Intangible Asset Valuation
Wall Street is the only place that people ride to in a Rolls Royce to get advice from those who take the subway.

------ Warren Buffett
Agenda

**Purpose**

- To understand nature and classification of intangibles
- Related identification of intangibles and the need for valuation of intangibles
- How to value intangibles

**Duration**

- Approx 70 minutes (including time for questions, if any)

**Takeaway**

- Tangible working knowledge on how to value intangibles
Intangible Assets

When do we value?

Why do we value?

What do we value?

How do we value?
When do we value intangibles?
The When

- For the Purpose of Accounting
  - Purchase Price Allocation (Ind AS 103 on Business Combinations)
    (Ebix – Yatra 84% premium to market price)
  - Impairment Testing (Ind AS 36 on Impairment of Assets)
    (Kraft – Heinz $7.1 billion goodwill and $8.3 billion intangible assets)

- For the Purpose of Tax
  - Amortization benefits (Slump Sale, Purchase Price Allocation)
  - Transfer Pricing (Transfer of intangibles between geographies / companies – pharmaceutical companies)

- Others
  - Licensing of intangibles (TATA, HUL, E-commerce Private Labels, Monsanto Royalty Cap)
  - Collateral for loans (Kingfisher brand)
  - Acquisition of intangibles (Marico – Reckitt Benckiser – Paras Pharma)
  - Litigation, when there has been a breach of contract/right and the compensation has to be determined / bankruptcy / restructuring
  - Insurance, such as determining the personal worth of a celebrity/football franchise/cricket franchise
  - Issuance of sweat equity shares which are generally issued against technical knowhow / technical expertise /intellectual property
Why do we value intangibles?
The Why

- **Revenue Enhancement**
  - Distribution Network (Airtel – Loop Mobile) (Future Group – Bharti Retail / Aditya Birla More)
  - Branch Network (Kotak – ING)
  - Brands (Dove v Hamam, Parle G v Hide & Seek) (Does equity value include value of intangibles?)

- **Cost Savings**
  - Merger of associate banks with SBI (Branch Rationalization / Benefits of Synergies)
  - Customers / Database / Data (Facebook – Watsapp)

- **Elimination of Competition / Increase in Market Share**
  - Brands (Coca Cola – Thums Up / Gold Spot, Ola – TaxiForSure, Swiggy – Zomato - Ubereats)
  - Walmart - Flipkart – Myntra – Jabong

- **Entry Barriers**
  - Telecom Licenses / Banking Licenses (Laxmi Vilas Bank – Indiabulls Housing Finance)
  - Certificate of Practice for Professionals / Auditors / Lawyers / Empanelment

- **Returns on Investment**
  - Paintings / Literary Works / Movie Scripts
    - (Chetan Bhagat – 3 Idiots, 2 States, The Godfather, Marvel Comics, Harry Potter, Star Wars Franchise)
Value Creation

VALUE OF A COMPANY

Market Value

Fair Value of Tangible Assets

Appreciation in Tangible Assets

Intangible Assets

Goodwill

Book Value
Value Destruction

Value of a Company

Market Value

Goodwill

Intangible Assets

Appreciation in Tangible Assets

Book Value

VALUE OF A COMPANY
What intangibles do we value?
The What

• **IDENTIFICATION**
  - Contractual - Legal Criterion OR
  - Separabality Criterion

• **CONTROL**
  - Workforce

• **FUTURE ECONOMIC BENEFITS**
  - Either increase in revenues or reduction in costs
  - Advertising / Insurance

• **MEASURABLE**
  - Olympic Medal Silver v Bronze
The What

- **Marketing-related**
  - Trademarks, trade names, internet domain names, non competition agreements

- **Customer-related**
  - Customer lists, order or production backlog, customer contracts, customer relationships

- **Artistic-related**
  - Plays, books, magazines, newspapers, literary works, musical works, pictures, photographs, video and audio films, television

- **Contract-based**
  - Royalty agreements, lease agreements, operating and broadcast rights

