the right to buy or sell an underlying financial asset. Similarly, real options are the right to buy or sell real assets, and represent the option to expand a project, abandon it or defer the investment. Real options are particularly valuable in situations in which investment decisions can be deferred. Deferral has value because the company can earn interests on the capital it retains, but also because deferring an investment until the situation is clear, reduces the uncertainty and increases flexibility<sup>12</sup>.

The valuation through real option is composed of two parts: a basic value and the value of the option itself. The value of the cash flows deriving from the licensing contract represents the underlying asset, while the cost of developing the brand is the strike price. Since this method considers the value inherent in the uncertainty of cash flow and in future opportunities, it is valuable for management decision making regarding extension and expansion of the brand.

The Expanded Brand Equity Value (EBEV) is:

$$EBEV = PBV + E^{EXP} + E^{EXT}$$

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12 Buckley and Tse (1996) and Flatto (1998)



The Parent Brand Value (PBV) accounts for the present value of expected cash flows associated with management's existing business plan commitments typically calculated through traditional brand valuation methods such as the Royalty Relief Method or the Discounted Cash Flow.  $E^{EXP}$  and  $E^{EXT}$  represent the extension and expansion options.

There are two ways of applying the real option method:

**a) Binomial method (time as a discrete variable)**

The Binomial Method creates a decision tree for a specified amount of time, and assumes that at each node the asset can have two possible prices, either following a constant upward trend or following a constant downward trend. Each node is characterized by a probability of occurrence and an utility function. The branch with the highest value on every decision node is discounted at WACC to find the value of the option. Considering that the risk of the asset fluctuates over time, the WACC must be adjusted to the varying risk.

**b) Black-Scholes model (time as a continuum)**

The Black and Scholes model is used to price European options and related derivatives. It acknowledges that the option price is purely a function of the volatility of the stock's price. The Black-Scholes equation calculates the value of a call option as follows:

$$C = S_0 * N(d1) - K e^{-rT} N(d2)$$

Where

$$d1 = \frac{\ln \frac{S_0}{K} + \left( r + \frac{\sigma^2}{2} \right) * T}{\sigma * \sqrt{T}}$$

And

$$d2 = d1 - \sigma * \sqrt{T}$$

And  $N(d1)$  and  $N(d2)$  are the cumulative standard normal probability distributions of  $d1$  and  $d2$ .

The inputs taken to value the opportunity to invest in a financial security can be compared to the characteristics of the real investment opportunity.

Black and Scholes variables	Stock option	Real Option
$S_0$	Stock Price	Present value of expected brand sales in the horizon considered
$K$	Exercise Price	Target investment in the horizon considered
$r$	Risk-free rate	Risk-free rate
$T$	Contract horizon	Expansion horizon
$\sigma$	Return Volatility	Investment uncertainty

Table 1: Black and Scholes and Real Options

Finally, the option value is added to the brand value obtained through the Net Present Value Method without growth and the total worth of the investment is valued.

## 6.7 Stock Price Movements Method

The Stock Price Movements Method calculates the brand value as the part of the company stock value that is derived from it. The value obtained is then equated to the value of advertising expenses, time in market and present and past ad share. This method is usually used to value single brand companies. It assumes strong efficient markets.

## 6.8 Valuation Model based on the Capital Asset Pricing Model

The Valuation Model based on the Capital Asset Pricing Model calculates the increase in firm value due to a variation in the WACC when the Reputation Index is increased by one unit. It produces a relative brand value.

## 6.9 Scanner-based Measure

The Scanner-based Measure<sup>13</sup> provides three measures of brand value:

- 1) the “perceived value” represents customers' perceptions not explained by price and promotion,
- 2) the “dominance ratio”, which objectively shows the brand's ability to compete in price against other brands,
- 3) the “intangible value”, which represents the perception of quality not attributable to physical characteristics.

Being based on scanner data on purchase histories, this technique is not comparable to customer-based models which rely on customers' surveys. However, being based on past and present purchase patterns, it does not necessarily forecast future brand profits.

## 6.10 McKinsey Brand Valuation Model

The McKinsey Brand Valuation Model<sup>14</sup> assumes that brand strength is quantifiable and is determined by *the three P factors*: Performance, Personality and Presence.

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13 Kamakura and Russell (1991)

## 6.11 Icon Research and Consulting Brand Trek Approach

The Icon Research and Consulting Brand Trek Approach is based on behavioural science<sup>15</sup> and

determines brand value from brand image and brand assets.

Brand image is composed of the short-term characteristics of the marketing mix that are visible to consumers, such as the product and packaging design, advertising, promotions and events. Brand assets represent longer-term changes in consumer attitudes but even though they have a direct connection with the success of a brand, they can only be influenced through the brand image.

## 7. Formulary Approaches

### 7.1 Financial World Magazine Method

The Financial World Magazine Method estimates the premium profit attributable to the brand by subtracting the earnings of a comparable unbranded product from the branded operating profit. The earnings of the unbranded product are assumed to be a ROCE of 5%<sup>16</sup>. The after tax premium profit is then multiplied by the Interbrand “Brand Index”.

### 7.2 Brand Equity Ten Method

The Brand Equity Ten Method<sup>17</sup> measures brand equity through 5 dimensions:

1. Loyalty
  - a. Price premium
  - b. Customer satisfaction
2. Perceived Quality or Leadership Measures
3. Other customer-oriented associations or differentiation measures
  - a. Perceived value
  - b. Brand personality
  - c. Organizational associations
4. Awareness measures

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14 McKinsey (1994)

15 Drees (1999)

16 Keller (1998)

17 Aaker (1996)

5. Market behaviour measures
  - a. Market share
  - b. Market price and distribution coverage

Representing the customer loyalty dimension of brand equity, these measures are used to create a brand equity measurement instrument.

### **7.3 Brand Finance Limited**

Brand Finance Limited, a UK consulting organization, developed the following commercial approach to brand valuation<sup>18</sup>:

1. It identifies the position of the brand in the competitive marketplace
2. Identifies the total business earnings from the brand
3. It determines the added value of total earnings attributed specifically to the brand
4. Assesses the "Beta" risk factor associated with the earnings

Then it discounts the brand added value after tax at a rate that reflects the brand risk profile.

## **8. Composite economical and behaviourally-oriented brand valuation models**

### **8.1 Semion Brand Value Approach**

The brand valuation system used by Semion Brand Broker GmbH relies on behavioural and image data as well as on financial data. It defines four brand value drivers: financial value of the company, brand strength, brand protection and brand image. It determines the value of each driver and then creates a single weighted factor. By multiplying the weighted factor by the average earnings before taxes of the last three years, it finds the brand monetary value.

### **8.2 Bekmeier-Feuerhahn's Market-oriented Brand Valuation Model**

The Bekmeier-Feuerhahn Approach (1998) combines a consumer-based and a company-based perspectives. It initially identifies the determinants of brand value such as brand strength and earnings and then finds a market price for them.

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18 David Haigh in Jones (1999)

### 8.3 Portfolio Models of Brand Value

The Portfolio Models of Brand Value<sup>19</sup> determine for each product four factors: market share, weighted distribution, average retail price and performance. After having identified the market and its substitutes products, it calculates the quotient *market share/weighted distribution* for each product. It then determines the quotient *product performance/price* for each product, and finally determines the Brand Value index in the form of an output/input quotient.

### 8.4 Sattler Brand Value Approach

The Sattler Brand Value Approach uses conjoint analysis and regression to find the relative importance of different brand value indicators on the long-term value of brands. It therefore uses the coefficients estimated to determine the long-term benefits of the brand at issue. It finally translates the long-term value benefits into a monetary value.

### 8.5 Integrated Model of Brand Valuation<sup>20</sup>

The Integrated Model of Brand Valuation joins together the economical, psychographic, behavioural, composite economical and behavioural brand valuation models. The factors, marked out by authors, grouped into 3 groups: the strength of brand value, brand image, defence and conflict factors. All these factors are ranked by points. According to the importance of each group of factors the weighted index is given.

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19 Preibner (1990)

20 Indrė Jucaitytė, Regina Virvilaite (2007)

## Integrated Model of Brand Valuation

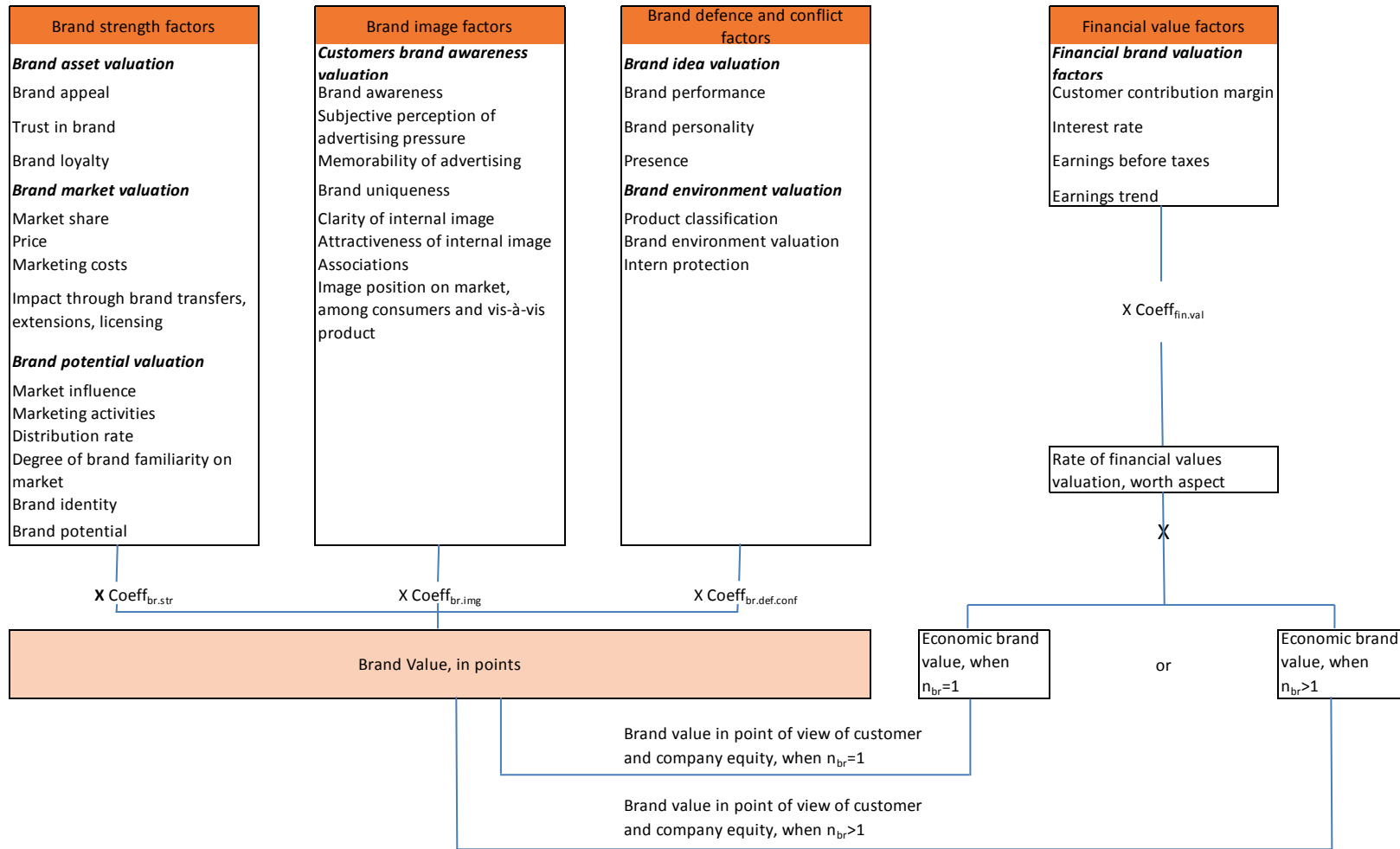


Figure 3: Source: Indrė Jucaitytė, Regina Virvilaite, "Integrated Model of Brand Valuation", 2007

