3.4.4 Devising a Financial Strategy for Yule Catto from Scratch

Exercise Answer

Unit: Unit 1 – Treasury Strategy

Module: Module 3 – Financial strategy

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Summary: An exercise in establishing a financial strategy for Yule Catto without the constraints of an existing capital structure

Student Notes: There is no 'right' answer to this question, but the exploration of ideas that occurs when undertaking this sort of research is designed to make you think more like a treasurer. Some alternative approaches are considered in the answer.

Answer

1. **Analyse the business strategically, from a business point of view.** There are several ways to make an analysis, pertinent conclusion roughly being as follows:

1.1. We follow the procedure as set out in Section 3 of reading 1.3.1. Note that this answer is frozen as at end 2010 and so some of the analysis may appear out of date and your own answers may be more relevant.

1.1.1. **Main External Factors**

PEST ANALYSIS

Political

- trade union / labour market inflexibility especially in US, Europe

Economic

- traditionally cyclical businesses
- often highly geared manufacturing processes
- high exposure to input material prices, while Yule Catto does seem to be successful in passing on higher input costs (often linked to basic petro-chemicals), there is a risk firstly of delay and secondly of eventual consumer resistance or lack of demand due to higher prices.
- global markets
- seeking growth in Asian markets especially China, stagnation in USA, Europe
- strong market share in several different markets
- weak market share in Europe
- seeking manufacturing base in Asia to match customer base, even though Yule Catto's immediate customers are other businesses.

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Socio-cultural

- polymer products generally fundamental to modern way of life so most growth in countries with modernising trends
- growing disposable income in emerging markets

Technology

- relative strength in technologically-based products
- lack of cash for investment capex may restrict future growth and competitiveness.

1.1.2. **Competitive Environment**

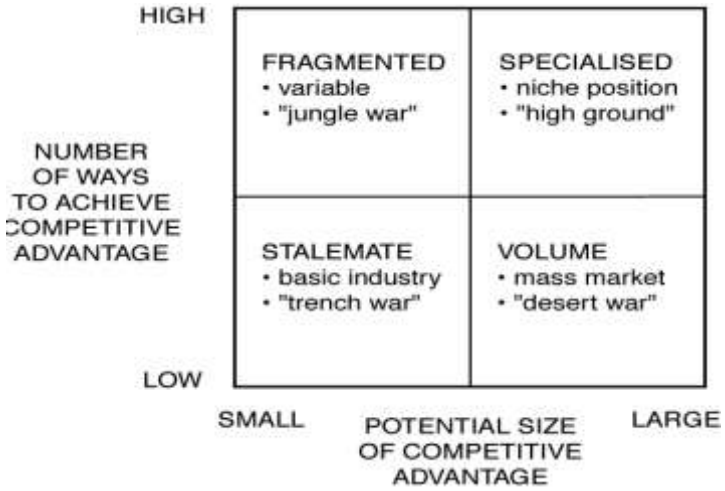
Product Life Cycle

Yule Catto serves generally mature western markets with products that are essential to modern life, so most growth in Polymers will come from geographical expansion rather than product innovation. This is reflected in the strategy statement:

"Our strategy in Polymers remains focused on geographical expansion around existing business hubs, further increasing our presence in emerging markets, particularly in Asia, and in developing market sectors where our technology, new product development and manufacturing capabilities give us a real competitive advantage."

1.1.3. **Competitive Environment**

Environments Matrix



- Polymer business has few ways to achieve differentiation, seeking closeness to markets to achieve growth
- Polymer business claims product technology and manufacturing capability as strengths, thus placing it into the volume sector, possibly near stalemate.
- Pharma is in similar position, relying on manufacturing efficiency to achieve profits, although falling in importance especially following the Polymer Latex acquisition, which demonstrates the consolidation in the sector.

Key issues arising out of this diagnosis are:

- Market share is critical
- Economies of scale and scope (across products) is critical for profitability
- Need to seek virtuous circle of spend and brand building
- Value drivers are usually market share, financial power, brand and control of distribution.