- **Technology-based**
  - Patented technology, computer software, databases, trade secrets
How do we value intangibles?
Methods under Cost Approach
- Historical Cost (HC)
- Replacement Cost (RC)

Methods under Market Approach
- Comparable Transactions (CT)

Methods under Income Approach
- Relief from Royalty (RR)
- Multi-Period Excess Earnings (EE)
- With and Without Method Incremental Cash Flows / Profits (ICF/IP)
- Discounted Cash Flows (DCF)
<table>
<thead>
<tr>
<th>Valuation Methodology</th>
<th>Relevance</th>
</tr>
</thead>
</table>
| **Historical Cost**   | • The historical cost method uses the details of the past cost of developing or purchasing the asset to determine the value of the asset.  
• This approach has limitations as it does not recognise the future economic benefits that may accrue to owners of the asset. |
| **Replacement Cost**  | • The replacement cost method involves estimating the costs to recreate / replace an asset with equivalent functionality at current prices and costs, including adjustments for factors like physical deterioration and functional / economic obsolescence wherever applicable. |
## Market Approach

<table>
<thead>
<tr>
<th>Valuation Methodology</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparable Transactions</strong></td>
<td>- This method estimates fair value by reference to market transactions of comparable intangible assets.</td>
</tr>
<tr>
<td></td>
<td>- Transactions occurring in a free and open market can be utilised to determine benchmark metrics against which the characteristics of the asset being valued can be compared.</td>
</tr>
</tbody>
</table>
### Income Approach

<table>
<thead>
<tr>
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</table>
| **Relief from Royalty** | • This method involves estimating the amount of savings in hypothetical royalty expense that might have been incurred if the asset was licensed in from an independent third party owner.  
• The fair value of the asset is the net present value of the prospective stream of hypothetical royalty cost that would be avoided over the expected useful life of the asset.  
• Values derived using the relief from royalty methodology are based on royalty rates observed for comparable assets. |
| **Excess Earnings** | • The fair value of the asset is the net present value of the earnings it generates, net of reasonable return on other assets also contributing to that stream of earnings.  
• This method examines the economic returns contributed by the identified tangible and intangible assets of a company and then isolates the excess return that is attributable to the pool of assets being valued.  
• This method estimates the value added by the subject asset after satisfying the required returns for all tangible and intangible assets. |
### Income Approach

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Incremental Cash Flows / Profits With and Without Method</strong></td>
<td>The incremental cash flows/profits method measures the economic contribution of the asset by calculating the net present value of the incremental cash flows/profits to be derived from the use of the asset.</td>
</tr>
<tr>
<td></td>
<td>This method requires the determination of the future cash flows/profits from the existing business with the asset and the future cash flows/profits from a notional business without the asset.</td>
</tr>
<tr>
<td><strong>Discounted Cash Flows</strong></td>
<td>Under the discounted cash flows methodology the projected free cash flows generated from using the asset are discounted at an appropriate discounting rate, and the sum of the present discounted value of such free cash flows is the value of the asset.</td>
</tr>
<tr>
<td></td>
<td>Generally it is very difficult to identify cash flows attributable only to the subject asset.</td>
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</tbody>
</table>
## The How – Relief from Royalty Method

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues from Trademark</td>
<td>300</td>
<td>400</td>
<td>500</td>
<td>600</td>
<td>750</td>
<td>725</td>
<td>500</td>
<td>200</td>
</tr>
<tr>
<td>Pre-Tax Royalty Rate</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Tax Royalty Savings</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>38</td>
<td>36</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Taxes</td>
<td>(5)</td>
<td>(7)</td>
<td>(9)</td>
<td>(10)</td>
<td>(13)</td>
<td>(13)</td>
<td>(9)</td>
<td>(3)</td>
</tr>
<tr>
<td>Post-Tax Royalty Savings</td>
<td>10</td>
<td>13</td>
<td>16</td>
<td>20</td>
<td>25</td>
<td>24</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Time Factor</td>
<td>0.50</td>
<td>1.50</td>
<td>2.50</td>
<td>3.50</td>
<td>4.50</td>
<td>5.50</td>
<td>6.50</td>
<td>7.50</td>
</tr>
<tr>
<td>Present Value Factor</td>
<td>0.93</td>
<td>0.81</td>
<td>0.71</td>
<td>0.61</td>
<td>0.53</td>
<td>0.46</td>
<td>0.40</td>
<td>0.35</td>
</tr>
<tr>
<td>Present Value of Post-Tax Royalty Savings</td>
<td>9</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>13</td>
<td>11</td>
<td>7</td>
<td>2</td>
</tr>
</tbody>
</table>

