

STRATEGIC CORPORATE FINANCE

PROFESSIONAL 2 EXAMINATION - AUGUST 2015

NOTES:

Section A - Answer Question 1; and

Section B - Answer **any two** from Questions 2,3 and 4.

Should you provide answers to more questions than required in Section B, you must draw a clearly distinguishable line through the answer not to be marked. Otherwise, only the first two answers provided will be marked.

STRATEGIC CORPORATE FINANCE TABLES ARE PROVIDED

Time Allowed

3.5 hours plus **20 minutes** to read the paper.

Examination Format

This is an open book examination. Hard copy material may be consulted during this examination subject to the limitations advised on the Institute's website.

Reading Time

During the reading time you may write notes on the examination paper, but you may not commence writing in your answer booklet.

Marks

Marks for each question are shown. A mark of 50 or more is required to achieve a pass in this paper.

Answers

Start your answer to each question on a new page.

You are reminded to pay particular attention to your communication skills. Care must be taken regarding the format and literacy of your solutions. The marking system will take into account the content of your answers and the extent to which the answers are supported with relevant legislation, case law or examples, where appropriate.

Answer Booklets

List on the cover of each answer booklet, in the space provided, the number of each question attempted. Additional instructions are shown on the front cover of each answer booklet.

THE INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS IN IRELAND

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CASE STUDY – Azorian

Azorian plc is listed on the Enterprise Securities Market (ESM) in Ireland. The company owns a chain of hotels which are spread throughout the Republic of Ireland. It has come through the recent recession relatively unscathed; this is due in part to the fact that its hotels are by and large well located. The majority of Azorian's hotels are located in Dublin. Furthermore, it did not purchase any new hotels since 1997. Therefore, it did not overpay for any of its hotels in the boom, and also has relatively low borrowings. Nonetheless, its profitability was severely affected by the recession, with turnover being reduced significantly over the period 2008-2011.

Azorian's shares have traded on the ESM for a number of years and its ownership structure is such that only three institutional shareholders own more than 1% of the firm. About 80% of the shares of Azorian are held by institutional investors such as insurance companies, pension funds and hedge funds. There are 50 million shares in issue. These currently trade at €5 each. The current Azorian management team own about 10,000 shares. Azorian's CEO, Bill Hoskins, owns 8,000 shares, the vast majority of the management's shareholding. He does not hold shares in any other company, but he contributes to Azorian's staff pension fund.

The five largest shareholders are outlined in Table 1.

Table 1
Largest Shareholders of Azorian

Investor's Name and Number of Shares Owned

Fickle Hedge Fund	1,585,000
Safety First Pension Fund	960,000
Diversified International Mutual	545,000
Responsible & Sustainable Fund	130,000
Well Diversified Irish Widowers	12,000

While business has improved since 2011, Bill Hoskins feels that the hotel industry is rather cyclical and he believes that Azorian should diversify into at least one other business in order to reduce risk. He argues that no company should put all its eggs in one basket. His current mantra seems to be "*diversification can reduce risk without sacrificing return: all businesses should diversify, it's just common sense*".

Bill has also noticed the emergence of craft breweries. Azorian is buying more and more beer, ale and stout from such small local breweries. The company is finding that its customers, both local and tourists alike, are turning to craft beer instead of the produce of the large international drinks producers. He reckons that with additional restrictions on the advertising of alcoholic beverages the large companies will find it impossible to continue their dominance of the industry. Thus there will be even more opportunities for artisan breweries in the future. He sees the purchase of a few artisan breweries as a method of expanding Azorian and simultaneously reducing risk. "*More profits and less risk, what could be wrong with that?*", he asks.

Glytherdale plc is another Irish company which amongst other things, controls four craft breweries: St. Finbarr's in Cork, St. Philbert's in Waterford; St. Ulick's in Dublin; DT's in Limerick. The last named derives its name from its famous blond beer, The Devil's Tipple. St. Finbarr's is best known for Hairy Harry's, a strong

stout with 7% alcohol, which is very popular with Corkonians. St. Philbert's mainly brews a number of smooth ales of which "The Stoat" is its bestselling brand. St Ulick's main product is the well known Belgian blond beer.