1.1.4. Porter's 5 Forces

- Horizontal competition in developed economies:
    - Established producers likely to be competing on price and quality, probably mostly price, where efficient processes are important. Brand issues largely settled. Currency issues important for market share in Europe.
    - New entrants unlikely to appear.
    - Substitutes possible as products developed and particularly susceptible in Pharma where new drugs may replace old ones quite suddenly.
- Horizontal competition in emerging economies:
    - Established producers jostling for brand recognition and presence in particular markets. Branding requires investment.
    - New entrants possible as local groups vie for presence in basic industries and have access to much local capital.
    - Substitute products possible if more basic products are acceptable.
- Vertical competition in developed economies:
    - Supplier story essentially about raw material prices, linked partly to oil price, suppliers likely to be few with little product or price differentiation.
    - Customer story essentially about consolidation, especially in polymers. Customers buying on price.
- Vertical competition in emerging economies:
    - Supplier story also about raw material prices but suppliers likely to be slightly more abundant but often subsidiaries of major western firms, but new suppliers likely to appear.
    - Customer story likely to be about many participants as local firms vie for presence in end markets. Thus consolidation not an issue yet, so brand name important to customers. Competition on price most likely.
    - Market presence important so financial strength a key issue in building market presence.

1.1.5. Conclusions

- Business operates in a cyclical environment
- Growth will only come from emerging markets
- Competition in developed countries will come from existing competitors
- Competition in emerging markets could come from existing and new competitors

- Success means being close to markets
- Profitability should be good but not excellent
- Brand is important
- Market share is a key measure
- Raw material prices are a key input cost and most increases can be passed on, subject to time delays and possible long term customer resistance
- Currency issues are important

1.2. Risks

Management helpfully point out the risks on p25 of the 2010 Annual Report, the major ones of which are:

- Economic cyclicality
- Volatility in raw material and energy prices
- Competition
- Currency risk
- Pension risk

Morgan Stanley add colour to one of these risks, a strengthening pound. The group has these risks to strong sterling:

- UK manufacture for export (UK originated sales of £160 million compared to £77 million of UK destination sales)
- Need to remit profits from overseas operations to pay head office costs and dividends
- Need to remit profits from overseas to pay pension deficit
- Translation risk

1.3. Competitors and peers

We have seen that brand issues are largely settled in Europe but not yet in developing markets. This is a similar description of competition. In developing markets, especially Asia, it is likely that new competition will arise, perhaps with money to spend on good, new plant.

1.4. What is its geography?

Growth in this business will come from developing markets.

1.5. What will be its challenges over the coming years?

To manage capital expenditure and demand in developing markets.
To maintain brand and market share in developed markets.
To deal with any sector consolidation.

1.6. Who might invest in this?

This should be an attractive industry for investors with sector consolidation important as well as the upside risk of finding growth in developing markets. It is probably fairly high risk on these counts.

1.7. How is the sector consolidating?

It is clear that there is consolidation still occurring in the sector and the acquisition of Polymer Latex by Yule Catto is a clear example of this.

2. Establish some basic financial measures for the business

2.1. What is the enterprise value?

The enterprise value is what will have to be financed in some way by a combination of equity, debt and other providers of finance. This should answer the question; how do lease rentals and the pension deficit affect the view on this?

Category	**£m**
Market cap	428
Net debt	63
Lease rentals (see Note 1)	25
Enterprise value	**516**
Also add	
Pension deficit (see Note 2)	66
Enterprise value	**582**

Note 1: In this model we follow a rating agency approach to leasing which assumes that leasing is a form of asset finance, i.e. debt. A typical approach to reach an equivalent capital value is to multiply the lease rentals by say 5 and assume that around 1/3rd of the rental is interest and 2/3^{rds} is depreciation. In this case lease rentals are £5m so multiply by 5 to reach £25m.

Note 2: In this model we also follow the rating agency approach to pensions and assume that they are another form of debt. This is merely saying that they will have to be paid out as cash at some stage in the future.

2.2. What is EBITDA?

Underlying EBITDA is calculated for us in note 36 to the accounts, but should be adjusted for the lease rentals shown above. If we assume the 1/3rd, 2/3^{rds} split explained above, then EBITDA becomes:

	£m
Underlying EBITDA	69.503
Add back lease rentals	5.131
Assume EBITDA (rounded)	**75**

The underlying EBITDA has in fact been very stable over the years, so we can adopt this for our models. This is surprising, considering the risks in raw materials and currencies but is possibly explained in improving efficiencies (such as 40% improvement in employee costs as a percentage of sales).