**Sum of Present Value of Post-Tax Royalty Savings** 76

**Tax Amortisation Benefit Factor** 1.29

**Value of Trademark** 98

*Rupees in Millions*
F5 Refresh – Relief from Royalty Method

- Revenues should reflect all revenues attributable to the intangible
  - Single product v multi product
  - Umbrella brand

- Prevailing royalty rates for similar intangible assets in the industry
- Differentiation over existing products in the marketplace (Dove v Lifebuoy, MontBlanc v Reynolds)
- Royalty payments as a percentage of revenue vary widely, depending upon the profitability of the product and the industry and market being served
- B2B usually have lower royalty rates than B2C
- Post expense royalty rate

- The 25% rule of thumb
- Primarily used to value trademark, tradename, brand, know-how
- Can also be used to value patents, technology
- Sources for royalty rates
# The How – Excess Earnings Method

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues from Customer Relationships</td>
<td>300</td>
<td>400</td>
<td>500</td>
<td>600</td>
<td>750</td>
<td>725</td>
<td>500</td>
<td>200</td>
</tr>
<tr>
<td>EBIT Margins (%)</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Earnings Before Interest &amp; Taxes (EBIT)</td>
<td>45</td>
<td>60</td>
<td>75</td>
<td>120</td>
<td>150</td>
<td>145</td>
<td>125</td>
<td>50</td>
</tr>
<tr>
<td>Taxes</td>
<td>34.61%</td>
<td>(16)</td>
<td>(21)</td>
<td>(26)</td>
<td>(42)</td>
<td>(52)</td>
<td>(50)</td>
<td>(43)</td>
</tr>
<tr>
<td>Profits After Taxes (PAT)</td>
<td>29</td>
<td>39</td>
<td>49</td>
<td>78</td>
<td>98</td>
<td>95</td>
<td>82</td>
<td>33</td>
</tr>
</tbody>
</table>

**Contributory Asset Charges (CAC)**

| Tangible Fixed Assets                           | 0.60%  | (1.80) | (2.40) | (3.00) | (3.60) | (4.50) | (4.35) | (3.00) | (1.20) |
| Net Working Capital                             | 0.25%  | (0.75) | (1.00) | (1.25) | (1.50) | (1.88) | (1.81) | (1.25) | (0.50) |
| Other Intangibles                                | 1.00%  | (3.00) | (4.00) | (5.00) | (6.00) | (7.50) |
| Workforce                                        | 0.10%  | (0.30) | (0.40) | (0.50) | (0.60) | (0.75) | (0.73) | (0.50) | (0.20) |
| **Total CAC**                                    | (5.85) | (7.80) | (9.75) | (11.70)| (14.63)| (6.89) | (4.75) | (1.90) |

| Net Available Excess Earnings                    | 24     | 31     | 39     | 67     | 83     | 88     | 77     | 31     |
| Time Factor                                      | 0.50   | 1.50   | 2.50   | 3.50   | 4.50   | 5.50   | 6.50   | 7.50   |
| Present Value Factor                             | 16.00% | 0.93   | 0.80   | 0.69   | 0.59   | 0.51   | 0.44   | 0.38   | 0.33   |

| Present Value of Excess Earnings                 | 22     | 25     | 27     | 40     | 43     | 39     | 29     | 10     |

| Sum of Present Value of Excess Earnings          | 235    |
| Tax Amortisation Benefit Factor                  | 1.29   |
| Value of Customer Relationships                  | 303    |
F5 Refresh – Excess Earnings Method