## 9. Summary of the methods analysed<sup>21</sup>

Approach	Method	Principle	Ease of application	Subjectivity	Time Perspective	Reliability
Consumer Based Approach	Conversion Model	Measures the level of awareness that should be generated in order to achieve the current sales	Medium	Medium	Forward-Looking	Medium
	Customer Preference Model	Matches the increase in awareness with the corresponding increase in market share	Medium	Medium	Forward-Looking	Low
Cost-based Approach	Historical cost of creation Method	Uses the historical cost of creating the brand as brand value	Low	Medium	Past	Medium/Low
	Cost to recreate Method	Uses current prices in order to estimate the cost of recreating the brand today	Low	Medium	Present	Low
	Replacement cost Method	Considers the expenditures and investments necessary to replace the brand with a new one with the same utility	Low	Medium	Present	Medium
	Capitalization of Brand-Attributable Expenses Method	Defines the proportion of accumulated advertising expense due to the brand over the total marketing expenses incurred, including other selling and distribution costs	Low	Medium	Past	Low
	Residual Value Method	Computes the discounted residual value obtained by subtracting the cumulative brand costs from the cumulative revenues attributable to the brand	Low	Medium	Past	Medium
Market-based Approach	Brand Sale Comparison Method	Looks at recent transactions involving similar brands in the same industry and referring to comparable multiples	Low	Low	Present	Medium/High
	Brand Equity Based on Equity Valuation Method	Sums the returns of "demand-enhancing" investments and the expected savings in marketing costs resulting from the promotion of branded products.	Low	Medium	Future	Medium
	Residual Method	Values intangibles as the residual value obtained when the net asset value is subtracted from the market capitalization	High	Low	Present	Medium

21 We include in the summary table all methods described in the above pages. However, we do not classify in terms of *Ease of Application*, *Subjectivity*, *Time Perspective* and *Reliability* proprietary methods such as the Brand Equity Ten Method, the Brand Finance Method and all the Formulary Approaches and Composite Economical and Behaviorally-oriented Brand Valuation Models. Being proprietary methods, we do not have enough information on their implementation procedures to give them such classification.

Approach	Method	Principle	Ease of application	Subjectivity	Time Perspective	Reliability
Income-based Approach	Price Premium Method	Multiplies the price differential of the branded product with respect to a generic product by the total volumes of sales	Medium	Medium	Present	Medium/High
	Demand Driver/Brand Strength Analysis Method	Considers the effects of brand equity on demand and supply in order to determine how much influence the brand has on consumer decision making and value creation	Low	Low	Present	Medium
	Gross Margin Comparison or Economy of Scale Technique	Multiplies the gross margin difference between the branded product and the average gross margin of competitors by the sales of the branded company	High	Low	Present	Medium/High
	Operating Profit Comparison Method	Multiplying the difference between the branded EBIT and the average EBIT of comparables by the sales of the branded company	High	Low	Present	Medium
	Royalty Relief Method	Discounts back to present the stream of royalty fees that the company should pay if it did not own the brand	Medium	Low	Present	High
	Excess Cash Flow Method	Estimates the free cash flows attributable to the brand by deducting all the cash flows related to other tangible and intangible assets from the free cash flow of the firm	Medium	Medium	Future	Medium/High
	Marginal Cash Flow Model	Values the brand looking at the marginal cash flows that are generated by its exploitation, compared to an unbranded firm	Low	Low	Future	Medium
	Company Value With and Without Brand Method	Computes the income attributable to the brand by looking at the value of the company with brand and checking what it would have been without the brand	Low	Medium	Future	Medium
	Excess Margin Model	Finds the intangible returns by subtracting the returns on tangible and financial assets from the firm's total return rate and then calculates the proportion of the excess margin which is attributable exclusively to the brand	Medium	Medium	Future	Medium
	Competitive Equilibria Analysis Model	Derives the brand earnings from the differential market share of the branded company with respect to the unbranded peers which is not explained by objective factors such as distribution, marketing investment and price	Medium	Medium	Future	Medium
	Corebrand Value plus the Value of Other Related Assets Method	Calculates the brand value as the sum of the value of the core brand and the value of the product brand	Low	High	Future	Low
	Customer Lifetime Value Method	Estimates how much of a customer lifetime value is attributable to the brand and then expands the value obtained to all customers	Low	Medium	Future	Low
	Brand equity based on differences in ROI, ROA and EVA Model	Considers the difference in returns between a branded company and an unbranded one	High	Low	Present	Medium
Differential of Price to Sale ratios Method	Calculates brand value as the difference between the estimated price to sales ratio for a branded company and the price to sales ratio for an unbranded company and multiplies it by the sales of the branded company	High	Low	Present	Medium	



Approach	Method	Principle	Ease of application	Subjectivity	Time Perspective	Reliability
Other Brand Valuation Approaches	Interbrand Approach	Determines the brand's earnings by defining the "Brand Index" seven factors: market, stability, leadership, trend, support, internationalization and protection	Medium	High	Future	Medium
	Cost of Creation and Development plus a Percentage of Historical Income Method	Estimates the brand value as the sum of the creation and development costs plus a 10% of the average annual revenues of the past 5 years	Low	Medium	Past	Low
	Formula Based on Accounting Data Method	Only relying on publicly available information, computes the brand value discounting the brand earnings in perpetuity with no growth	Medium	Medium	Future	Low
	Multiples Based on Proprietary Research Data Method	Calculates brand value by multiplying the intangibles EVA by the brand contribution to it and by the brand multiple	Medium	Medium	Present	Low
	Percentage of Market cap Attributable to the Brand Method	Derives the brand value looking at financial data and making surveys to corporate executives	Medium	Medium	Present	Low
	Real Options Method	Applies financial options to non-financial assets	Medium	Medium	Future	High
	Stock Price Movements Method	Calculates the brand value as the part of the company stock value that is derived from it	Low	Medium	Present	Low
	The Valuation Model based on the Capital Asset Pricing Model	Calculates the increase in firm value due to a variation in the WACC when the Reputation Index is increased by one unit	Low	Medium	Present	Low
	Scanner-based Measure	Provides three measures of brand value: the "perceived value", the "dominance ratio" and the "intangible value"	Low	High	Past/Present	Low
	McKinsey Brand Valuation Model	Assumes that brand strength is quantifiable and is determined by the three P factors: Performance, Personality and Presence				
	Icon Research and Consulting Brand Trek Approach	Is based on behavioural science and determines brand value from brand image and brand assets				
Formulary Approaches	Financial World Magazine Method	Estimates the premium profit attributable to the brand by subtracting the earnings of a comparable unbranded product from the branded operating profit				
	Brand Equity Ten Method	Measures brand equity through 5 dimensions: Loyalty, Perceived Quality or Leadership Measures, Other customer-oriented associations or differentiation measures, Awareness measures, Market behaviour measures				
	Brand Finance Limited	Discounts the brand added value after tax at a rate that reflects the brand risk profile				
Composite economical and behaviourally-oriented brand valuation models	Semion Brand Value Approach	It defines four brand value drivers: financial value of the company, brand strength, brand protection and brand image				
	Bekmeier-Feuerhahn Approach	Combines a consumer-based and a company-based perspectives				
	Portfolio Models of Brand Value	Determines the Brand Value index in the form of an output/input quotient				
	Sattler Brand Value Approach	Uses conjoint analysis and regression to find the relative importance of different brand value indicators on the long-term value of brands				
	Integrated Model of Brand Valuation	Joins together the economical, psychographic, behavioural, composite economical and behavioural brand valuation models				

Table 2: Summary of the Brand Valuation Methods analysed. Source: own analysis

## 10. Case Study - Alibaba.com

### 10.1 Market overview

#### *Globally*

The global online retail sector grew by 21.4% in 2014 and reached a value of \$986.7bn. The compound annual growth rate of the sector in the period 2010-2014 was 22.9%.

Statistics confirm the explosive pace at which the industry has developed as worldwide B2C e-commerce sales amounted to more than \$1.2 trillions in 2013<sup>22</sup>. Current e-commerce statistics state that 40% of worldwide internet users have bought products online. This represents more than 1 billion online buyers and is projected to grow.

Electronics represent the largest segment of the global online retail sector with a share of 22.5% of the total value. The Apparel/accessories/footwear segment is the second larger with a share of 19.1%.<sup>23</sup>

America represents 37% of the sector value, Europe 34.3%, Asia Pacific 28.2% and Middle-East and Africa 0.9%.

In 2019, the global online retail sector is forecasted to have a value of \$2,041.7bn, which represents an increase of 106.9% since 2014. Thus, the CAGR 2014-2019 is expected to be 15.7%.

#### *China*

The Chinese online retail sector grew by 56.2% in 2014 and reached a value of \$161.9bn.

E-Commerce accounted for 10.7% of China total retail sales in 2014.

Contrary to the global trend, the Apparel/accessories/footwear is the largest online retail segment in China (26.5%), while the Electronic segment is the second bigger (18.4%).

Growth in the Chinese sector will continue to be fuelled by rising internet penetration and growing household incomes. According to Internet World Stats, Chinese internet penetration was 45.8% as of December 31, 2013. The CAGR in China between 2010 and 2014 has been of 98.7%. However, the performance of the sector is expected to decelerate and register a CAGR of 26% in the period 2014-2019.

In 2019 the Chinese online retail sector is forecast to have a value of \$515.1bn, an increase of 218% since 2014.

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22 Source: HEC Paris, Statista

23 Source: Marketline

## 10.2 The choice of Alibaba

In this dissertation we chose to analyse the brand value of the giant Alibaba.com.

### *Alibaba's dimensions*

Alibaba is the world's fastest growing e-commerce market<sup>24</sup>. Transactions on its online sites totalled \$248bn last year, more than those of eBay and Amazon.com combined. Currently, 80% of China's online shopping market is dominated by Alibaba.

### *Alibaba's value*

Alibaba became one of the most valuable tech companies in the world after rising \$25bn from its US IPO, with a market capitalisation of \$203.71bn as of 20<sup>th</sup> April 2015.

In January 2015 Alibaba was ranked China's second most valuable brand with a value of \$59.7bn in the 2015 BrandZ ranking by Milward Brown, an international advertising research agency, and WPP, the world largest communication services conglomerate.

However, there is a noticeable disparity among Brand Valuation Consultancies with respect to the Alibaba brand value. Brand Finance values Alibaba brand only at \$11.4bn in 2015.

As a consequence, the Alibaba latest growth and success and the divergent opinions of Brand Valuation Consultancies motivated us to implement an analysis of the Alibaba brand.

## 10.3 Alibaba - Overview and History

The Alibaba group was founded in 1999 by Jack Ma and 17 other co-founders. Their objective was to help small Chinese exporters, manufacturers and entrepreneurs to sell internationally.

Nowadays, in addition to operating global wholesale and retail online marketplaces, Alibaba manages internet-based businesses which offer advertising and marketing services, electronic payments, cloud-based computing, network and mobile services.

It operates a platform for third parties and does not have its own sales. In this way, it does not compete with its merchants. It provides the technological infrastructure and marketing tools to help users to reach their commercial counterparties.

It operates in China, India, Japan, Korea, the UK and the US. It currently employs 24,000 people.

Since the early stages of its life, Alibaba was able to attract big investors such as Goldman Sachs and Fidelity. In 2003 it founded Taobao, a consumer e-commerce platform. In the next two years, the group made Alipay a separate business and took over China Yahoo!. At the end of 2007, Alibaba.com was successfully listed on the Hong Kong stock exchange. On its tenth anniversary, the group established Alibaba Cloud Computing. In 2010 Taobao launched eTao, a shopping search engine and the year after the all Taobao is reorganized into three different companies: Taobao Marketplace, Taobao Mall (Tmall.com) and eTao. Tmall is a B2C platform for large brands. In 2011 Alibaba Cloud Computing launched its first mobile

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24 Source: The Wall Street Journal

operating system Aliyun OS. In 2014, after announcing the process of filing for an Initial Public Offering in the U.S., it undertook a wave of acquisitions such as Weibo, a micro-blogging service, China Vision Holdings, Lyft, a car-sharing service and Peel Technologies, a smart remote app developer. It also acquired 50% of Guangzhou EvergrandeFootball club and 100% of the Chinese mobile internet firm UCWeb, apparently making the biggest merger in the Chinese internet sector.

