The document proposes to review to key advantages and disadvantages of the most standard valuation methods used in Corporate Finance. This paper will cover the asset based (Cost to Build, Replacement Cost), the market based (Comparable Companies, Precedent Transactions), and the income based valuation techniques (Capitalisation of Earnings, Discounted Cash-Flows).

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1. Introduction

Various methods can be used to estimate the economic value of a company or a business, from classical methods to non-standard approaches. Market practices often favour a quantitative approach, where parameters are derived from financial statements of companies, but more qualitative methods more recently emerged, particularly for less mature businesses.

Considering that those methods have widely been discussed into the modern literature, the purpose of this document is not to define those techniques, but well to compare them and highlight the main strengths and weaknesses of the most standard methods.

2. Metrics at a Glance

Standard Valuation Method

Asset Based	Market Based	Income Based		
Cost to Build	Comparable Companies	Capitalisation of Earnings		
Replacement Cost	Precedent Transactions	Discounted Cash-Flows		
		Incremental Future CFs	Total CFs	Perpetual Growth

Asset Based
The Asset Based method derives the valuation of a company from its net asset value (total assets – total liabilities). The method is frequently used for tangible assets like real estate properties.

Cost to Build	
Method mostly used for real estate valuations, consisting in assessing the cost that would incur if the property was built from scratch. The rationale is that no investor would be ready to pay more for a property that it will cost to build an equivalent new property.	
Advantages	**Pitfalls**
⇒ Easy to understand, quick to compute. ⇒ Useful to value very specific properties.	⇒ IRR doesn't consider the size of cash-flows. Large projects with high positive CFs can have a lower IRR than projects with lower

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	CFs. IRR must then be used to assess mutually exclusive projects as it ignores the size of those projects. ⇒ May deviate from the market value of past sales.

Replacement Cost	
This approach is also mostly applied to real estate assets; it consists in assessing the price it would incur to replace an existing asset at the current market price.	
Advantages	**Pitfalls**
⇒ Require little data to perform the valuation. ⇒ Simple approach that can easily be monitored and challenged.	⇒ Doesn't consider the cash-flows generated by the property. A property can have a lower valuation than a similar asset but generates higher periodic cash-flows. ⇒ Ignores intangibles assets. ⇒ Doesn't consider a change in market conditions, for instance, future inflation. ⇒ Strong assumptions can be required, for instance, assuming that all the conditions are met to re-build a similar property (finding land, *etc.*).

Market Based
A Market Based method relies on market indicators to derive the valuation of a company (*i.e.* it doesn't depend on financial statements or accounting metrics). This method is also known as extrinsic form of valuation, or relative form of valuation. The "Comparable Company Analysis" method and the "Precedent Transactions" method are frequently used in terms of valuation.

Comparable Companies	
The Comparable Company analysis is a method used to evaluate the value of a company by comparing the company's valuation multiples with those of peers active in a similar business, with similar size, and operating in a similar industry and/or region. The comparison can for instance be achieved *via* a scorecard method or a checklist method.	
Advantages	**Pitfalls**
⇒ Easy to interpret. ⇒ Can be used as a benchmark in order to compare with other market players. ⇒ Not dependent on any financial forecast.	⇒ It can be challenging to find companies similar to the business analysed. Companies tend to have their own specificities. ⇒ Absence of data for companies in the private sector. ⇒ Can be influenced by non-fundamental factors. ⇒ Is impacted by the macro conditions (bullish or bearish market sentiment).
Precedent Transactions	
Precedent Transaction analysis, also referred as historical transactions, or as M&A comps, is a method frequently used in the Investment Banking space, and that consists in deriving the value of a company from historical transactions using key multiples from a sector.	

