Part (a) Estimate Ojuelegba’s WACC and list any further information you may require to finalise your calculation | Marks
---|---
Cost of equity \((14\% + 0.8\times(10\%))\) | 22.0% 1C
Risk-free rate | 14.0% ½
Market risk premium | 10.0% ½
Beta coefficient (levered) | 0.80 1
Interest rate – long-term debt | 17.0% 1
After tax (30% tax rate) debt rate | 11.9% 1
WACC \([(22\% \times 90.91\%) + (11.9\% \times 9.09\%)]\) | 21.08% 1C

Additional information required
- What are the Beta coefficients of comparable listed companies (use similar FMCG companies (Promo; Nestleibble) and not overall sector). 1
- Information on gearing of comparative companies to un-lever and re-lever. 1
- Are the risk free rate and market risk premium provided by experts reasonable? Research? 1
- The debt to equity ratio of 10% is unsubstantiated. The target structure should be determined which will be higher due to new debt. 1
- What adjustments need to be made for Ojuelegba given its unlisted status? 1
- A list of specific risk factors of Ojuelegba (Operating leverage, diversity of product range, customer base etc) to enable an adjustment of the Beta. 1

Available 13
Maximum 10
Total for part (a) 10

Part (b) Assuming you are advising Hotline on the acquisition of Ojuelegba, critically comment on King’s free cash flow valuation of Ojuelegba. Assume that Ojuelegba’s management forecasts for the period FY2017 to FY2019 are reasonable. | Marks
---|---
**General approach**
- The discount rate of 15% is unsubstantiated. One would need to calculate the cost of equity and WACC and establish a reasonable rate. If FCFF used, discount at WACC (add back debt and interest), if FCFE used then discount at Ke. 1
- The forecast period is too short – one should use at least five years, evidenced by not having stable cash flows over the 3 years. 1
- Adding a control premium is correct as Beta is listed, implicit that is a minority, and no synergies in cash flows. 1
- Adding a round 30% is not correct, premium determination must be justified. 1
- There are no adjustments for the unlisted status of Ojuelegba. 1
- There are no adjustments for specific risks factors. 1

**Technical errors in FCF valuation**
- Income tax and VAT should not be added back. 1
- The adjustment for abnormal capex is incorrect – Only the representative year needs to be sustainable. Other cash flows included as expected. 1
- The debt movements should be added back to derive free cash flows (Or discount at Ke). 1C
- The interest income and expense should be added back – after tax (Or Ke). 1C
- Interest income item should be valued separately if different investment, or surplus cash not required for operations should be added to company value, or assume no surplus. 1C
- The market value of debt should be deducted from the enterprise value, or Value calculated using FCFE is equity value. 1C
### SUGGESTED SOLUTION

#### Other comments

- Is a 12% growth in perpetuity reasonable in Nigeria? With high inflation there is little real growth. 1
- Is the assumed sustainable EBITDA stable? 1
- The dividend has correctly been added back. 1
- Is a turnaround in its circumstances assured given that Ojuelegba incurred a loss in FY2016? 1

#### Higher level thinking and application

- The terminal value calculation is incorrect (discounted 4 instead of 3 years) \((773\times (1+12\%))/(15\%-12\%)=28,859, PV 18,975\). 1
- The average EBITDA multiples of listed FMCG companies may not yield an appropriate comparison. It would be more appropriate to use the ratios of comparable companies, such as Promo and Nestable. 1
- Comparative multiples from listed assumes a minority stake. The implicit minority discount should be adjusted for. 1
- The listed EBITDA ratios may have been affected by lower profits, which means the ratios could be high as market expects a turnaround 1

#### Part (c) Discuss the approach you would take and the steps you would follow to perform an earnings-based valuation of Ojuelegba. Marks

**Approach**

- Derive enterprise value using the EBITDA multiple, add **surplus cash** if any and deduct **debt** = equity value 1A
- PE cannot be used as company has **negative earnings**. EBITDA multiplier provides a better measure of **operational and cash performance**, and here eliminates the finance **income**. 1
- Ojuelegba profits are **declining**, so one needs to be more cautious in estimating a sustainable EBITDA 1

**Sustainable EBITDA**

- Review the recent company EBITDA history to assess **sustainability/trend** 1A
- Analyse the year-to-date **management accounts** for evidence of changes 1A
- Add back **non-recurring** items from history and forecasts 1A
- Add back **non-economic** items from history and forecasts 1A
- Apply **weightings** to historic (inflation adj) & forecast EBITDA to derive sustainable profit 1A

**EBITDA multiple**

- Identify listed companies that are **comparable** (i.e. that are similar in the nature of their business and size) to Ojuelegba. From the information in the scenario these would be **Promo** (size) and **Nestable** (products) 1A
- Recalculate the historic EBITDA multiples of comparable listed companies to identify **trends** 1A
- Ensure that **non-recurring** items have been removed from listed company results in determining historic EBITDAs 1A
- Adjust comparable listed company EBITDA multiples for **specific risk** factors and size differentials 1A
- Make an adjustment to take into account the **unlisted** status of Ojuelegba 1