*Other websites of Alibaba*

Juhuasuan is a stand-alone website that focuses on group buying, flash sales, and limited time promotions. 1688.com is an online wholesale marketplace for Chinese B2B. AliExpress is instead dedicated to consumers outside China. Alibaba.com is the English-language wholesale platform serving B2B channel. Alimama is the online marketing platform. While Taobao, Tmall, Juhuasuan and 1688.com are dedicated to the Chinese commerce business, Aliexpress and Alibaba.com are internationally-oriented.

	China	International
Retail	<p><b>Taobao Marketplace</b> Online shopping destination</p> <p><b>Tmall Platform</b> Brands and Retail Platform</p> <p><b>Juhuasuan</b> Group buying marketplace</p>	<p><b>AliExpress</b> Global Consumer Marketplace</p>
Wholesale	<p><b>1688.com</b> Wholesale Marketplace</p>	<p><b>Alibaba.com</b> Global Wholesale Marketplace</p>

Table 3: Alibaba's Platforms - Commerce Business (Source: Form F1- SEC)

## 10.4 SWOT Analysis

### Strengths

- *Market position*: Strong market position, with the world's largest online and mobile commerce business based on 2013 GMV;
- *Mobile Commerce*: Leadership in mobile commerce in China (86% of total mobile retail gross merchandise volume in China);
- *Network Effects*: Network effects of Taobao and Tmall are difficult to replicate;
- *Customers' attraction*: Thanks to its dominant user base, Alibaba has accumulated the largest number of customers' reviews. This attracts new customers;
- *Absence of direct sales*: Alibaba does not have inventory expenses on its P&L: it operates as an intermediary for third-party sellers;
- *Small asset base*: Having a little asset base, Alibaba can have a strong cash-flow generation.

### Opportunities

- *Underpenetrated market*: China's online shopping market is relatively underpenetrated (less than half of the Chinese internet users have ever shopped online);
- *Customers' Spending Power*: Rising spending power of Chinese customers;
- *Cloud computing*: Positive trends in the cloud computing market.

### Weakness

- *Cost leadership and lack of differentiation*: By offering value to its customers through very low prices, Alibaba would not be able to sustain a price war;
- *Piracy issues*: Alibaba has to incur high legal and technological costs to fight piracy.

### Threats

- *China's growth rate*: Slowing growth of the Chinese economy;
- *Intense competition*: Yahoo!, 360buy, Tencent, Gome Electricals are exercising fierce competition. However, Alibaba also competes with catalogue and mail order retailers and online/offline auctioneers;
- *Challenging environment for SMEs*: Small and Medium enterprises, Alibaba's main customers are encountering difficulties in fundraisings and because of rising labour costs;
- *Rapid technological changes*: the adoption of new industry standards may impact the company's competitive position;
- *Regulation*: Increased regulation over online and mobile payment.

## 10.5 Financial Statements

### Income Statement

Source: Brokers report

(in \$millions except for per share data. FY ends March,31)

	2012A	2013A	2014A
Revenues	3,179	5,523	8,401
COGS	(1,041)	(1,555)	(2,139)
<b>Gross Profit</b>	<b>2,139</b>	<b>3,968</b>	<b>6,262</b>
Product development expenses	(460)	(611)	(815)
Sales and Marketing Expenses	(486)	(588)	(727)
G&A	(351)	(470)	(675)
Others	203	428	(207)
<b>EBITDA</b>	<b>639</b>	<b>1,870</b>	<b>4,252</b>
D&A	(157)	(178)	(265)
<b>EBIT</b>	<b>796</b>	<b>1,751</b>	<b>3,987</b>
Net Financing Costs	82	(102)	301
<b>Profit before Taxes</b>	<b>878</b>	<b>1,618</b>	<b>4,288</b>
Taxes	(134)	(233)	(511)
Tax rate	15%	14%	12%
<b>Net Income</b>	<b>741</b>	<b>1,385</b>	<b>3,777</b>
Non controlling Interests	(69)	(19)	(14)
Other Items	0	(21)	(71)
<b>Net Income of the Group</b>	<b>671</b>	<b>1,345</b>	<b>3,692</b>

Table 4: Alibaba' Income Statement

### Balance Sheet- Economic View

Source: Brokers report and own calculations

(in \$millions except for per share data. FY ends March,31)

	2012A	2013A	2014A
Working Capital Assets	267	277	749
Working Capital Liabilities	1,501	2,264	3,144
<b>Net Working Capital</b>	<b>(1,234)</b>	<b>(1,986)</b>	<b>(2,395)</b>
Tangible Fixed Assets	394	609	893
Goodwill	1,830	1,807	1,887
Other Intangible Assets	329	357	571
Investments	1,802	2,053	8,128
Other Assets	235	239	334
<b>Invested Capital</b>	<b>3,355</b>	<b>3,079</b>	<b>9,417</b>
Cash and Cash Equivalents	2,697	4,863	5,287
Short Term Debt	379	1,575	2,837
Long Term Debt (incl. Convertible a	0	4,424	4,914
<b>Net Debt</b>	<b>(2,318)</b>	<b>1,136</b>	<b>2,464</b>
Other Liabilities	167	175	422
<b>Total Equity</b>	<b>5,506</b>	<b>1,767</b>	<b>6,531</b>
<b>Invested Capital</b>	<b>3,355</b>	<b>3,079</b>	<b>9,417</b>

Table 5: Alibaba's Balance Sheet

Alibaba's sales have considerably increased in the last two years. Growth has been of 74% in 2013 and of 52% in 2014. Having Costs of Goods Sold increased at a lower pace (49% and 38% in the two years respectively), the Gross Margin has registered an impressive surge. Alibaba has been invested in its brand by expanding Product Development Expenses and Sales and Marketing Expenses by approximately 30% each year. Overall, keeping Operating Costs growth monitored, EBITDA has tripled in 2013 and then doubled in 2014, being 20% of Sales in 2012 and 51% of Sales in 2014. The limited depreciation that characterises the e-commerce business has allowed EBIT to increase by 120% in both years. EBIT Margin was 25% in 2012 and became 47% in 2014. Finally, the Net Profit of the group has doubled in 2013 and tripled in 2014. EPS increased from 3.66 in 2013 to 10.61 in 2014.

Being Alibaba in the retail business, it can benefit of Negative Working Capital. The group's success in the last two years has increased its bargaining power against suppliers and the Working Capital is more and more financing the activities of the company.

Alibaba invested both in Fixed and Intangible Assets (excluding Goodwill), doubling them in two years.

While Net Debt was negative in 2011, in the last two years it has become Positive. However, considering that Net Debt/EBITDA is 0.6 both in 2013 and 2014, the indebtedness of the group is still low.

This is also confirmed by the Net Financing Costs, which are very low in 2013 and become even positive in 2014.

The company share price surged from \$93 in September 2014 to a peak of \$119.15 in November 2014<sup>25</sup>. After that, the share price has seen a prolonged decline until stabilizing between \$81 and \$86 in March and April 2015.

The Market to Book Value ratio is at 32.2 at the end of April 2015.

All in all, the company's performance appears solid and in steady increase. It is quite reasonable to have positive expectations for the near future of the group.

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<sup>25</sup> Source: Yahoo! Finance

## 10.6 The brand

The brand Alibaba is mainly built on four factors: its leader, its objective, its horizon and its network.

**The leader:** Jack Ma is a charismatic leader guiding the company to build trust internally and with foreign investors<sup>26</sup>. The employees believe in his objectives and follows his guidance.

**The objective:** Joseph Baladi, head of consulting at the Leo Burnett Institute of Behaviour in Singapore, found that “making money” was the common response when he interviewed more than 100 CEOs from Asian companies and asked about the purpose of their businesses. On the contrary, Mr Ma was able to create a business model that makes money by exploiting and fulfilling the human fundamental need to connect.

**The horizon:** Contrary to some China’s top brands which have difficult names from non-Chinese speakers’ perspective, Mr Ma chose the name Alibaba “because it is well-known around the world and it can be easily pronounced in many languages<sup>27</sup>”. In this way, Mr Ma immediately prepared the company to become global.

**The network:** Managing the most popular online marketplaces in China, Alibaba relies on a powerful network effect: the value of a platform to customers increases with the increase of the number of sellers and vice versa. Being the different marketplaces interconnected, the network effect becomes even stronger. Buyers on Tmall can also go to Taobao to find a broader range of products, while Taobao users can move to Tmall if looking for branded products and higher quality. This is a valuable way of decreasing customers' acquisition costs. It must be noted that currently this network effect is very strong in China, but almost inexistent abroad.

**Main brands:** Alibaba, Taobao, Tmall and Alipay

## 10.7 Comparable non branded company

JD.com is a major B2C online retailer in China, founded in 2004 and internationally expanded since 2012. JD.com offers product of different categories including electronics, home appliances and general merchandise on is direct sales and third-party marketplace platforms.

In 2013 it launched cloud computing services, internet financial credit payment products and was granted a license to resell mobile telecom services. In 2014 JD.com created a partnership with Tencent, another leading company in China, maker of WeChat. Being WeChat the second most popular mobile platform in the world (for online gaming, online

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26 Source: Angela Doland, “Branding Lessons from China’s Alibaba – what can other Chinese companies learn from e-commerce giant’s success?”, September 2014

27 Source: company website



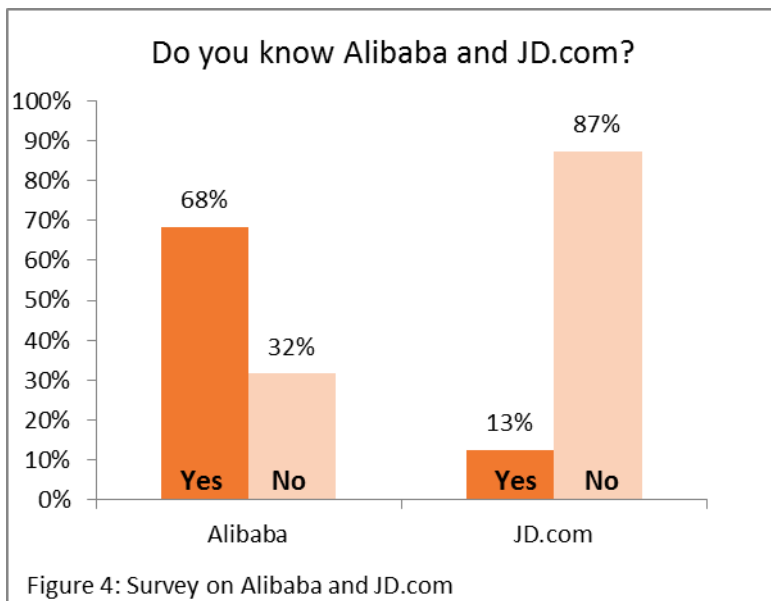
payments and taxi reservations), it is a very strong advertising means for JD.com against Alibaba. JD.com was listed on NASDAQ on 22<sup>nd</sup> May 2014.

JD.com is the main competitor of Tmall, and as Alibaba it is internationally oriented and has been listed on the US stock exchange in 2014.

However, JD.com can be considered Alibaba's unbranded comparable. A survey run on a sample of 100 business students reports that 68% of them know the brand Alibaba and have a clear idea of its business model. However 87% of the people have never heard of JD.com. The survey has included a heterogeneous sample with respect to gender and nationality.

To sum up, the characteristics that led us consider JD.com as the unbranded comparable of Alibaba are the following:

- 1) Both headquartered in China
- 2) Both in the same industry (e-commerce)
- 3) Both search international expansion
- 4) Both were listed on the US stock exchange in 2014
- 5) Alibaba brand is known and recognized, while JD.com is mainly known by Chinese people



## 10.8 WACC Computation

**Risk free rate**=3.43%<sup>28</sup>. Mainland China, February 2015.

Considering that commerce in China represented 81.6% of total Revenues in FY2014<sup>29</sup> leaving only 7% share to International commerce, we use the Mainland China 10yr Government bond rate in February 2015 as the risk free rate for the cost of equity computation. The remaining 7% of revenues is generated by cloud computing, internet infrastructures, interest income from microloans and revenues of UCWeb and AutoNavi.

**Beta**= 1.07<sup>30</sup>.

**Equity risk premium**= 7.96%<sup>31</sup>. Again, being Alibaba's revenues concentrated in China for 81.6%, we take the Chinese equity risk premium.