Glytherdale's breweries were all rather small in terms of turnover when purchased by the company. They have developed the markets for their products to the extent that they can no longer keep up with demand and need to urgently expand their production facilities. Glytherdale's primary interests, however, lie elsewhere. The person who managed the brewery section of Glytherdale's business has since left the company. Robert Cramer, Glytherdale's CEO, is not keen to recruit another specialist in the brewing industry. All the craft breweries have to be run as essentially independent companies since it is vital that they do not lose their artisan status. This is proving a bit of a problem for Robert, and he is of the opinion that he does not have the same level of control over the breweries as he has over the remainder of Glytherdale's business. The breweries need some investment since there are significant economies of scale in the brewing industry and they need to upscale to exploit their expanding market. The need to run the four breweries as independent businesses in order to maintain their craft status as mentioned above is also problematic. Glytherdale's main business involves running a chain of retail outlets. The company has made the decision to focus on its main business and is actively seeking a buyer for its breweries.

Bill Hoskins meets Robert Cramer, CEO of Glytherdale, to discuss the sale of the four breweries to Azorian. Robert provides Bill with the 2015 audited financial statements and projected accounts for Glytherdale's Brewery Division from 2016 to 2019. These are outlined in Table 2. Robert explains that he reckons that the craft beer sector will grow by 5% to 6% over the next couple of years. However, the growth rate will settle down to a long-run growth rate of 1% from 2018. These growth rates are reflected in the projections outlined in Table 2.

Robert Cramer goes on to state that the Board of Glytherdale reckons that the assets of its brewery division are worth about €600 million (although their book value is only €130 million). With debts of €40 million, he reckons that Glytherdale would accept an offer in the region of €560 million for the division. Robert explains that this rather high Market-to-Book ratio for the breweries stems from their growth prospects. A few days after the meeting with Cramer, Bill Hoskins reports back to his board. He requires the approval of the board before any offer can be made to purchase the brewery division of Glytherdale. Details of Azorian's board are outlined in Table 3.

Table 2
Income Statements to 30 June in €000's

	2015 Audited	2016	2017	2018	2019
Sales	200,000	212,000	222,600	229,278	231,570
Operating Expenses	180,000	190,800	191,436	201,765	203,782
Operating Income	20,000	21,200	31,164	27,513	27,788
Interest	1,800	2,000	3,400	3,300	3,300
Profit Before Tax	18,200	19,200	27,764	24,213	24,488
Taxation	2,275	2,400	3,470	3,027	3,060
Net Profit After Tax	15,925	16,800	24,294	21,186	21,427
Dividends	10,000	10,000	10,000	12,000	12,000
Addition to Equity	5,925	6,800	14,294	9,186	9,428

Balance Sheet as at 30 June in €000's

	2015 Audited	2016	2017	2018	2019
Fixed Assets	90,000	120,000	133,560	137,567	138,942
Net Current Assets	40,000	42,400	44,520	48,148	48,630
Operating Assets	130,000	162,400	178,080	185,715	187,572
Cash	0	2,400	(986)	565	2,135
Net Assets	130,000	164,800	177,094	186,280	189,708
Shareholders' Equity	90,000	96,800	111,094	120,280	129,708
Debt	40,000	68,000	66,000	66,000	60,000
Total Financing	130,000	164,800	177,094	186,280	189,708

Table 3
Azorian Board of Directors

<i>Bill Hoskins</i>	CEO for the past 15 years; has worked in the hotel industry since he was 18. He is now 49 years old.
<i>Bertram McKenzie (British)</i>	Chairman, former banker and board member of See Scotland; 60 years of age.
<i>George Gilhooley (Northern Ireland)</i>	NED, Chief operating officer of a large Belfast hotel; 50 years old.
<i>Brian Pitt, BComm, CPA</i>	NED, Partner in Pitt & Co., Certified Public Accountants; 48 years old.
<i>David D'Arcy</i>	NED, Celebrity chef and owner of a famous Dublin restaurant; 38 years old.
<i>Terence Michael</i>	NED, founder of Michael Travel which he recently sold to a British plc; 52 years old.
<i>Humphrey Bolger, BE, MBA,</i>	NED, founder and former CEO of Bolger Engineering; now NED on another Irish plc quoted on the main market as well as of Azorian; 55 years old.