**Higher level thinking and application**

- Perform a **forward EBITDA** valuation due to fluctuating growth. Estimate the EBITDA for each forecast year separately. Multiply the forecast EBITDA for FY2019 by a forward EBITDA multiple. Discount all to PV at **WACC**. 1A
- Undertake one’s own research of industry trends and issues 1A

#### Total for part (c)

Available 18

**Communication skills – logical argument** 1

**Total for argument** 18
Part (d)  Describe the key risks faced by Hotline arising from its acquisition of a controlling interest in Ojuelegba | Marks
---|---
**Nigeria country risks** |  
Nigerian reliance on oil  
- Nigeria’s reliance on oil **revenue** could negatively affect consumer spending | 1  
**Naira exchange rate volatility**  
- Exchange rate devaluation of the naira could translate into much lower profits in the Rand. | 1  
Unpredictable government  
- The risk of government intervention could lead to a restriction of foreign currency repatriation, changing import **duties**, etc. | 1

**Diversification risk** |  
Hotline **new** to Nigeria  
- Hotline has not operated in Nigeria and may be **unfamiliar** with the territory and conditions in it resulting in additional risk | 1  
**Business model different to Ojuelegba**  
- The nature of Ojuelegba's business differs from that of Hotline, as the latter does not manufacture tea, coffee, soft drinks or biscuits | 1

**Ojuelegba specific risks** |  
Ojuelegba highly reliant on **imported** raw materials  
- Could result in increasing costs and negatively affect security of supply | 1  
Ojuelegba may have **limited pricing power**  
- May have limited ability to pass on increased costs (imports, inflation) through price increases given the **weak macro backdrop and demand** | 1

**Turnarounds inherently risky**  
- The question is to what extent a turnaround is assured, given the loss it suffered in FY2016. This means that its future **profitability is uncertain** | 1

**Competition likely to be intense in Nigeria**  
- Ojuelegba could face increasing competition and it is also **smaller than listed competitors** | 1

**Acquisition risks** |  
Risk Hotline **overpaid**  
- There is a risk that Hotline paid too much for Ojuelegba, could lead to **sub-optimal returns** | 1  
**Post-merger integration likely to be challenging**  
- Differences in the nature of their businesses could result in poor post-merger integration | 1

**Gearing risk from capex expenditure in forecast period, massive change**  
- Significantly more debt will result in **overhead pressure** from interest. | 1  
**Risk insufficient due diligence was performed**  
- It would seem as if inadequate due diligence was performed, which could lead to **additional investments** being required to right-size the business | 1  
**Risk Ojuelegba management/shareholder could leave immediately**  
- To be successful, the Ojuelegba management/Davido need to be **retained** for historical know-how of operating in Nigeria, especially initially | 1  
**Minority shareholding could block key decisions**  
- The 49% minority could **block corporate changes**, hampering the ability to control Ojuelegba and implement changes | 1

**Higher level application** |  
Poor **past record** of South African corporate success in Nigeria / compliance  
- South African corporates have been **unsuccessful** in acquiring Nigerian companies, adherence to laws and regulations (e.g. Tiger Brands/MTN) | 1  
**Market structure in Nigeria differs from that in South Africa**  
- There is a significant difference to doing business in Nigeria compared to South Africa – fewer shopping centres and more **informal trade. Logistics and distribution** more difficult | 1  
**Security risks in Nigeria elevated**  
- There are **high crime rates** and security risks in Nigeria, with the added risk of terrorism threats and attacks | 1

Available 36  
Maximum 20  
Communication skills – clarity of expression 1  
Total for part (d) 21
### Part (e) Assuming you are advising Hotline, critically discuss Ms Davido’s proposed terms of the sale of her shareholder’s interest in Ojuelegba. Ignore the reasonability of the purchase price.

<table>
<thead>
<tr>
<th>Part (e)</th>
<th>SUGGESTED SOLUTION</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The current purchase price assumes turnaround will take place, she has therefore already been rewarded for the increased profit. Paying an extra NGN2 billion would therefore be paying again for the same performance. Only if the guaranteed performance is removed from the cash flows can an additional profit warranty (performance above cash flows) be offered.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>• Perhaps a portion of the upfront payment of NGN14 billion should be left in escrow to cover any potential warranty claims/unrecorded liabilities.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>• How will Hotline recover NGN3 billion if FY2019 revenue ≤ NGN30 billion (legal jurisdiction)?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>• Will Davido be accessible, Nigerian and not in South Africa (credit risk)?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>• Hotline should pay less upfront given Ojuelegba’s loss in FY2016 and only pay the bulk of the purchase price once profitability has been restored.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>• Hotline may be exposed to currency risk in respect of future payments and receipts in NGN.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>• The earn-out arrangement would only be appropriate if Ojuelegba operates independently of Hotline, if operations are integrated with other Hotline operations it would be difficult to separate their respective sales/profits.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>• As Hotline has to pay if EBITDA (not revenue) exceeded a certain level and Ms Davido only pays if Revenue (Not EBITDA) doesn’t exceed certain level, poses the question if there are hidden costs Hotline is not aware of.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>• An argument for these terms will be that Hotline will control both revenue and costs whereas Ms Davido will have no control over costs (she can only provide some comfort on the revenue outlook).</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Available 12
Maximum 6
Total for part (e) 6