**Cost of debt**= 5%<sup>32</sup>.

**Gearing ratio** = 38%. We used the Ned Debt and Equity Book Values in 2014A.

**Tax rate**= the effective tax rate is 15%, 14% and 11.9% in 2012, 2013 and 2014 respectively. However, as Alibaba's subsidiaries are entering their third profitable year, the effective tax rate is going to increase according to the Chinese Commercial Law. As a result, Bernstein Research expects an effective tax rate of 19% for 2016 and it is reasonable to use this value for future estimations.

Variable	Value	Comments
Risk free rate	3.43%	Chinese 10yr Gov Bond yield
Beta	1.07	Source: UBS Brokers Report
Market risk premium	6.65%	Damodaran: Chinese Equity Risk Premium
Cost of Equity	10.5%	
Cost of Debt	5%	Source:Morningstar Equity Research
Tax Rate	19%	Source: Bernstein Research
Net Debt/EV	27%	We used Book Values
<b>WACC</b>	<b>8.8%</b>	

Table 6: Wacc Computation

We obtain a Wacc value of 8.8%<sup>33</sup>, which is below the range of discount rates that Alibaba uses for brand earnings (16% to 30%), as stated in its 2011 Notes to the Financial Statements.

28 Source: Trading Economics. 10 year Government Bond

29 IPO Prospectus

30 Source: UBS Brokers Report

31 Source: Damodaran Total Equity Risk Premium as of 1 January 2015

32 Morningstar Equity Research

33 Morningstar Equity Research uses a Wacc of 9.7% and Bernstein Research uses a Wacc of 10%, UBS uses a WACC of 9.8%.

**Growth rate:** 32% which corresponds to the expected 2016 GMV growth rate according to Bernstein Research.

**Discount rate:** As seen, Alibaba adopts a discount rate between 16% and 30% in Impairment tests <sup>34</sup> in 2011. In order to compute our discount rate, we refer to the WARA theories exposed in paragraph 3.1.

For the definition of assets' returns we consider the following:

- We assume that the Negative Working capital is invested in short term debt. Thus as  $R_{NWC}$  we use the Alibaba 2017-2019 average bond yield, which is 2.14%<sup>35</sup>.
- For  $R_{TFA}$  we used the cost of equity (10.5%) because the company is mostly financed through equity.
- For Investments and Other Assets we took a middle value between the cost of equity and the short term bond yield, thus 5.81%.

By applying the WARA formula we obtain a  $R_{IA}$  discount rate of 12%.

Asset	2014A Value	Return
Working Capital	(2,395)	2.14%
Tangible Fixed Assets	893	10.50%
Investments and Other Assets	8,462	5.81%
IA	2,457	
$V_L$	9,417	
WACC		8.8%
$R_{IA}$		12%

Table 7: Discount rate Calculation based on WARA Theories

## 10.9 Benchmark Valuations

Author	Year	Brand Value (\$m)	Comments
BrandZ by Millward Brown	2015	59,700	Alibaba ranked as China's second most valuable brand after Tencent (\$66,1bn)
Interbrand	2014	20,400	Alibaba ranked third in the 2014 Best China Brands Report after Tencent and China Mobile
Brand Finance	2015	11,400	Alibaba was the new entry in the annual study

Table 8: Benchmark Valuations

As can be seen from the table, the valuation of the Alibaba brand is very controversial and ranges between \$11bn to \$60bn according to Brand Valuation Agencies.

34 Notes to The Financial Statements 2011

35 Source: Thomson One

## 10.10 Royalty Relief Method

Year	Territory	Licensee	Licensor	Royalty rate		Details
				Low range	High range	
2014	Worldwide	Sungard Availability Services Capital, Inc.	Sungard Data Systems Inc.	n.a.	0.30%	During the first two years following the split-off, the licensed mark is royalty free. In years 3, 4 and 5, SpinCo will pay a royalty payment of 0.30% of SpinCo's worldwide revenue. In years 6 and 7, the royalty is reduced to 0.15% and 0.075%, respectively. As of year 8, if SpinCo has paid all royalties, it will have a perpetual, royalty-free license to use the mark going forward.
2012	China, excluding Hong Kong, Macau and Taiwan	Alibaba Group Holding Ltd. And China Yahoo!	Yahoo Inc.	1%	2%	Upfront fee of \$550m. Royalties equal to the following will be paid: (A) 2 % of Alibaba Revenues for the first 7 years from January 1, 2006; (B) 1.5 % of Alibaba Revenues for the 8th through 14th years; and (C) 1 % of Alibaba Revenues thereafter
2008	China	Shanghai Mecox Lane Information Technology Co., Ltd.	Mecox Lane Ltd.	5%	8%	5% of retail sales or 8% of internet sales
2007	China	Chengdu DayuWeiye Advertising Co., Ltd.	Chengdu Time Share Technology Information Co., Ltd.	5%	5%	For the year of 2007, the amount of license fee for the use of the Domain Name and Trademark equals to 5% of Party B's advertising operating revenue
2007	China	China Digital Mobile television Co., Ltd.	China Digital Technology Consulting (Shenzhen) Co., Ltd.	0.02%	0.02%	Licensee will pay 0.02% of its revenue to Licensor annually as royalties for exclusive rights to use the Target Domain Names
2006	China	Sichuan Time Share Advertising & Communication Co., Ltd	Chengdu Time Share Technology Information Co., Ltd.	5%	5%	Sichuan Time Share will pay a license fee to Chengdu Time Share for the use of its trademark and domain name equal to 5% of Sichuan Time Share's revenues in 2007
Median				3%	4%	

Table 9: Royalty Rates of Comparable Companies  
Source: RoyaltySource

Table 2<sup>36</sup> presents royalty contracts of e-commerce companies in China and worldwide during the last decade. The range of royalty rates span between 0.02% to 5% in the low

36 SunGard Availability Services Capital, Inc. provides data protection and disaster recovery services. The company offers managed IT services, information availability consulting services, and business continuity management software. It designs and implements solutions to address enterprise IT availability needs. Sungard Availability Services Capital, Inc. is based in Wayne, Pennsylvania.

range and between 0.02% and 8% in the high range. The medians result being 3% and 4% in the low and high ranges respectively.

However, Alibaba's bargaining power with respect to a hypothetical licensee would be very high. Thus we believe that 8% could be considered a lower bound for Alibaba's royalty rate range. In particular, we assume a royalty rate of 12% and then compute sensitivities.

(\$M)				Brokers' Forecast			Soft Landing			
	2012A	2013A	2014A	2015E	2016E	2017E	2018E	2019E	2020E	2021E
Revenues	3,204	5,523	8,401	12,358	16,494	20,961	25,585	29,945	33,544	35,893
Growth		72%	52%	47%	33%	27%	22%	17%	12%	7%
Retail Revenues %	68%	79%	79%	79%	79%	79%	79%	79%	79%	79%
Brand Related Revenues	2,182	4,374	6,653	9,788	13,063	16,601	20,263	23,716	26,567	28,427
Royalty Rate				12%						
Pre-Tax Royalty Savings	262	525	798	1,175	1,568	1,992	2,432	2,846	3,188	3,411
Tax rate	15%	14%	12%	19%	19%	19%	19%	19%	19%	19%
Post-Tax Royalty Savings	223	451	703	951	1,270	1,614	1,970	2,305	2,582	2,763
Discount rate				12%						
Discounted Royalty Savings				951	1,134	1,286	1,402	1,465	1,465	1,400
Present Value of Royalty Savings				9,103						
Terminal Value										59,130
Present Value of Terminal Value				29,957						
Brand Value				39,061						

Table 10: Royalty Relief Method

\$M	Discount Rate	Royalty rate								
		8.0%	9.0%	10.0%	11.0%	12.0%	13.0%	14.0%	15.0%	16.0%
	9%	65,398	73,573	81,748	89,923	98,098	106,273	114,447	122,622	130,797
	10%	43,524	48,964	54,405	59,845	65,286	70,726	76,167	81,607	87,048
	11%	32,593	36,668	40,742	44,816	48,890	52,964	57,038	61,113	65,187
	12%	26,040	29,296	32,551	35,806	39,061	42,316	45,571	48,826	52,081
	13%	21,676	24,386	27,095	29,805	32,514	35,224	37,933	40,643	43,352
	14%	18,562	20,882	23,203	25,523	27,843	30,163	32,484	34,804	37,124
	15%	16,230	18,258	20,287	22,316	24,344	26,373	28,402	30,430	32,459

Table 11: Sensitivities on Royalty Rate and Discount Rate

Mecox Lane Limited (Mecox Lane) is a holding company that operates online platform for apparel and accessories. It offers a selection of products on its M18.com e-commerce Website. Mecox Lane's online platform offers products under its own brands, such as Euromoda and Rampage and under selected third-party brands, including established international and Chinese brands, such as Adidas, Daphne, Kappa and Li Ning, as well as independent and emerging brands.

China Digital Mobile Television Co., Ltd. Operates a technology that sends signals from a base station to TV sets in public areas such as shopping malls and buses. China Digital Mobile TV Co., Ltd. operates as a subsidiary of China Digital Technology Consulting (Shenzhen) Co., Ltd.

Yahoo! Inc., is a global Internet media company that offers communications, content, and a community platform. The Company's site includes a hierarchical, subject-based directory of Web sites, which enables users to locate and access information.

\$M		Royalty rate								
		8.0%	9.0%	10.0%	11.0%	12.0%	13.0%	14.0%	15.0%	16.0%
Growth Rate	5.0%	19,369	21,790	24,211	26,632	29,053	31,474	33,895	36,316	38,738
	5.5%	20,652	23,234	25,815	28,397	30,978	33,560	36,141	38,723	41,304
	6.0%	22,149	24,918	27,686	30,455	33,224	35,992	38,761	41,529	44,298
	6.5%	23,918	26,908	29,897	32,887	35,877	38,867	41,856	44,846	47,836
	7.0%	26,040	29,296	32,551	35,806	39,061	42,316	45,571	48,826	52,081
	7.5%	28,634	32,214	35,793	39,372	42,951	46,531	50,110	53,689	57,269
	8.0%	31,876	35,861	39,845	43,830	47,814	51,799	55,784	59,768	63,753
	8.5%	36,044	40,550	45,055	49,561	54,066	58,572	63,077	67,583	72,089
	9.5%	49,380	55,553	61,725	67,898	74,070	80,243	86,415	92,588	98,761

Table 12: Sensitivities on Royalty Rate and Growth Rate

The Royalty Relief Method gives a brand value of \$39,061bn.

### 10.11 Price/Volume Premium Method

The Price Premium Method requires to find the Price that Alibaba can asks to its customers and compare it with the price of JD.com.

There is a major difference between the two comparable companies: while Alibaba is a platform where sellers and buyers meet to transact, JD.com is mainly a direct sales e-commerce company that sells directly to customers. So the fee that Alibaba asks to its sellers is not directly comparable with the price that JD.com imposes to its customers.

However, recently JD.com has been trying to increase the value and attractiveness of its marketplace, following the example of Alibaba. Transactions and advertising fees paid by retailers to JD.com have reached \$377 millions<sup>37</sup> in the last quarter of 2014, up 199% from the same period the year before.

JD.com is currently a loss-making company because its direct sales requires it to finance and manage a large inventory, while maintaining a capital-intensive logistics and infrastructure network of 123 warehouses and 3,210 delivery stations in China. For this reason, JD.com is trying to imitate the marketplace business model of Alibaba, leveraging on the delivery network and warehouses that it can offer to its merchants and that distinguish it.

Therefore, we decided to compare Alibaba brand value to JD.com brand value, but only taking into consideration JD.com's marketplace segment.

Our analysis showed that while Alibaba's revenues from its marketplace total more than \$5bn in 2013, JD.com is still realizing only \$1bn in 2014 from its marketplace.

