

# P4

## 海外投资项目测算文字

1. 背景
2. **Requirement**
3. **Assumption**

1. **P4必备**

It is assumed that all the estimates such as sales revenue, costs, royalties, initial investment costs, working capital, and costs of capital and inflation figures are accurate. There is considerable uncertainty surrounding the accuracy of these and a small change in them could change the forecasts of the project quite considerably. A number of projections using sensitivity and scenario analysis may aid in the decision making process.

2. 汇率

It is assumed that future exchange rates will reflect the differential in inflation rates between the two countries. It is, however, unlikely that exchange rates will move fully in line with the inflation rate differentials.

3. **Residual value**

Even if the project ceases after four years, no details are given about the sale of the land, buildings and machinery. The residual value of these non-current assets could have a considerable bearing on the outcome of the project.

4. 税

1. **Bi-lateral**

It is assumed that Chmura Co will be given and will utilise the full benefit of the bi-lateral tax treaty and therefore will not pay any additional tax in the country where it is based.

2. **Additional tax**

It is assumed that no additional tax is payable in the USA for the profits made during the first two years of the project's life when the company will not pay tax in Yilandwe either.

5. **Start immediately (新建厂必备)**

Although the scenario states that the project can start almost immediately, in reality this may not be possible and Imoni Co may need to factor in possible delays.

6. **BOSP assumption**

The BSOP model makes several assumptions such as perfect markets, constant interest rates and lognormal distribution of asset prices. It also assumes that volatility can be assessed and stays constant throughout the life of the project, and that the underlying asset can be traded.

Neither of these assumptions would necessarily apply to real options. Therefore the BoD needs to treat the value obtained as indicative rather than definitive.

1. Risk-free rate
2. Standard deviation
3. Indicative not definitive

#### 4. Risk

##### 1. Political risks

Investing in Mehgam may result in political risks. For example, the current government may be unstable and if there is a change of government, the new government may impose restrictions.

##### 2. Remittance

The financial projections are prepared on the basis that positive cash flows from Yilandwe can be remitted back to the USA. Imoni Co needs to establish that this is indeed the case and that it is likely to continue in the future.

##### 3. Physical infrastructure

##### 4. Fiscal risks

As much as possible, Chmura Co will want to ensure that fiscal risks such as imposition of new taxes.

##### 5. Local regulation

Also, it will want to familiarise itself on regulations such as employee health and safety law, employment law and any legal restrictions around land ownership.

##### 6. Culture

Imoni Co needs to take account of cultural risks associated with setting up a business in Yilandwe. The way of doing business in Yilandwe may be very different.

##### 7. Reputation

###### 1. QC

Other areas where Chmura Co will need to focus on are the quality control procedures to ensure that the quality of the food batches is similar to the quality in the host country.

###### 2. Ethical

#### 5. Recommendation

With Bulud Co's offer, it is recommended that the BoD proceed with the project, as long as the BoD is satisfied that the offer is reliable, the sensitivity analysis/scenario analysis indicates that any negative impact of uncertainty is acceptable and the business risks have been considered and mitigated as much as possible.

Real option / follow-up projects

Imoni Co should assess and value alternative real options which it may have. It could consider whether the project can be abandoned if circumstances change against the company; entry into Yilandwe may provide Imoni Co with other business opportunities.

# Valuation

## Synergy

An acquisition creates synergy benefits when the value of the combined entity is more than the sum of the two companies' values. Synergies can be separated into three types: revenue synergies, cost synergies and financial synergies.

**Financial synergies** may be available because Strand Co does not have the funds to innovate new products. On the other hand, Hav Co has cash reserves available. It may be possible to identify and quantify this synergy based on the projects that can be undertaken after the acquisition, but would have been rejected before, and their corresponding net present value.

Furthermore, as the company increases in size, the debt capacity of the combined company may increase, giving it additional access to finance.

Finally, the acquisition may result in a decrease in the cost of capital of the combined company.

**Cost synergies** may arise from the larger company being able to negotiate better terms and lower costs from their suppliers.

And there may be duplication of functional areas and head office which could be reduced and costs saved.

These types of synergies are easier to identify and quantify but would be more short-lived.

Revenue synergies are perhaps where the greatest potential for growth comes from but are also more difficult to identify, quantify and enact.

In this case, Hav Co's management can help market Strand Co's products more effectively by using their sales and marketing talents resulting in higher revenues and longer competitive advantage.

The services of the scientists from Strand Co will be retained to drive innovation forward, but these need to be nurtured with care since they had complete autonomy when they were the owners of Strand Co.

## Finance

The cash together with bond offer yields the highest return.

The 31.3% return is the closest to the maximum premium based on the excess earnings method and more than the maximum premium based on the PE ratio method.

initial cash payment

be diluted most

The cash and share offer gives a return in between the pure cash and the cash and bonds offers.

Although the return is lower, Strand Co's shareholders become owners of Hav Co and have the option to sell their equity immediately.

The pure cash offer gives an immediate and definite return to Strand Co's shareholders, but is also the lowest offer and may also put a significant burden on Hav Co having to fund so much cash, possibly through increased debt.

**Different impacts on shareholders' personal taxation situations due to the different payment methods might also influence the choice of method.**

## FCF 定义 (201406)

**Free cash flows (FCF)** = after tax operating (pre interest) cash flows – net investments in assets

**Free cash flows to equity (FCFE)** = FCF – net interest paid

## Method of development

*Vogel Co* may have switched from a strategy of **organic growth** to one of growth by **acquisition**, if it was of the opinion that such a change would result in increasing the value for the shareholders.

Acquiring a company to gain access to new products, markets, technologies and expertise may be **quicker and less costly**.

Horizontal acquisitions may help *Vogel Co* **eliminate key competitors** and enable it to take advantage of economies of scale.

**Organic growth may take a long time**, can be expensive and may result in little competitive advantage being established due to the time taken.

Also organic growth, especially into a new area, would need managers to gain knowledge and expertise of an area or function, which they not currently familiar with.

Furthermore, in a saturated market, there may be little opportunity for organic growth.

### own investment vs licensing

*Imoni Co* may be able to benefit from setting up its own plant as opposed to licensing in a number of ways.

*Yilandwe* wants to attract foreign investment and is willing to offer a number of **financial benefits** to foreign investors which may not be available to local companies.

The company may be able to **control the quality of the components** more easily, and offer better and targeted training facilities if it has direct control of the labour resources.

The company may also be able to **maintain the confidentiality** of its products, whereas assigning the assembly rights to another company may allow that company to imitate the products more easily.

Investing internationally may provide opportunities for risk diversification, especially if *Imoni Co*'s shareholders are not well-diversified internationally themselves.

Finally, direct investment may provide *Imoni Co* with new opportunities in the future, such as **follow-on options**.

### Own investment's Drawbacks

higher costs

high risks

The licensee, because it would be a local company, may understand the operational systems of doing business in *Yilandwe* better.

## Risk / Failure

The Board of Directors of Vogel Co needs to ensure that there are **good reasons** to undertake the acquisition, and that the acquisition should result in an increase in value for the shareholders.

Research studies into mergers and acquisitions have found that often companies are acquired not for the shareholders' benefit, but for the benefit or self-interest of the acquiring company's management.

The non-executive directors should play a crucial role in ensuring that acquisitions are made to enhance the value for the shareholders.

Procedures need to be established to ensure that **the acquisition is not overpaid**. Vogel Co should determine the maximum premium it is willing to pay and not go beyond that figure.

Vogel Co needs to ensure that it has proper procedures in place to **integrate** the staff and systems of the target company effectively, and also to recognise that such integration takes time.