- Intangible assets do not generate cash flows in a vacuum – they also utilise contributory assets to generate cash flows

- Contributory charges are hypothetical “rental” charges or an opportunity cost for the use of the other contributing assets

- Calculation of contributory charges

- Growth and Attrition

- Adjustment for expenses (new v existing)

- Primarily used to value customer contracts, customer relationships, IPR&D, Patents
Discounting Rate vs WACC

- Liquidity
  - Low
  - High

- Risk
  - Low
  - High

- Cash
- Debtors
- Fixed Asset
- Intangible

- Required Return
  - Lower than WACC
  - WACC
  - Higher than WACC
Whenever an asset acquired is eligible for tax amortisation, the tax amortisation benefit (‘TAB’) value becomes an element of the fair value of that asset.

<table>
<thead>
<tr>
<th>TAB</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Balance of Intangible Asset</td>
<td>100.00</td>
<td>75.00</td>
<td>56.25</td>
<td>42.19</td>
<td>31.64</td>
<td>23.73</td>
<td>17.80</td>
<td>13.35</td>
</tr>
<tr>
<td>Depreciation</td>
<td>25.00</td>
<td>18.75</td>
<td>14.06</td>
<td>10.55</td>
<td>7.91</td>
<td>5.93</td>
<td>4.45</td>
<td>3.34</td>
</tr>
<tr>
<td>Closing Balance of Intangible Asset</td>
<td>75.00</td>
<td>56.25</td>
<td>42.19</td>
<td>31.64</td>
<td>23.73</td>
<td>17.80</td>
<td>13.35</td>
<td>10.01</td>
</tr>
<tr>
<td>Savings in Tax</td>
<td>8.65</td>
<td>6.49</td>
<td>4.87</td>
<td>3.65</td>
<td>2.74</td>
<td>2.05</td>
<td>1.54</td>
<td>1.15</td>
</tr>
<tr>
<td>Time Factor</td>
<td>0.50</td>
<td>1.50</td>
<td>2.50</td>
<td>3.50</td>
<td>4.50</td>
<td>5.50</td>
<td>6.50</td>
<td>7.50</td>
</tr>
<tr>
<td>Discounting Rate</td>
<td>15.00%</td>
<td>15.00%</td>
<td>15.00%</td>
<td>15.00%</td>
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<td>0.53</td>
<td>0.46</td>
<td>0.40</td>
<td>0.35</td>
</tr>
<tr>
<td>PV of Tax Savings</td>
<td>8.1</td>
<td>5.3</td>
<td>3.4</td>
<td>2.2</td>
<td>1.5</td>
<td>1.0</td>
<td>0.6</td>
<td>0.4</td>
</tr>
<tr>
<td>Sum of PV of Tax Savings</td>
<td>22.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening Balance</td>
<td>100.00</td>
<td></td>
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<td></td>
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<tr>
<td>Attributable to Intangible</td>
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<td></td>
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<td></td>
<td></td>
<td>77.56</td>
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<tr>
<td>Attributable to TAB</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>1.29</td>
</tr>
</tbody>
</table>
Takeaway

➢ The Why
  ➢ Accounting, Tax, Licensing, Collateral

➢ The When
  ➢ Revenue Enhancement, Cost Savings, Competition, Market Share, Entry Barriers, Returns on Investments

➢ The What
  ➢ Identification, Control, Future Economic Benefits, Measurable
  ➢ Marketing related, Customer related, Artistic related, Contract based, Technology based

➢ The How
  ➢ Cost, Market and Income Approach
  ➢ Discounting Rate v WACC
  ➢ Remaining Useful Life
  ➢ Tax Amortisation Benefit
  ➢ Workforce / Goodwill
It’s all about PERCEPTION

- The Curious Case of Jamnadas Morarjee and D S Prabhudas
- Rolex v Titan
- Rolex v Apple Watch
- Business Class v Economy Class
- First Class v Second Class
- Registered Valuer v Others
It takes 20 years to build a reputation and five minutes to ruin it. If you think about that, you'll do things differently.

------ Warren Buffett