37 Source: JD.com Q42014 Earnings Release

		Alibaba	JD.com	
		2014	2013	2014
Marketplace	GMV	\$248bn	\$5bn	\$16bn
	Revenues	\$5.8bn	\$0.37bn	\$1.04bn
	Number of Merchants	807,000	38,000	60,000
Total	Orders	11,300m	323m	689m
	Number of active customers	300m	47.4m	96.6m

Table 13: Comparison Alibaba-JD.Com

Looking at the table we can see that Alibaba dominates and has a competitive advantage with respect to JD.com for what concerns GMV, Marketplace Revenues, Number of Merchants, Total Number of Orders and Active Customers.

However, if we consider Total revenues of JD.com (\$18.5bn in 2014 and \$11bn in 2013) they are much higher than Alibaba's revenues. This is due to the prices to final customers.

The figures above show that Alibaba is 15 times bigger in terms of GMV, 5 times bigger in terms of Marketplace revenues, 13 times bigger in terms of Number of Merchants, 16 times bigger in terms of orders executed and 3 times bigger in terms of Number of Active Customers.

However, JD.com has a Price premium with respect to Alibaba: a merchant pays approximately \$7,000 per year on Alibaba, while \$18,000 in JD.com. We think that these \$11,000 difference is due to the network and delivery facility that JD.com is offering to its clients and that actually this does not represents a Price Premium of JD.com vs Alibaba, but simply the expense that customers need to incur for the network utilization. Moreover, the dimension of Alibaba's marketplace allows for economies of scale, thus cost advantage.

Thus, as the two services and relative prices are still not completely comparable, we do not want to use the Price Premium Method in its original form, but we want to apply a variation of it and compute the Volume Premium Method. We believe that the value of an internet platform relies mostly on the network effect that it offers and on the number of existing customers and transactions.

Alibaba has 807,000 paying members at the end of 2013 and each of them pays an annual fee between CNY30,000 (\$4,800) and CNY60,000 (\$9,600) plus a commission rate of 0.5% to 5% of the GMV transacted on Alipay. Thus considering total GMV gives a good idea of Alibaba's dominance of the market. However, it does not represent the all value created by the Alibaba brand since only the transactions executed on Alipay are actually billed to sellers.

We use the number of merchants on the marketplace as the volume variable and multiply the difference in the expected number of merchants in Alibaba and JD.com marketplaces per the Alibaba's price to find the Volume Premium of Alibaba.

We subtract the expenses related to brand management that Alibaba has in excess of JD.com to arrive to Brand Earnings.

The following tables show our assumptions and computations.

Data	Values/range	Comments
<b>China</b>		
Chinese Inflation	2.9%	Source: WEO Database (2015-2019)
<b>Alibaba</b>		
Yearly increase in Number of merchants	7%	We assume it equal to China GDP Growth
Brand Earnings growth rate	1.5%	Own estimate based on Notes to Financial Statements
Tax rate	19%	Source: Bernstein Research
Discount rate	12%	Source: Own calculations
Commission rate	0.05%	5.00% Source: Morningstar "Conservative Pricing Creates Opportunity for Wide-Moat Alibaba" pag. 5
Annual fee	4,800	9,600 (\$ Source: Morningstar "Conservative Pricing Creates Opportunity for Wide-Moat Alibaba" pag. 5
Paying Members	807,000	Source: F1 Form pag. 140
GMV settled through Alipay	5,800,000,000	Source: Yahoo! Finance "Alibaba Group Generated US\$9.3 Billion in GMV on 11.11 Shopping Festival"
<b>JD.com</b>		
Transactions & Advertising fees paid by retailers	1,040,044,000	(\$ Source: JD.com Q4 2014 Earnings Release
Commission rate	3.00%	10.00% Source: JD.com Q4 2014 Earnings Release
Annual fee	960	(\$ Source: JD.com Q4 2014 Earnings Release
GMV in the Marketplace	16,000,000,000	(\$ Source: JD.com Q4 2014 Earnings Release
Number of merchants	60,000	Source: JD.com Q4 2014 Earnings Release
Yearly increase in Number of merchants	58%	Source: JD.com Q4 2014 Earnings Release

Table 14: Price Premium Method Inputs

<b>Alibaba</b>	
Average Commission Rate	2.53%
GMV settled through Alipay	5,800,000,000
Revenues from GMV	146,450,000
Annual fee	7,200
Paying Members	807,000
Revenues from Annual fees	5,810,400,000
Total Revenues	5,956,850,000
Paying Members	807,000
Price per member	7,381

<b>JD.com</b>	
Average Commission Rate	6.5%
GMV in the Marketplace	16,000,000,000
Revenues from GMV	1,040,000,000
Annual fee	960
Number of merchants	60,000
Revenues from Annual fees	57,600,000
Total Revenues	1,097,600,000
Number of merchants	60,000
Price per member	18,293

Table 15: Computation of Alibaba and JD.com Prices



¥m a part from Price and Number of Paying members									
	2013	2014	2015	2016	2017	2018	2019	2020	2021
Number of Merchants									
Alibaba	807,000	863,490	923,934	988,610	1,057,812	1,131,859	1,211,089	1,295,866	1,386,576
<i>growth</i>		7%	7%	7%	7%	7%	7%	7%	7%
JD.com		60,000	90,374	129,555	176,302	227,098	276,018	315,407	337,486
<i>growth</i>		58%	51%	43%	36%	29%	22%	14%	7%
Difference in the number of merchants	807,000	803,490	833,560	859,055	881,511	904,761	935,072	980,458	1,049,090
Alibaba Price (\$)	7,381	7,596	7,816	8,042	8,276	8,516	8,763	9,017	9,278
Client Premium before taxes	5,957	6,103	6,515	6,909	7,295	7,705	8,194	8,841	9,734
Taxes	(1,132)	(1,160)	(1,238)	(1,313)	(1,386)	(1,464)	(1,557)	(1,680)	(1,849)
Client Premium after taxes	4,825	4,943	5,277	5,596	5,909	6,241	6,637	7,161	7,884
Alibaba									
Sales and Marketing Expenses	(558)	(741)	(947)	(1,142)	(1,206)	(1,274)	(1,354)	(1,461)	(1,609)
<i>%of Price Premium after taxes</i>	(12%)	(15%)	(18%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)
R&D Expenses	(611)	(831)	(1,126)	(1,376)	(1,453)	(1,534)	(1,632)	(1,761)	(1,939)
<i>%of Price Premium after taxes</i>	(13%)	(17%)	(21%)	(25%)	(25%)	(25%)	(25%)	(25%)	(25%)
Total	(1,169)	(1,572)	(2,073)	(2,518)	(2,659)	(2,808)	(2,986)	(3,222)	(3,548)
JD.com									
Marketing expenses	(256)	(600)	(641)	(679)	(717)	(757)	(806)	(869)	(957)
<i>%of Price Premium after taxes</i>	(5%)	(12%)	(12%)	(12%)	(12%)	(12%)	(12%)	(12%)	(12%)
R&D Expenses	(160)	(300)	(320)	(340)	(359)	(379)	(403)	(435)	(478)
<i>%of Price Premium after taxes</i>	(3%)	(6%)	(6%)	(6%)	(6%)	(6%)	(6%)	(6%)	(6%)
Total	(416)	(900)	(961)	(1,019)	(1,076)	(1,136)	(1,208)	(1,304)	(1,435)
Expenses related to Brand Management	(753)	(672)	(1,112)	(1,499)	(1,583)	(1,672)	(1,778)	(1,918)	(2,112)
Taxes	143	128	211	285	301	318	338	364	401
Brand Expenses after Taxes	(610)	(544)	(901)	(1,214)	(1,282)	(1,354)	(1,440)	(1,554)	(1,711)
Brand Earnings	4,215	4,399	4,376	4,382	4,627	4,887	5,197	5,607	6,174
Discounted value			4,376	3,912	3,689	3,478	3,303	3,182	3,128
Discount rate	12%								
Brand earnings growth rate	1.5%								
Present Value			25,067						
Terminal Value			30,234						59,677
Brand Value			55,302						

Table 16: Price Premium Method

¥M	Brand Earning Growth Rate				
	0.5%	1%	1.5%	2%	3%
9%	70,594	73,544	76,888	80,709	85,118
10%	63,236	65,478	67,983	70,802	73,996
11%	57,295	59,040	60,968	63,111	65,505
12%	52,401	53,785	55,302	56,970	58,814
13%	48,301	49,418	50,632	51,956	53,407
14%	44,818	45,732	46,718	47,787	48,949
15%	41,825	42,581	43,393	44,267	45,212

Table 17: Sensitivities Volume Premium Method

Considering that in the Notes to the Financial Statements in 2011 Brand Earning growth rate was estimated to be between 2.5% and 4%, we took a more conservative view because Alibaba has recently already expanded considerably. We assumed a brand earning growth rate of 1.5% and then computed sensitivities. The brand value obtained is \$55,302.

## 10.12 Margin Comparison Method

JD.com's EBIT Margins have been taken from Jefferies Brokers Report.

Alibaba EBIT Margins and Revenues are from BNP Paribas Brokers Report Estimates. For EBIT Margins soft landing period, Alibaba has been kept constant at 43% while JD.com EBIT Margin have been put constant at 4% based on Jefferies average estimates. For Alibaba Revenues in soft landing we assumed a final growth rate of 7% in 2021E, representing the expected Chinese LT growth.

\$M	Brokers Estimates				Soft Landing			
	2014A	2015E	2016E	2017E	2018E	2019E	2020E	2021E
Alibaba EBIT Margins	47%	35%	42%	42%	42%	42%	42%	42%
JD.com EBIT Margins	0%	-1%	1%	1%	4%	4%	4%	4%
<b>Margins difference</b>	<b>47%</b>	<b>36%</b>	<b>41%</b>	<b>41%</b>	<b>38%</b>	<b>38%</b>	<b>38%</b>	<b>38%</b>
Alibaba Revenues	8,401	12,358	16,494	20,961	25,585	29,945	33,544	35,893
<i>Revenues growth</i>		47%	33%	27%	22%	17%	12%	7%
Operating Margin Premium Cash Flow before Taxes	3,987	4,450	6,828	8,691	9,722	11,379	12,747	13,639
Taxes	(758)	(845)	(1,297)	(1,651)	(1,847)	(2,162)	(2,422)	(2,591)
<i>Tax Rate</i>	<i>19%</i>	<i>19%</i>	<i>19%</i>	<i>19%</i>	<i>19%</i>	<i>19%</i>	<i>19%</i>	<i>19%</i>
<b>Margin Premium Cash Flow after taxes</b>	<b>3,230</b>	<b>3,604</b>	<b>5,530</b>	<b>7,040</b>	<b>7,875</b>	<b>9,217</b>	<b>10,325</b>	<b>11,048</b>
Present Value of Brand Earnings		3,604	4,938	5,612	5,605	5,858	5,859	5,597
Discount rate		12%						
Total Present Value		37,073						
Terminal Value		27,412						54,105
Growth Rate		1.5%						
<b>Brand Value</b>		<b>64,484</b>						

Table 18: Margin Comparison Method

\$M		Alibaba EBIT Margins (2018-2021)						
		36.0%	38.0%	40.0%	42.0%	44.0%	46.0%	48.0%
JD.com EBIT Margins (2018-2021)	0%	61,835	64,484	67,133	69,782	72,431	75,080	77,729
	1%	60,511	63,160	65,809	68,458	71,107	73,756	76,405
	2%	59,186	61,835	64,484	67,133	69,782	72,431	75,080
	3%	57,862	60,511	63,160	65,809	68,458	71,107	73,756
	4%	56,537	59,186	61,835	64,484	67,133	69,782	72,431
	5%	55,213	57,862	60,511	63,160	65,809	68,458	71,107
	6%	53,889	56,537	59,186	61,835	64,484	67,133	69,782
	7%	52,564	55,213	57,862	60,511	63,160	65,809	68,458
	8%	51,240	53,889	56,537	59,186	61,835	64,484	67,133

Table 19: Sensitivities: Alibaba and JD.com 2018-2021 EBIT Margins

The brand value obtained with the Margin Comparison Method is \$64,484.