The board has three committees. The audit committee is comprised of Messrs Pitt (Chair) and Bolger; the nomination committee comprises Messrs Michael (Chair), McKenzie and Gilhooley; the remuneration committee is comprised of Humphrey Bolger (Chair) and Terence Michael.

The board of Azorian listens to Bill as he outlines the merits of the takeover. Bill waxes lyrical about an exciting new era for Azorian and the tremendous growth prospects in the craft beer industry. Another factor that he stresses is that the beer production will make Azorian more diversified and reduce its risk. *"If we stick with hotels we will not achieve the growth required by shareholders"*, Bill declares. He goes on to explain that there are so many hotels in Ireland at the moment that there is no room for expansion here. He points out that expanding to say, the UK, would entail additional risks including foreign exchange risk. He stands up and declares to the board *"the purchase of the breweries not only delivers much needed growth but actually reduces risk as well"*. The board listens carefully to Bill and decides to call in Azorian's auditor, Fred Falstaff, CPA to value the breweries to see if they are worth the €560 million asking price.

Fred Falstaff, establishes that the accounts and projections for the breweries are reasonable. He further confirms that the brewing industry is of average systematic risk, so the equity beta of a brewery can be approximated by the average beta of all stocks. The market risk premium $[E(R_m) - RF]$ is 4.5% and the risk free rate of interest is 0.6%. Azorian's beta is 1.1.

END OF CASE STUDY

SECTION A - Compulsory Question.

Explain fully all statements and assumptions made in arriving at your answers.

1.

REQUIREMENT:

You are required to prepare a report in which you:

- (a) Carry out a valuation of the brewery division of Glytherdale based on the projections outlined in Table 2 and the information gleaned by Fred Falstaff. Advise the board as to the most appropriate strategy based on your valuation.
(30 Marks)
- (b) Justify why you did or did not make an adjustment for corporation tax when computing the cost of capital for the breweries project.
(15 Marks)
- (c) Robert Cramer explains the difference between what he perceives as the market value for Glytherdale's breweries and their book value in terms of their growth prospects. Discuss how the market-to-book ratio of a business is related to its expected growth rate.
(5 Marks)

[Total: 50 Marks]

SECTION B – Answer only 2 questions from this section

2.

REQUIREMENT:

- (a) Outline the main principles of diversification i.e. how diversification can reduce risk without sacrificing return.
(5 Marks)
- (b) Bill Hoskins seems well aware of the principles of diversification. Discuss the extent to which Bill appears to be diversified on a personal level? Advise him on how he might further diversify his holdings of financial assets justifying the most efficient methods of achieving risk reduction.
(10 Marks)
- (c) Critically assess whether the diversification provided by purchasing a business in a different industry is a good reason for Azorian to acquire the breweries?
(10 Marks)

[Total: 25 Marks]

3.

REQUIREMENT:

- (a) Critically analyse the merits (or otherwise) of the board of Directors of Azorian in terms of effective corporate governance, on the basis of the information outlined in the case.
(13 Marks)
- (b) Detail the additional information that you should now like to know in order to make of full assessment of the overall standard of corporate governance in Azorian.
(12 Marks)

[Total: 25 Marks]

4.

REQUIREMENT:

Assume that the takeover deal goes ahead, as suggested by Bill, and that both Azorian's and Glytherdale's shares are correctly valued by the market prior to and after the takeover.

- (a) Critically evaluate Bill's argument that the purchase of hotels in the UK increases risk and thus is an inferior alternative to the purchase of breweries in Ireland.

(10 Marks)

- (b) In terms of mergers and acquisitions how should you classify the brewery project from the perspective of both Azorian and Glytherdale?