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Advantages	Pitfalls
⇒ Relies on public data. ⇒ Good indicator about the market sentiment around the sector, and the premium investors are ready to pay.	⇒ The method doesn't capture potential synergies. ⇒ Companies tend to have their own specificities, making the comparison difficult. ⇒ Except if an advanced average of past transactions is used, choosing one strategy over another one can provide a wrong picture. ⇒ Market conditions are not static and vary in time. Past postulates are not necessarily applicable to present markets.

Income Based

The Income Based valuation method relies on the assumption that the current value of a business lies on its ability to generate future revenues. The method is considered as an intrinsic form of valuation.

Capitalisation of Earnings

The Capitalisation of Earnings method doesn't require any assumption about the growth of future cash-flows. The method consists in assuming that future benefits are capitalised using an appropriate capitalisation rate.

Advantages	Pitfalls
⇒ The method relies on a simple formula, easily understandable by investors. ⇒ It focuses on the profit streams generated by a company, which is an approach generally valued by investors to estimate a business. ⇒ Because capitalisation of earnings is simpler to explain than DCF, the method can be advantageous to be used in specific situation, like in case of bankruptcy or for litigation purposes. ⇒ It doesn't require forecasting any time-horizon, it is a single period approach.	⇒ The capitalisation rate reflects the rate of return investors are expecting, defining an accurate number can be challenging. ⇒ It can be difficult for companies with just a few years operation to predict future expected earnings. The method is more adequate for stable and mature businesses, where the earnings growth can be predicted. ⇒ The method focuses on future earnings and neglects other balance sheet components as assets or liabilities. ⇒ The valuation can be significantly different from the market valuation of the company.

Discounted Cash-Flows - Incremental Future CFs

The Discounted Cash-Flows method evaluates the value of an investment from the net present value of its future cash-flows; cash-flows are discounted by the weighted cost of capital (including cost of debt and equity). The method requires to know the time horizon and the terminal value (exit value of the company).

Advantages	Pitfalls
⇒ Forward looking method not impacted by historical inputs. ⇒ Fundamental analytic, relying on cash-flows generation, not directly Impacted by market factors. ⇒ Not impacted by short-term market	⇒ Highly dependent on the assumptions about the free-cash-flows generation, the Discount Rate (often the WACC), the Terminal Value of the business, and the forecasting period (usually horizon is 3 to 5 years). ⇒ The Terminal Value is usually the component

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volatility. ⇒ Sub-additive measure, allowing to split the business into several components. ⇒ A sensitivity analysis can easily be implemented by amending the underlying parameters.	with the biggest weight in the equation. ⇒ Difficult to apply to fast-growing companies, or for early stage companies like start-up or Venture Capital businesses. ⇒ Doesn't consider the valuation of market peers.

Discounted Cash-Flows - Total Cash-Flows

The Total Cash-Flows method is very similar to the Incremental Future CFs approach, except that both past and future cash-flows are considered into the valuation.

Advantages	Pitfalls
⇒ In addition to the advantages of the Incremental Future CFs method, the Total Cash-Flows approach is particularly useful at a project level, considering that it assesses a project profitability from inception.	⇒ In addition to the disadvantages of the Incremental Future CFs method, the fact that the method considers past CFs is less relevant at a business valuation level.

Discounted Cash-Flows - Perpetual Growth

This technique is a simplified version of the Discounted Cash-Flows method. It assumes that a single future CF can be considered as a reliable estimate of what the business will generate in the future. The method assumes that future CFs will grow at a steady pace into perpetuity. This method is also called Gordon-Growth model.

Advantages	Pitfalls
⇒ Since the method is not impacted by market conditions, it facilitates the comparison between businesses. ⇒ Can be implemented to all type of companies, mature and less mature ones.	⇒ The assumption that future CFs will grow at a steady pace into perpetuity is a strong assumption. ⇒ The model doesn't manage non-linear growth pattern. ⇒ Very sensitive model, any minor change into the growth rate would have a significant impact on the company value. ⇒ Model too simplistic, that focuses on a narrow number of parameters and neglects fundamental determinants to value a firm.

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