## 10.13 Excess Cash Flow Method

Variable	Value	Comments	Source
Brand Growth Rate	1.5%	Sensitivities made	As in all our computations
Working Capital	2.14%	We assume that Negative WC is invested in short term debt. We use the Alibaba 2017-2019 average bond yield	Source: Thomson One
Tangible Fixed Assets	10.5%	We use the Cost of Equity because the company is mostly financed through equity.	Source: Table 3
Financial Assets	5.81%	We use an average value between cost of equity and short term debt yield	Source: Discount Rate Computation table
Brand and Other Intangibles	12%	Wacc + Risk spread related to the brand	As in all our computations
Goodwill	13%	We consider Goodwill riskier than Other Intangibles	
Free Cash Flows			Forecasts Source: BNP Paribas Brokers Report

Table 20: Excess Cash Flow Method Assumptions

\$m	Required Return	Brokers' Report				Soft Landing			
		2014A	2015E	2016E	2017E	2018E	2019E	2020E	2021E
Free Cash Flows		2,217	3,403	5,226	6,606				
Growth rate			53%	54%	26%				
Working Capital	(2.1%)	(1,469)	(2,161)	(2,884)	(3,666)				
Financial Assets	5.8%	3,644	3,644	3,644	3,644				
Fixed Assets	10.5%	893	1,662	2,613	3,735				
Goodwill	13.0%	1,887	1,887	1,887	1,887				
Brand and Other Intangibles	12.0%	571	313	311	323				
Asset Employed x Required Return		651	715	830	966				
Free Cash Flows Attributable to the Brand		1,567	2,688	4,396	5,640	6,858	7,880	8,526	8,653
FCF Growth Rate			72%	64%	28%	22%	15%	8%	1.5%
Discounted Brand FCF			2,688	3,925	4,496	4,881	5,008	4,838	4,384
Discount Rate	12%								
Sum of Discounted FCF			30,219						
Terminal Value			42,380						83,650
Brand Value			72,599						

Table 21: Excess Cash Flow Method

\$m	Discount Rate	Growth Rate						
		0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%
	9%	88,157	92,523	97,434	102,999	109,358	116,694	125,252
	10%	78,950	82,383	86,198	90,460	95,254	100,686	106,894
	11%	71,435	74,193	77,227	80,580	84,304	88,466	93,147
	12%	65,187	67,444	69,904	72,599	75,562	78,836	82,474
	13%	59,915	61,788	63,816	66,020	68,424	71,056	73,951
	14%	55,408	56,982	58,677	60,507	62,489	64,643	66,992
	15%	51,513	52,850	54,283	55,822	57,479	59,268	61,205

Table 22: Excess Cash Flow Method - Sensitivity Analysis - Growth and Discount rate

\$m		WC Required Return						
		0.6%	1.1%	1.6%	<b>2.1%</b>	2.6%	3.1%	3.6%
Fixed Assets Required Return	7.5%	74,930	74,695	74,460	74,225	73,990	73,755	73,519
	8.5%	74,388	74,153	73,918	73,683	73,448	73,212	72,977
	9.5%	73,846	73,611	73,376	73,141	72,906	72,670	72,435
	<b>10.5%</b>	73,304	73,069	72,834	72,599	72,364	72,128	71,893
	11.5%	72,762	72,527	72,292	72,057	71,822	71,587	71,352
	12.5%	72,221	71,986	71,751	71,515	71,280	71,045	70,810
	13.5%	71,679	71,444	71,209	70,974	70,739	70,504	70,268

Table 23: Excess Cash Flow Method - Sensitivity Analysis - WC and Fixed Assets Required Return

\$m		Goodwill Required Return						
		10%	11%	12%	<b>13%</b>	14%	15%	16%
Intangible Assets Required Return	9%	103,665	103,443	103,221	102,999	102,778	102,557	102,336
	10%	91,057	90,858	90,659	90,460	90,261	90,063	89,865
	11%	81,123	80,942	80,761	80,580	80,400	80,219	80,039
	<b>12%</b>	73,098	72,931	72,765	72,599	72,433	72,267	72,102
	13%	66,483	66,328	66,174	66,020	65,866	65,713	65,560
	14%	60,939	60,795	60,651	60,507	60,363	60,220	60,077
	15%	56,228	56,093	55,957	55,822	55,687	55,553	55,418

Table 24: Excess Cash Flow Method - Sensitivity Analysis - Goodwill & Intangibles Required Return

The Excess Cash flow Method gives a brand value of \$72,599.

## 10.14 Historical Cost Method

To apply the Historical Cost Method we collected the amounts of Operating Costs incurred by Alibaba from 2006 to 2014 and we applied the Salinas (2009) ratio in order to derive the share of costs that can be attributable to the brand. However, being Alibaba a new company we believe that Salinas (2009) 75% ratio should be increased in order to take into account that an e-commerce company in its early stages invests almost the totality of its resources in order to build its brand. We therefore use 95%. Moreover, financial data of the company prior to 2006 are not publicly available, so we constructed an historical trend assuming that costs increase at a 5% rate for the first four years after the foundation of the company in 1999 and then increase at 10% for the next three years.

We included also Taxes and the Tax shield as required by the Canadian Institute Chartered Business Valuator. We considered Interest expenses and Depreciation and Amortization and applied a rate of 15% to compute the Tax Shield.

Given the fact that it is a recent business, we also took into account in the Historical Cost of Brand building what has been invested by the company since its creation.

\$m	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Revenues								218	346	480	620	889	1,027	3,179	5,621	5,863
Sales and Marketing Exp.	(55)	(58)	(61)	(64)	(71)	(79)	(88)	(98)	(118)	(175)	(260)	(328)	(327)	(486)	(588)	(741)
<i>Growth</i>		5%	5%	5%	10%	10%	10%	21%	21%	48%	49%	26%	0%	49%	21%	26%
Product Development Exp.	(9)	(10)	(11)	(11)	(12)	(14)	(15)	(17)	(21)	(30)	(61)	(93)	(126)	(460)	(611)	(831)
<i>Growth</i>		5%	5%	5%	10%	10%	10%	25%	25%	42%	106%	51%	35%	266%	33%	36%
G&A	(14)	(15)	(16)	(17)	(19)	(21)	(23)	(26)	(37)	(51)	(66)	(91)	(102)	(351)	(470)	(688)
<i>Growth</i>		5%	5%	5%	10%	10%	10%	44%	44%	39%	28%	39%	13%	243%	34%	46%
Taxes	(6)	(7)	(7)	(8)	(8)	(9)	(10)	(11)	(29)	(34)	(26)	(38)	(68)	(134)	(237)	(521)
<i>Growth</i>		5%	5%	5%	10%	10%	10%	10%	154%	16%	-22%	45%	81%	96%	77%	120%
Interests	4	4	4	4	4	4	4	4	55	38	23	28	51	(11)	(256)	(358)
D&A	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(12)	(20)	(36)	(41)	(111)	(128)	(215)
Tax rate	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Tax Shield	1	1	1	1	1	1	1	1	(7)	(4)	(0)	1	(2)	18	58	86
Total Brand-related Expenses	(84)	(89)	(94)	(99)	(110)	(122)	(136)	(151)	(212)	(293)	(413)	(548)	(624)	(1,413)	(1,848)	(2,695)
Salinas (2009) ratio adapted	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
Brand Expenses	(80)	(85)	(89)	(94)	(104)	(116)	(129)	(143)	(201)	(279)	(393)	(521)	(593)	(1,342)	(1,756)	(2,560)
Total Equity								23	497	795	511	534	1,203	874	284	1,050
Investments in the company									474	298	0	24	669	0	0	766
Total Investments in the company																2,230
Brand Value																10,715

Table 25: Historical Cost Method

The Historical Cost method gives a value of \$10,715m.

## 10.15 Replacement Cost Method

\$m	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Revenues								218	346	480	620	889	1,027	3,179	5,621	5,863
Sales and Marketing Exp.	(55)	(58)	(61)	(64)	(71)	(79)	(88)	(98)	(118)	(175)	(260)	(328)	(327)	(486)	(588)	(741)
<i>Growth</i>	0%	5%	5%	5%	10%	10%	10%	21%	21%	48%	49%	26%	0%	49%	21%	26%
Product Development Exp.	(9)	(10)	(11)	(11)	(12)	(14)	(15)	(17)	(21)	(30)	(61)	(93)	(126)	(460)	(611)	(831)
<i>Growth</i>	0%	5%	5%	5%	10%	10%	10%	25%	25%	42%	106%	51%	35%	266%	33%	36%
G&A	(14)	(15)	(16)	(17)	(19)	(21)	(23)	(26)	(37)	(51)	(66)	(91)	(102)	(351)	(470)	(688)
<i>Growth</i>	0%	5%	5%	5%	10%	10%	10%	44%	44%	39%	28%	39%	13%	243%	34%	46%
Taxes	(6)	(7)	(7)	(8)	(8)	(9)	(10)	(11)	(29)	(34)	(26)	(38)	(68)	(134)	(237)	(521)
<i>Growth</i>	0%	5%	5%	5%	10%	10%	10%	10%	154%	16%	-22%	45%	81%	96%	77%	120%
Interests	4	4	4	4	4	4	4	4	55	38	23	28	51	(11)	(256)	(358)
D&A	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(12)	(20)	(36)	(41)	(111)	(128)	(215)
Tax rate	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Tax Shield	1	1	1	1	1	1	1	1	(7)	(4)	(0)	1	(2)	18	58	86
Total Brand-related Expenses	(84)	(89)	(94)	(99)	(110)	(122)	(136)	(151)	(212)	(293)	(413)	(548)	(624)	(1,413)	(1,848)	(2,695)
Salinas (2009) ratio adapted	95%															
Brand Expenses	(80)	(85)	(89)	(94)	(104)	(116)	(129)	(143)	(201)	(279)	(393)	(521)	(593)	(1,342)	(1,756)	(2,560)
Inflation	(1.40%)	0.40%	0.70%	(0.80%)	1.20%	3.90%	1.80%	1.50%	4.80%	5.90%	(0.70%)	3.30%	5.40%	2.65%	2.62%	2.28%
Inflation Factor	0.986	1.004	1.007	0.992	1.012	1.039	1.018	1.015	1.048	1.059	0.993	1.033	1.054	1.026	1.026	1.023
Cumulated Inflation Factor	1.335	1.349	1.345	1.338	1.346	1.334	1.295	1.277	1.262	1.214	1.155	1.162	1.129	1.075	1.049	1.023
Brand Expenses in Present Money value	(107)	(114)	(120)	(125)	(140)	(155)	(167)	(183)	(254)	(338)	(454)	(606)	(670)	(1,443)	(1,842)	(2,619)
Capitalized Brand Expenses	(587)	(557)	(523)	(489)	(488)	(480)	(463)	(453)	(561)	(668)	(800)	(953)	(941)	(1,811)	(2,063)	(2,619)
Brand Value																14,456

Table 26: Replacement Cost Method

Salinas ratio of Brand Expenses		Salinas ratio of Brand Expenses						
		70%	75%	80%	85%	90%	95%	100%
Discount Rate	9%	9,388	10,059	10,729	11,400	12,070	12,741	13,411
	10%	9,778	10,477	11,175	11,874	12,572	13,271	13,969
	11%	10,199	10,927	11,655	12,384	13,112	13,841	14,569
	12%	10,652	11,412	12,173	12,934	13,695	14,456	15,216
	13%	11,140	11,936	12,732	13,527	14,323	15,119	15,914
	14%	11,668	12,501	13,334	14,168	15,001	15,835	16,668
	15%	12,238	13,112	13,986	14,860	15,734	16,608	17,482

Table 27: Replacement Cost Method - Sensitivities

The Replacement Cost Method gives a value of \$14,456m.

## 10.16 Transaction Multiple Method

To apply the Transaction Multiple Method we looked at recent acquisitions of e-commerce companies done by Alibaba's main competitors. We selected one acquisition done by e-Bay, two acquisitions done by Amazon and one acquisition done by Baidu. In the four acquisitions, the acquirer was taking control of 100% of the target (for the Nuomi Holding Inc. acquisition, Baidu was buying the remaining 41% stake, having bought already 59% of the company four months before).

In the cases of GSI Commerce Inc and Zappos.com Inc, the acquired brand value was explicitly reported in the acquiror's annual report. However, for the other two transactions, we had to estimate the brand value of the target based on the information available in the annual reports of the acquirer. In particular, for Quidsi Inc, considering that the enterprise value represents 70% of Amazon's acquisition value in 2011 (\$771m), we assumed that of the total Marketing-related Intangible Assets acquired (\$130m), Quidsi brand value could be estimated as being 70% of them. For Nuomi Holdings Inc, we assumed a ratio Brand Value at Acquisition over Enterprise Value at Acquisition similar to that resulting in the 91 Wireless Acquisition, thus reaching a Brand Value of \$8m.