This, incidentally, gives EV/EBITDA of around 8, and EV / Sales of around 0.9, both about average for the sector.

2.3. What is the ideal capital expenditure level?

Capex has been around depreciation on average over the last few years, and slightly less in the difficult years of 2009/2010. However, it seems that Yule Catto should spend relatively highly to ensure growth in developing markets and a figure of around double depreciation is probably reasonable for a few years. In the long run, a rule of thumb for maintenance capex is around 116% of depreciation in current circumstances.

2.4. What return on equity is required?

We first calculate the ungeared beta.

$$\text{Un-geared beta} = \text{geared beta X } \left(\frac{E}{E+D\,(1-t)}\right)$$

Excluding the lease and pension numbers, this becomes:

$$\text{Un-geared beta} = 1.52 \text{ X } \left(\frac{428.35}{428.35+63.4\,(1-0.19)}\right) \quad = \quad 1.36$$

It is useful to include the lease and pension number by way of comparison, this then becomes:

$$\text{Un-geared beta} = 1.52 \text{ X } \left(\frac{428}{428+154\,(1-0.19)}\right) \quad = \quad 1.18$$

It is useful here to think how precarious these calculations can be. We have seen this vary with different assumptions about what comprises debt. The tax rate can also be a significant factor and we are already making simplifying assumptions, using 19% whereas there may be more than one tax rate in the group.

For our purpose we will use 1.35, to be conservative.

An un-geared return on equity is thus

$$Ke = Rf + \beta(Rm - Rf)$$

$$Ke = \quad 2.5 + 1.35 \text{ x } (7.0 - 2.5) \quad = \quad 8.575\%$$

We should now consider how we might achieve a return for shareholders above this, so first we need a rough un-geared profit and loss account. The following treatment takes account of the pension deficit and assumes that it will need servicing of some kind, effectively interest and of course it will also require contributions. Alternative approaches to this could be just to assume that the deficit requires cash flow. Here, we assume that the pension deficit will cost around 9% of the deficit.

	£m
EBITDA	75
Depreciation	(15)
Servicing of pension scheme	(6)
Pre tax profit	**54**
Tax (at 19%)	(10)
Profit for investors	**44**

This gives a return of 44 on (pre pension deficit) enterprise value of 516, or 8.5%. This is borderline adequate and so we must adopt some form of leverage to achieve a return on equity above 8.575% (and increased to reflect the increased riskiness of gearing), or assume that there will be earnings growth to lift EBITDA to the required level. The fact that the EV / EBITDA ratio is around right for the sector implies that the market is generally happy with the growth story. We must therefore find a capital structure that gives a WACC at or below 8.5%

See the accompanying spreadsheet used to provide the following answer; solution found using Goal Seek in Excel.

Equity percentage in capital	INPUT %	93.9
Debt percentage in capital	Calculated	6.1
Risk free rate (10 year zero)	Given	2.50%
Ungeared beta	From above	1.35
Equity premium	Given	4.50%
Interest rate pre tax	Given	3.00%
Tax rate	Given	19.0%
After tax cost of debt	Calculated	2.43%
Net debt *(1 - tax rate)	Calculated	5.0
Geared beta	Calculated	1.4
Cost of equity	Calculated	8.90%
WACC	Calculated	8.50%

It is worth spending some time on the model in this approach, to see just how sensitive the formulas are to slight changes in the input variables. A change in ungeared beta to 1.25 (still slightly above the beta including lease and pension debt) moves the debt requirement from 6.1% to no debt, in fact net cash up to 33%. This is a lesson for models in general. We have uncertainty in one input and it causes huge variety in outputs. Therefore models must be treated with enormous caution and indeed it is sometimes very hard to draw any conclusions from them at all. The model has taken the arithmetic too far, so we must not rely on it alone.

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2.5. What leverage should be targeted?
Yule Catto is quite risky, taking into account:

- A strengthening of sterling is quite damaging
- Commodity rates might cause limitations in demand. It seems that Yule Catto can generally pass on raw material price increases with perhaps a delay of a quarter or so but should they rise too quickly, demand for the end product will simply fall
- Capex is needed to expand where the growth is
- There is consolidation occurring in the sector
- Competition is strong
- End markets are cyclical

All these factors indicate that actually leverage should be quite low. There is already natural leverage with the pension scheme and so a possible approach would be to have zero to negative leverage of around 10%, i.e. equity comprises 110% of enterprise value and there is surplus cash. The other side of a low tax rate and high beta is that this does not affect WACC too adversely. However, the EBITDA of Yule Catto has been very stable historically and so two further alternative approaches to this problem are advanced here.