(5 marks)

- (c) A supplementary reason for the takeover of the four breweries by Azorian as espoused by Bill is the prospects for growth it provides. Critically evaluate the achievement of 'growth' as an objective of a business in general and Azorian in particular.

(10 Marks)

[Total: 25 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

THE INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS IN IRELAND STRATEGIC CORPORATE FINANCE

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SOLUTION 1

Solution to Azorian

Note: These solutions contain a tutorial element so it is possible for students to get full marks in a question or part thereof without covering all the material below.

- (a) First we must compute the cost of capital for the Brewery takeover. The relevant cost of capital must be that pertaining to the Brewery business which we are told has an average beta i.e. $\beta = 1$.

We will take the market value of equity to be €560 Million and that of debt to be equal to its book value of €40 million.

Calculation of the cost of Capital for Breweries

Here debt adjusted for corp. tax		Here debt is not adjusted for Corporate Tax	
Rf	0.6	Rf	0.6
Beta	1	Beta	1
Rm-Rf	4.5	Rm-Rf	4.5
Cost of Equity	5.1	Cost of Equity	5.1
Cost of Debt*(1-T)	3.5	Cost of Debt	4
Market Value of Equity	560	Market Value of Equity	560
Value of Debt	40	Value of Debt	40
Value of Breweries	600	Value of Breweries	600
E/V	0.933	E/V	0.933
D/V	0.067	D/V	0.067
WACC	4.993	WACC	5.027
E/V*Ke	4.760	E/V*Ke	4.760
E/V*Kd(1-T)	0.233	E/V*Kd	0.267
WACC	4.993	WACC	5.027

From the above the cost of capital for the project or WACC is equal to 5%. Remember that in reality we are estimating the cost of capital. It is not a figure which is known as such. The precision of our estimate is not likely to be about to distinguish between 4.8% and 5%. Using 4.8% would be a signal that a person did not appreciate the variability of the estimate.

We next compute the free cash flow and discount it at 5%. Note the terminal growth rate is 1% as outlined in the question and reflected in the projections.

Computation of Free Cash Flow

Operating Income After Tax	18,800	27,694	24,487	24,727
Δ NOA	32,400	15,680	7,635	1,857
Free Cash Flow (OI - Δ NOA)	-13,600	12,014	16,852	22,870
Cash Flow Statement				
Dividends	10,000	10,000	12,000	12,000
Increase (Reduction) in Cash	2,400	-3,387	1,552	1,570
Reduction (Increase) in Debt	-28,000	2,000	0	6,000
Interest on Debt	2,000	3,400	3,300	3,300
FCF	-13,600	12,014	16,852	22,870
FCF	-13,600	12,014	16,852	22,870
Discount Factor	1.050	1.103	1.158	1.216
DFCF	-12,952	10,897	14,557	18,815
Terminal Value				577,475
PVDFCF to 2019	31,317			
PVTV	475,090			
Enterprise Value	506,406			
Value of Debt	40,000			
Value of Equity	466,406			
Operating Income Aft Tax	18,800	27,694	24,487	24,727
Capital Charge	6,500	8120	8,904	9,286
ReOI	12,300	19,574	15,583	15,442
Discount Factor	1.050	1.103	1.158	1.216
Discounted ReOI	11,714	17,754	13,461	12,704
TV				389,902
PV of ReOI to 2019	55,633			
PV of TV	320,774			
Book Value	90,000			
Value of Equity	466,406			

We note that the value of equity is only about €466.5 million. This is substantially less than the amount that Robert Cramer is looking for.

Our advice is NOT to purchase the breweries. We would suggest that the project should not be proceeded with at all since there are other aspects of it which cause some concern. For example the lack of experience of Azorian in Brewing and the motivation for the purchase.

(b) If no adjustment was made to the cost of debt for taxation this could be justified on the basis that:

1. The corporation tax rate in Ireland is so low it will not provide a large tax shield
2. It is difficult to justify adjusting for one market imperfection (Corporate Tax rates) and not making allowances for other such as non-debt tax shields, personal tax rates, bankruptcy costs, agency issues etc.
3. There may be some capital allowances for the CAPEX projected to be undertaken in 2016; 2017 which will reduce the need for the tax shield provided by debt.
4. If the gearing ratio was greater this would still not make much of a difference – if it were very high one would really have to consider bankruptcy costs. Taking a high debt to equity ratio of 100% ($D/V = 0.5$) we would get the following WACC with and without taxes.