To compute the Implied Multiple we decided to use the Operating Margin of the Target companies at the time of acquisition. The decision being driven by the possible non-comparability of different companies revenues because different e-commerce companies bill their customers in different ways, something focusing only on sellers, sometimes billing all users; their fees are also quite different, being sometimes a fixed annual fee, some other a percentage of GMV. We were able to find data about the operating income of all targets a part from Quidsi Inc, of which we instead found data about sales. Thus we estimated Quidsi Inc. operating income applying the industry average operating margin of 6%. For 91 Wireless, we found that Net Income was \$4.6m and decided to estimate operating income at \$6m. Finally, we computed the multiple by looking at how many times the Brand Value at transaction Time was bigger than the Operating Income of the Target at transaction Time. We found a median of 8x, excluding Nuomi Holdings Inc, because it had negative Operating Income.

The benefit of using the Enterprise Value Comparison method is the neutralisation of the impact of the different net financial debts.

Date	Target	Target Description	Acquiror	Stake Acquired	EV at acquisition (\$m)	Brand Value at Transaction Time (\$m)	Target Operating Income at the time of the Transaction (\$m)	Implied Multiple
17/06/2011	GSI Commerce Inc	GSI is a leading provider of ecommerce and interactive marketing services.	Gibraltar Acquisition Corp (e-Bay Inc)	100%	1,710	8	10	1
27/04/2011	Quidsi Inc.	Fast growing e-commerce company and parent of Diapers.com (baby care), Soap.com (household essentials) and BeautyBar.com (prestige beauty). It focuses on fast delivery and customer service	Amazon.com Inc.	100%	545	91	11	8
01/11/2009	Zappos.com Inc.	Operates an online store that sells apparel and footwear (shoes, clothing items, beauty products, bags and handbags, accessories, housewares, gift cards...). It also provides a mobile shopping application for iPad.	Amazon.com Inc	100%	920	223	22	10
28/02/2014	Nuomi Holdings Inc	Offers group buying services and products. Entertainment, dining, health and beauty services make up the majority of its social commerce. Nuomi users can access the service through nuomi.com and Nuomi's mobile app.	Baidu Holdings Ltd	Remaining 41% stake	300	8	(27)	
01/10/2013	91 Wireless	Leading Chinese mobile application marketplace and mobile games producer. Integrates dominant products such as 91 Assistant, Android Market, 91 Open Mobile Platform, 91 Panda Reader, 91 Panda Desktop, Android Desktop, 91 Cellphone Entertainment Portal, and Hiapk.com as a content portal for a complete application product group.	Baidu Inc	100%	1,830	48	6	8
<b>Median</b>								<b>8.0</b>
Alibaba 2015E Operating Income								4,326
Alibaba Brand Value								34,610

Table 28: Transaction Multiple Method



Multiple	Brand Value
5	21,631
6	25,957
7.0	30,284
<b>8</b>	<b>34,610</b>
9.0	38,936
10	43,262
11.0	47,589

Table 29: Sensitivities -  
Transaction Multiple Method

The brand value obtained is \$34,610m.

## 10.17 Demand Driver Approach

### 1) EBIT Differential

	2013A	2014A	2015E	2016E
Alibaba EBIT	1,751	4,046	5,347	7,159
JD.com EBIT	-96	-935	-433	115
EBIT Differential	1,847	4,981	5,780	7,044
Inflation adjustment	1.026	1.023	1.025	1.030
EBIT Differential inflation adjusted	1,895	5,096	5,925	7,255
PV of EBIT Differential	2,377	5,707	5,925	
<i>Discount Rate</i>			12%	
Weighting Factor	1	2	3	
Weighted Average of PVs			5,261	
Allowance for future reduction in EBIT Differential			-1,052	
<i>Allowance rate</i>			20%	
Capital Remuneration			-631	
Brand differential earnings before Tax			3,577	
Taxes			-680	
<i>Tax Rate</i>			19%	
<b>Brand Differential Earnings</b>			<b>2,898</b>	
Table 30: Demand Driver Approach				

### 2) Alibaba brand strength score computation

#### Leadership

Alibaba is the dominant leader in China e-commerce with 80% market share. It is the largest online and mobile commerce company in the world in terms of GMV in 2013, according to the technology research firm IDC. At the same time, iResearch defines Taobao Marketplace

as China's largest online shopping destination, Tmall as China's largest third party platform for brands and retailers for GMV and Juhuasuan as China's most popular group buying marketplace by monthly active users. BABA also operates Alibaba.com, China's largest global wholesale marketplace by revenues. Alibaba's dominant position in China is protected by positive network effects and scale. However, considering that Alibaba has still a lot to gain in international expansion (being China revenues 80% of total revenues) we consider its leadership very strong but only in China. We thus give a score of 15/25.

### *Stability*

Being founded in 1999 the company is 16 years old and has been creating many new brands during its life. However, it is still a new company and its size and popularity have raised very recently, especially thanks the IPO. It will possibly gain stability in the future, but at the moment we think a score of 7/15 is reasonable.

### *Market*

Marketline states that the strong market growth in the online retail industry alleviates the rivalry caused by the large number of players and low switching costs for consumers. The sector is very competitive because customers can easily make comparisons between different prices but at the same time many consumers are concerned about the security of online transactions, which increases loyalty to well-known retailers. Barriers to entry are low due to low fixed costs, little regulation and easy access to suppliers. Small companies may enter the market by providing specialized or niche products. We give a score of 5/10.

### *Internationality*

As mentioned earlier, Alibaba has recently gained in international expansion but we believe that it has still a lot to gain on this front. China revenues are still 80% of total revenues thus we give a score of 8/25.

### *Trend*

Being Alibaba a marketplace, it does not sell own products thus it is difficult to evaluate its trend characteristic. However, we can consider trendy the fact that e-commerce is moving from direct sales towards the marketplace concept (as previously seen, also JD.com is trying to follow Alibaba's path). We give a score of 7/10.

### *Support*

During the last decade, Alibaba has highly sustained its brand investing on average 47% of its revenues in Sales and Marketing and Product Development Expenses. In the last three years, having its brand recognition increased considerably, 26% of revenues have been dedicated to brand-related expenses. We consider that Alibaba can give all the necessary support needed to further expand the awareness and loyalty to its brand. We therefore give a score of 8/10.

### *Protection*

As of 31 December 2013, Alibaba had 323 issued patents and 837 publicly filed patent applications in China and 512 issued patents and 1,762 publicly filed patent applications in

various countries internationally<sup>38</sup>. While consider Alibaba’s trademarks protected, to be conservative on the results of patent applications we give a rate of 3/5.

Strength Factor	Maximum score	Alibaba's score
Leadership	25	15
Stability	15	7
Market	10	5
Internationality	25	8
Trend	10	7
Support	10	8
Protection	5	3
<b>Brand Srength</b>	<b>100</b>	<b>53</b>

Table 31: Alibaba's Brand Score

S-Curve Construction

Brand Score	Multiplier
0	7.12
5	7.12
10	7.12
15	7.12
20	7.12
25	7.13
30	7.14
35	7.21
40	7.63
45	9.85
50	16.73
55	23.61
60	25.82
65	26.24
70	26.32
75	26.33
80	26.33
85	26.33
90	26.33
95	26.33
100	26.33

Table 32: Brand Multiplier

38 Source: F-1 Pag.170

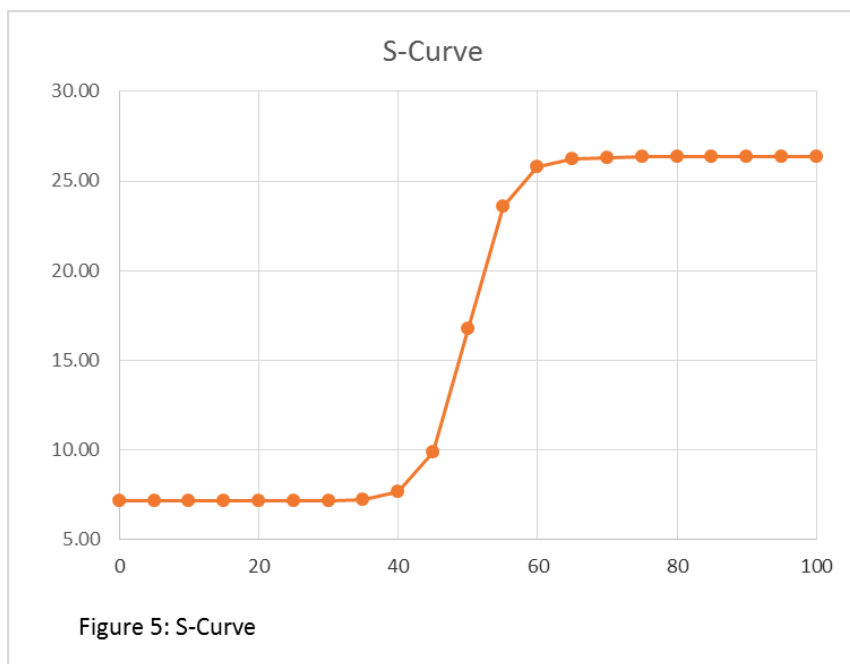


Figure 5: S-Curve

Final Result	
Alibaba brand's score	53
Multiple	16.73
Brand Differential Earnings	2,898
<b>Alibaba brand's value</b>	<b>48,477</b>

Table 33: Demand Driver Approach Final Result

The Demand Driver Approach gives a brand value of \$48,477.

### 10.18 Real Options Method

Firstly, we value the Alibaba brand assuming no growth through the Baldi and Trigeorgis Approach. We apply the Royalty Relief Method and impose 0% growth starting from 2017. This means that past investments will payoff in 2015 and 2016 and then maintenance investment will allow for stability but no growth in the following years.

(\$M)			Brokers' Forecast			Soft Landing			
	2013A	2014A	2015E	2016E	2017E	2018E	2019E	2020E	2021E
Revenues	5,523	8,401	12,358	16,494	20,961	20,961	20,961	20,961	20,961
Growth		52%	47%	33%	27%	0%	0%	0%	0%
Retail Revenues %	79%	79%	79%	79%	79%	79%	79%	79%	79%
Brand Related Revenues	4,374	6,653	9,788	13,063	16,601	16,601	16,601	16,601	16,601
Royalty Rate			12%						
Pre-Tax Royalty Savings	525	798	1,175	1,568	1,992	1,992	1,992	1,992	1,992
Tax rate	14%	12%	19%	19%	19%	19%	19%	19%	19%
Post-Tax Royalty Savings	451	703	951	1,270	1,614	1,614	1,614	1,614	1,614
Discount rate			12%						
Discounted Royalty Savings			951	1,134	1,286	1,149	1,025	916	818
Present Value of Royalty Savings			7,279						
Terminal Value									13,447
Present Value of Terminal Value			6,813						
Brand Value			14,091						

Table 34: Real Option Method - 0% growth

Alibaba's Chairman Jack Ma is defining a strategy of global growth for the group. He plans to expand in the US, Europe, Russia and Brazil<sup>39</sup>.

We define 2016 as the starting year of the investment strategy and 2019 as the final year. We use BNP Paribas forecasts of CAPEX in the period selected and of the total amount we estimate that 50% will be used for global expansion while the other 50% will be invested in China.