The first alternative approach to this question which can be considered is to accommodate the cyclical nature of the chemicals industry and indeed such an approach is often adopted in reality. If the low point in the cycle can be found historically and a base profitability / cash flow established at these levels, then debt supported by that cash flow can be assumed. We don't have sufficient information to make this analysis but it amounts almost to another approach to the leverage question.

A further alternative that could be considered is to go even further up the risk curve and use the stable EBITDA to support relatively high gearing using High Yield debt. We have not considered the layering of debt inside structures but it essentially involves having a senior level of bank debt, together with a subordinated (lower in the Gone Concern pecking order) debt issuance. Subordinated debt holders will accept higher leverage (normally in terms of multiples of EBITDA) than conventional lenders, for a higher return. The senior debt might even be at investment grade level under such a structure. Such designs are usually put in place in a structured way, to support an acquisition, for example, rather than in anticipation of sectoral consolidation.

2.6. Should we target a credit rating?
Yule Catto is probably too small to merit an investment grade rating, even if following a negative leverage approach as shown above, and especially when taking the risk factors into account. It also has negative tangible net worth which is often a problem for some analysts. Therefore a credit rating target is probably inappropriate but other financial targets such as leverage should be targeted.

2.7. What do the peer group companies do?

We are not given information on peer group companies but looking briefly at four of the companies shown in the Morgan Stanley report (but note that this research needs more detailed analysis than was seen in the Morgan Stanley report), we see the following:

Johnson Matthey	Net debt / EBITDA Interest cover	X1.4 including pension deficit X17.7
Solvay	Net debt / EBITDA Interest cover	X0.9 in 2009 but now positive cash X7 in 2009
Victrex	No debt	
Elementis	Net debt / EBITDA Interest cover	X1.2 including pension deficit X19.6

Thus leverage is very moderate in the sector, and indeed generally reducing, and so it would not be out of line to have low or negative leverage.

2.8. What is the life cycle of the company and its products?

Both the company and its products are very mature and this would indicate that they could deal with high levels of complexity in debt and financial matters.

2.9. What financial flexibility do we need?

All of the following indicate that significant financial flexibility is required:

- The high level of risk in many categories, especially the commodity pricing and foreign exchange issues
- The need for capex in the developing world
- Sector consolidation

2.10. What other products are required from the financial sector?

Yule Catto needs some but probably not large facilities to deal with foreign exchange risk. Facilities to deal with commodity risk are less necessary, as it is unlikely that Yule Catto undertake much hedging in this area. Exact matches for the commodities used are unlikely to be available or liquid and the pricing pattern is likely to be fairly short term. However it probably does not need much capacity in bank guarantees or letters of credit except perhaps to support some foreign trade and perhaps insurance. Credit requirements in cash management are also likely to be modest.

3. Establish some conclusions

3.1. Leverage?

We have established that positive net leverage is probably ideal for this business and to deal with the financial flexibility issues then it might be ideal to have some debt and then have cash to meet the demands of business as they arise. A possible annual cash flow statement could go something like this:

	£m
EBITDA	75
Tax	(10)
Capex (high in early years, then later at say 17)	(30)
Pension scheme, say	(6)
Working capital, say, as it grows	(2)
Dividends	(10)
Cash generation	**17**

So a capital structure could look like:

	£m
Enterprise value	**582**
Financed by:	
Pension deficit	66
Leases	25
Equity	541
Net debt	(50)
Total	**582**

Then Yule Catto could spend, say, £100 million on investments over and above its near double depreciation capex, go into debt of around £50 million and repay that debt over around 3 years.

Note that this policy does require the equity investors in Yule Catto to be confident that management can be trusted to spend wisely (rather than the money burning a hole in their pocket). Judging from the acquisition made (but not modelled here) in January 2011, this should be the case.

3.2. Ideal dividend policy

Dividend yield under this scenario is around 10/541 or just under 2%, quite adequate for a stock promising growth and not taking too much cash out of the business.

3.3. Debt markets to tap

A possible approach to the debt structure would be to make the £50 million net cash comprised of £100 million cash plus £50 million debt, giving huge financial flexibility.