Calculation of the cost of Capital for Breweries

Here debt adjusted for corp. tax

Rf	0.6
Beta	1
Rm-Rf	4.5
Cost of Equity	5.1
Cost of Debt*(1-T)	3.5
Market Value of Equity	300
Value of Debt	300
Value of Breweries	600
E/V	0.500
D/V	0.500
D/E	1.000
WACC	4.300
E/V*Ke	2.550
E/V*Kd(1-T)	1.750
WACC	4.300

Here debt is not adjusted for Corporate Tax

Rf	0.6
Beta	1
Rm-Rf	4.5
Cost of Equity	5.1
Cost of Debt	4
Market Value of Equity	300
Value of Debt	300
Value of Breweries	600
E/V	0.500
D/V	0.500
D/E	1.000
WACC	4.550
E/V*Ke	2.550
E/V*Kd	2.000
WACC	4.550

If D/E were higher than (100%) whatever small tax advantage to debt could potentially be eroded.

If the above were our calculations I believe we would set the cost of capital at 4.5% regardless. This is especially so since a D/V ratio would have further costs (bankruptcy; higher Kd in the future) associated with them

If one wished to argue for the taxation adjustment one would make the following points.

1. The gearing is low so bankruptcy and other costs of debt are unlikely to be factors.
2. It is clear from the projections that the company is expected to be profitable and will ultimately have to pay tax regardless of capital allowances.
3. It is standard practice to make this adjustment.

- (c) The market to book ratio (MTB) is simply the market value of equity divided by the book value of equity. Stocks with high MTB ratios are often termed growth stocks since the reason that their equity values exceed their book values is that their earnings and book values are expected to grow in the future.

The MTB ratio is related to the P/E ratio as follows:

$$\frac{M}{B} = \frac{P}{E} \times \frac{E}{B}$$

Note M is just P multiplied by the number of shares in issue; E stands for EPS; B stands for book value in the MTB ratio and Book-value per share in the ROE. Sometimes MTB is called the price to book ratio.

The MTB ratio is the P/E ratio multiplied by the current return on equity. Stocks with high P/E ratios will generally have high MTB ratios – but the ROE can have an effect as well. If a stock has a very low ROE it can have a high P/E but a moderate MTB. This is because the P/E reflects growth relative to current earnings.

The MTB ratio depends on the level of future earnings relative to normal earnings or book value times the cost of capital (rB_{t-1}). The level of normal earnings (rB_{t-1}) and a company's ability to exceed it depends on a) the cost of capital and b) how conservative the balance sheet book value (B_{t-1}) is. If the balance sheet is very conservative clearly book values will be much less than market values and the Present value of Residual Income (PVRI) will be positive. To explain this fully one can use the residual income valuation model (RIVM).

The residual income valuation model can be used to explain how the MTB ratio depends on the present value of residual income (PVRI). Thus the value of firms with high MTB ratios will depend mainly on the present value of expected residual income or abnormal earnings. On the other hand the value of firms with low MTB ratios will depend more on assets in place.

To explicate this fully we begin with a basic finance model: the present value of expected dividends (PVED) model $P_t = \sum_{\tau=1}^{\infty} \frac{D_{t+\tau}}{(1+r)^\tau}$. Second we assume clean surplus accounting, that is the change in equity book value is simply retained earnings. More formally $X_t - D_t = B_t - B_{t-1}$. We can then substitute for dividends [$D_t = X_t - (B_t - B_{t-1})$ or earning minus retained earnings] in the PVED equation to get (after algebraic manipulation)

$$P_t = B_t + \sum_{\tau=1}^{\infty} \frac{RI_{t+\tau}}{(1+r)^\tau}$$

Note Residual Income: $RI_t = E_t - rB_{t-1}$

E_t is earnings

r is the cost of capital and

B_{t-1} is opening book value

$\sum_{\tau=1}^{\infty} \frac{RI_{t+\tau}}{(1+r)^\tau}$ is the present value of residual income (PVRI)

We can rewrite the equation showing that value depends on assets in place (B_t) and the present value of expected residual income.

$$P_t = B_t + PVRI$$

$$\frac{P}{B} = 1 + \frac{PVRI}{B}$$

This equation states that the price to book ratio (MTB) is equal to 1 plus the present value of future residual income divided by its current book value.