		2015E	2016E	2017E	2018E	2019E	2020E
Group Capex			1,567	1,991	2,456	2,992	3,291
% Dedicated to expansion			50%	50%	50%	50%	50%
Capex for global expansion			783	996	1,228	1,496	1,646
Capex Value discounted to 2015			700	794	874	951	934
Discount rate			12%				
Total global investments discounted			4,252				
US	30%		1,276				
Europe	30%		1,276				
Brazil	20%		850				
Russia	20%		850				

Table 35: Investments for growth options

39 Source: Fortune « Alibaba's muddled growth strategy »

US (\$M)			
Current 2015		Objective 2019	
<b>Market</b>			
Market size (\$m)	363,537	Market size (\$m)	564,159
CAGR (2015-2019)	11.61%		
<b>Aibaba</b>			
Aibaba Market share	0%	Aibaba Market share	3%
Alibaba sales	0	Alibaba sales	16,925
2019 Target Investment	1,276		
		Sales if no investments	0
PV of 2019 Expected Cash Flow	12,407	Expected Cash Flows	16,925
<b>WACC Computation</b>			
Risk Free rate	1.92%	Source: Bloomberg - US 10r Gv Bond yield	
Alibaba Beta	1.07	Source: UBS Brokers Report	
US Equity Risk Premium	5.75%	Source: Damodaran	
Cost of Equity	8.07%		
Gearing	0%	Negative Net Debt	
Wacc	8.07%		
<b>Black-Scholes Model</b>			
S	12,407		
K	1,276		
T	4		
r	1.92%		
sigma	40%		
d1	3.3396		
d2	2.5396		
N(d1)	0.9996		
N(d2)	0.9945		
US expansion call option value	11,227		

Table 36: Real Option - US

	\$M	Volatility						
		25%	30%	35%	40%	45%	50%	55%
Investments	850	11,620	11,620	11,620	11,620	11,620	11,622	11,626
	1,063	11,422	11,422	11,423	11,423	11,425	11,428	11,435
	1,276	11,225	11,225	11,225	11,227	11,230	11,236	11,247
	1,488	11,029	11,029	11,030	11,032	11,037	11,047	11,063
	1,701	10,832	10,832	10,833	10,837	10,845	10,860	10,882

Table 37: US Real Option - Sensitivities

	\$M	2019 Market Share						
		1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%
Investments	850	5,419	7,485	9,552	11,620	13,688	15,755	17,823
	1,063	5,226	7,289	9,356	11,423	13,491	15,558	17,626
	1,276	5,036	7,095	9,160	11,227	13,294	15,361	17,429
	1,488	4,851	6,904	8,966	11,032	13,098	15,165	17,233
	1,701	4,670	6,715	8,773	10,837	12,902	14,969	17,036

Table 38: US Real Option - Sensitivities

Europe (\$M)			
Current 2015		Objective 2019	
Market			
Market size (\$m)	322,815	Market size (\$m)	490,530
CAGR (2015-2019)	11.03%		
Aibaba			
Aibaba Market share	0%	Aibaba Market share	2.0%
Alibaba sales	0	Alibaba sales	9,811
2019 Target Investment	1,276		
		Sales if no investments	0
PV of 2019 Expected Cash Flow	7,138	Expected Cash Flows	9,811
WACC Computation			
Risk Free rate	1.48%	Source: Bloomberg - UK 10r Gv Bond yield	
Alibaba Beta	1.07	Source: UBS Brokers Report	
US Equity Risk Premium	6.35%	Source: Damodaran for UK	
Cost of Equity	8.27%		
Gearing	0%	Negative Net Debt	
Wacc	8.27%		
Black-Scholes Model			
S	7,138		
K	1,276		
T	4		
r	1%		
sigma	40%		
d1	2.6266		
d2	1.8266		
N(d1)	0.9957		
N(d2)	0.9661		
Europe expansion call option value	5,946		

Table 39: Real Option - Europe

\$M		Volatility						
		25%	30%	35%	40%	45%	50%	55%
Investments	850	6,337	6,337	6,337	6,339	6,342	6,348	6,358
	1,063	6,136	6,137	6,138	6,141	6,148	6,159	6,175
	1,276	5,936	5,936	5,939	5,946	5,957	5,975	6,000
	1,488	5,736	5,738	5,743	5,754	5,773	5,799	5,832
	1,701	5,536	5,539	5,548	5,566	5,592	5,627	5,670

Table 40: Europe Real Option - Sensitivities

\$M		2019 Market Share						
		0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%
Investments	850	1,059	2,783	4,557	6,339	8,122	9,907	11,691
	1,063	923	2,601	4,363	6,141	7,923	9,707	11,491
	1,276	807	2,429	4,174	5,946	7,725	9,507	11,291
	1,488	707	2,268	3,991	5,754	7,530	9,310	11,092
	1,701	622	2,117	3,814	5,566	7,336	9,113	10,894

Table 41: Europe Real Option - Sensitivities

Russia (\$m)			
Current 2015		Objective 2019	
<b>Market</b>			
Market size (\$m)	15,256	Market size (\$m)	24,329
CAGR (2015-2019)	12.37%		
<b>Aibaba</b>			
Aibaba Market share	0%	Aibaba Market share	0.9%
Alibaba sales	0	Alibaba sales	219
2019 Target Investment	850		
		Sales if no investments	0
PV of 2019 Expected Cash Flow	101	Expected Cash Flows	219
<b>WACC Computation</b>			
Risk Free rate	12.18%	Source: investing.com - Russia 10r Gv Bond yield	
Alibaba Beta	1.07	Source: UBS Brokers Report	
US Equity Risk Premium	8.60%	Source: Damodaran	
Cost of Equity	21.38%		
Gearing	0%	Negative Net Debt	
Wacc	21.38%		
<b>Black-Scholes Model</b>			
S	101		
K	850		
T	4		
r	12%		
sigma	40%		
d1	-1.6558		
d2	-2.4558		
N(d1)	0.0489		
N(d2)	0.0070		
Russia expansion call option value	1.26		

Table 42: Real Option - Russia

\$M		Volatility						
		25%	30%	35%	40%	45%	50%	55%
Investments	425	0.87	2.27	4.37	7.06	10.22	13.72	17.46
	638	0.10	0.47	1.32	2.76	4.78	7.33	10.33
	850	0.01	0.12	0.48	1.26	2.55	4.38	6.72
	1,063	0.00	0.04	0.20	0.64	1.48	2.80	4.63
	1,276	0.00	0.01	0.09	0.35	0.91	1.89	3.34

Table 43: Russia Real Option - Sensitivities

\$M		2019 Market Share						
		0.6%	0.7%	0.8%	0.9%	1.0%	1.1%	1.2%
Investments	425	1.85	3.15	4.88	7.06	9.70	12.79	16.31
	638	0.59	1.09	1.80	2.76	3.99	5.50	7.31
	850	0.23	0.45	0.79	1.26	1.89	2.70	3.69
	1,063	0.10	0.21	0.38	0.64	0.98	1.44	2.02
	1,276	0.05	0.11	0.20	0.35	0.55	0.82	1.18

Table 44: Russia Real Option - Sensitivities



Brazil (\$M)			
Current 2015		Objective 2019	
<b>Market</b>			
Market size (\$m)	20,663	Market size (\$m)	26,203
CAGR (2015-2019)	6.12%		
<b>Aibaba</b>			
Aibaba Market share	0%	Aibaba Market share	0.5%
Alibaba sales	0	Alibaba sales	131
2019 Target Investment	850		
		Sales if no investments	0
PV of 2019 Expected Cash Flow	78	Expected Cash Flows	131
<b>WACC Computation</b>			
Risk Free rate	4.49%	Source: Bloomberg - Brazil 10r Gv Bond yield	
Alibaba Beta	1.07	Source: UBS Brokers Report	
US Equity Risk Premium	8.60%	Source: Damodaran for Brazil	
Cost of Equity	13.69%		
Gearing	0%	Negative Net Debt	
Wacc	13.69%		
<b>Black-Scholes Model</b>			
S	78		
K	850		
T	4		
r	4%		
sigma	40%		
d1	-2.3551		
d2	-3.1551		
N(d1)	0.0093		
N(d2)	0.0008		
Brazil expansion call option value	0.16		

Table 45: Real Option - Brazil

\$M		Volatility						
		25%	30%	35%	40%	45%	50%	55%
Investments	425	0.03	0.18	0.61	1.43	2.68	4.36	6.42
	638	0.00	0.02	0.13	0.42	1.01	1.96	3.31
	850	0.00	0.00	0.04	0.16	0.46	1.03	1.94
	1,063	0.00	0.00	0.01	0.07	0.23	0.60	1.23
	1,276	0.00	0.00	0.00	0.03	0.13	0.37	0.83

Table 46: Brazil Real Option - Sensitivities

\$M		2019 Market Share						
		0.2%	0.3%	0.4%	0.5%	0.6%	0.7%	0.8%
Investments	425	0.03	0.18	0.60	1.43	2.77	4.71	7.27
	638	0.00	0.04	0.16	0.42	0.90	1.65	2.72
	850	0.00	0.01	0.05	0.16	0.36	0.69	1.20
	1,063	0.00	0.00	0.02	0.07	0.16	0.33	0.59
	1,276	0.00	0.00	0.01	0.03	0.08	0.17	0.31

Table 47: Brazil Real Option - Sensitivities

The final value of the brand is the sum of the brand value without growth and the four options values.

Real Options Brand Value	
Alibaba brand assuming no growth	14,091
Expansion in US Option	11,227
Expansion in Europe Option	5,946
Expansion in Russia Option	1.26
Expansion in Brazil Option	0.16
<b>Alibaba Brand Value (\$M)</b>	<b>31,265</b>
Table 48: Real Option Method	

The brand value obtained with the Real Option Method is \$31,265.

### 10.19 Results Summary

Method	Brand Value
Royalty Relief	39,061
Volume Premium	55,302
Margin Comparison	64,484
Excess Cash Flow	72,599
Historical Cost	10,715
Replacement Cost	14,456
Transaction Multiple	34,610
Demand Driver Approach	48,477
Real Option Method	31,265
<b>Average</b>	<b>41,219</b>
<b>Median</b>	<b>39,061</b>
Table 49: Results Summary	

## Appendix

Internet Pure Play retailers						
North America	2009	2010	2011	2012	2013	2014
Amazon.com Inc	25.2	27.8	31.5	33.3	34.2	35
eBay Inc	14.2	12.5	10.4	10.5	9.7	9.5
Apple Inc	4.4	4.3	4.5	5.4	6.8	6.9
Valve Corp	1	1.6	2.1	2.5	2.8	3.1
Newegg.com Inc	3.6	3.1	2.7	2.4	1.9	1.7
Kynetic LLC	-	-	1	1.2	1.2	1.2
Overstock.com Inc	1.7	1.7	1.4	1.2	1.2	1.1
Wayfair LLC	-	-	0.6	0.6	0.8	1
Etsy Inc	0.3	0.5	0.6	0.8	0.9	1
Hewlett-Packard Development Co LP	2.5	2.2	1.7	1.4	1.1	0.9
LL Bean Inc	1.8	1.6	1.4	1.2	1	0.9
Groupon Inc	-	-	-	0.4	0.7	0.8
Rakuten Inc	-	1.1	1	0.8	0.7	0.6
OSP Group	-	-	-	-	0.7	0.6
Systemax Inc	1.8	1.5	1.2	0.8	0.5	0.4
Walgreen Co	-	-	0.6	0.5	0.5	0.4
Gilt Groupe Inc	0.3	0.5	0.5	0.5	0.4	0.4
1-800-Flowers.Com Inc	0.6	0.5	0.5	0.4	0.4	0.3
Blue Nile Inc	0.5	0.5	0.4	0.4	0.3	0.3
Eddie Bauer Holdings Inc	0.3	0.3	0.2	0.2	0.2	0.2
Asos Plc	0	0	0.1	0.1	0.1	0.1
Longo Bros Fruit Markets Inc	0.1	0.1	0.1	0.1	0	0
Catalog Holdings Corp	0.5	0.1	0	0	0	-
PPR SA	-	1.2	1	0.9	-	-
Charming Shoppes Inc	0.1	0	0	-	-	-
Najafi Group	1.2	0.7	-	-	-	-
Drugstore.com Inc	0.7	0.7	-	-	-	-
CSN Stores Inc	0.5	0.6	-	-	-	-
Quidsi Inc	0.4	0.5	-	-	-	-
GSI Commerce Inc	0.3	0.3	-	-	-	-
Buy.com Inc	1.3	-	-	-	-	-
Bertelsmann AG	-	-	-	-	-	-
Zappos.com Inc	-	-	-	-	-	-
Others	37	36.3	36.7	34.5	33.8	33.5
Total	100	100	100	100	100	100

Source: Euromonitor Passport

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