Because Yule Catto is unlikely to be investment grade, careful thought needs to be given as to where to source this debt. It is often commonly held that the sweet spot for bank finance is around the BBB rating grade. Single A rated corporates seem to prefer the bond markets and it is well known that sub-investment grade borrowers are not favoured by the banking sector. However, Yule Catto does have ancillary business in the form of cash management requirements, trade finance and foreign exchange and so this might push it into bank finance territory, especially as the leverage is low. The beauty of the bank market is the flexibility of finance and the ability to use revolving facilities, for

example. However, the reality of Basel III might make these types of facilities more expensive.
Another possible source for the sort of debt size here is the private placement market and it would be sufficiently long term to allow stability in the capital structure during an expansionary mode.

Covenants, if sought, should be based around a downside economic scenario from a fully invested balance sheet. Thus there should be no default if Yule Catto makes the £100 million acquisition discussed and then the economy turns down. Modeling should be able to account for this.

3.4. Bank relationships
Because of the international nature of its operations and growth plans in developing markets, Yule Catto requires banks in many different locations to deal with cash management and also perhaps to allow some raising of small amounts of finance for working capital purposes or to manage small cash swings and offer derivatives. It has the choice of using a global bank for this, such as Standard Chartered, HSBC or Citibank or it could use a local bank for each location. This decision must be made with consideration for the resources available to manage the relationships. If resources are available locally then local banks may be best. If central resources are available, a global bank may be best, although the business models of such banks are most under threat from regulation.

For Europe, however, where Yule Catto operates in the Euro zone and Sterling areas, two banks are probably best to share cash management operations, derivatives lines, and to allow risk management of foreign exchange, interest rate and commodity risks. Two banks will give competitive tension, especially in derivatives.

3.5. International cash management structure
This strategy is linked to the bank relationship question. Use of local banks will make an information and concentration structure more difficult than if a global bank was used. This decision is again based on the resource available for each location.

3.6. What corporate structure for subsidiaries and other investments
Yule Catto would almost certainly wish to retain its own technology for manufacture learnt (probably) in European plants for itself. Its default investment policy for subsidiaries would therefore be to retain 100% ownership except where local regulations might prohibit this. Exceptionally, where local distributors may be needed to break into a market, some equity participation may be necessary, but incentivisation should be sought in other ways.

3.7. Foreign exchange policy
Yule Catto has two major FX risks, translation and economic (which leads to transaction risk).

With regard to translation risk, this is mainly a shareholder risk, but Yule Catto should ensure that foreign exchange rate movements alone do not cause stress to credit ratios, for example net debt / EBITDA or interest cover, generally by having debt in similar

currencies to earnings. Of particular note here is the pension scheme, which is a predominantly UK scheme and therefore gives rise to a sterling obligation.

With regard to economic risk on trade related exposures, Yule Catto is especially exposed to a fall in sterling. It is impossible to hedge forever and so a rise in sterling would eventually have to be accommodated by the business model, so the policy to be adopted would be to give management time to adapt the business model in that case. Therefore when any pricing is committed to in terms of a price list or price indications or an acceptance of pricing in the market, then the exchange rate assumed in that pricing should be protected for the relevant period. With regard to commodity pricing, it is probable that there is some form of reference pricing in the business model, allowing Yule Catto to be immune from most price changes in that area.

Of particular interest is the requirement for sterling to be spent on dividends, head office costs and pension deficit payments, despite earnings in other currencies. This particular flow should be protected as far in advance as possible to the extent that there are insufficient earnings in sterling.

3.8. Interest rate policy

With low debt, and indeed negative net debt, the risk in interest rates will also be quite low and therefore not a high priority for action. However, Yule Catto is likely to spend money (and therefore have net indebtedness) when times are good and interest rates high, so there is some argument for a small amount of hedging of interest rates.

3.9. Pension policy

The pension scheme (DB) was closed many years ago and so the remaining risk is around the usual things found in DB schemes, such as interest rate, inflation and longevity together with risks in any assets such as equities and bonds. Investment policy is in the hands of trustees but where this can be influenced, then Yule Catto would not want their corporate risks to be increased by excessive risk taken inside the pension scheme. Some clear communications between the company and trustees should establish a risk budget for the investments and other products inside the scheme.

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