For a MTB of 1 PVRI = 0 and price (market value) equals book value.

For an MTB > 1 PVRI is positive – the market expects high earnings (positive RI) in the future and this is reflected in the value of the stock.

For an MTB < 1 PVRI is negative – the market expects low earnings (negative RI) in the future.

(Marking notes – I don't expect many of the students to use the RIVM so I will only allocate 1 mark for this: I am mainly interested in the expected growth versus assets in place aspect of the MTB ratio: market value reflects the future and book values the past and what it tells us about the future)

SOLUTION 2

(a) Brief Recap on Portfolio Theory by way of a Tutorial for students

From a perusal of the capital markets we note that investors do not hold securities in isolation. They tend to hold a number of securities in different companies at the same time i.e. they hold portfolios. A portfolio is simply a holding of a number of different securities. Why do investors do this? It can be shown that by diversifying one's wealth across a number of different securities one can reduce risk (variance of returns) without sacrificing expected returns. Intuitively we have a situation where some securities in a portfolio will be doing well while others will be doing badly. This will dampen down (reduce) the variability in the portfolios returns. To explore this further we need to know how the variance of a portfolio is calculated.

The crucial inputs into the calculation of the variance or risk of a portfolio are the correlation coefficients between the securities that comprise the portfolio and the number of securities in the portfolio.

Typically investors will have more than two shares in their portfolios. It can be shown that provided that the shares are not perfectly positively correlated (i.e. $\rho = 1$) the greater the number of shares the lower the risk of the portfolio. However the risk reduction from diversification is a diminishing function of the number of shares in the portfolio (see figures 1 and 2). That is adding an additional share to a randomly chosen ten security portfolio is likely to reduce the risk of that portfolio by more than that achieved by adding the same security to a randomly chosen 100 security portfolio. This is because the extra share will almost certainly be more highly correlated with the larger portfolio.

RISK REDUCTION THROUGH DIVERSIFICATION

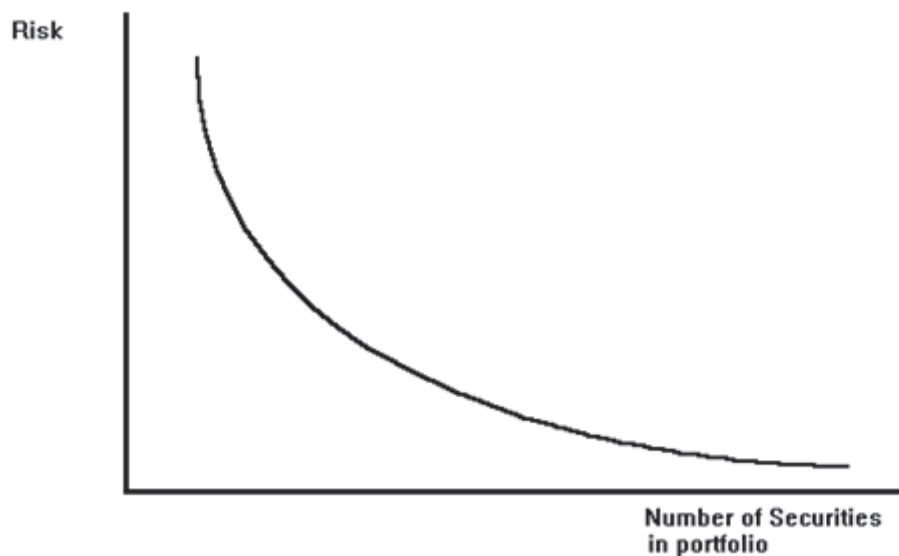
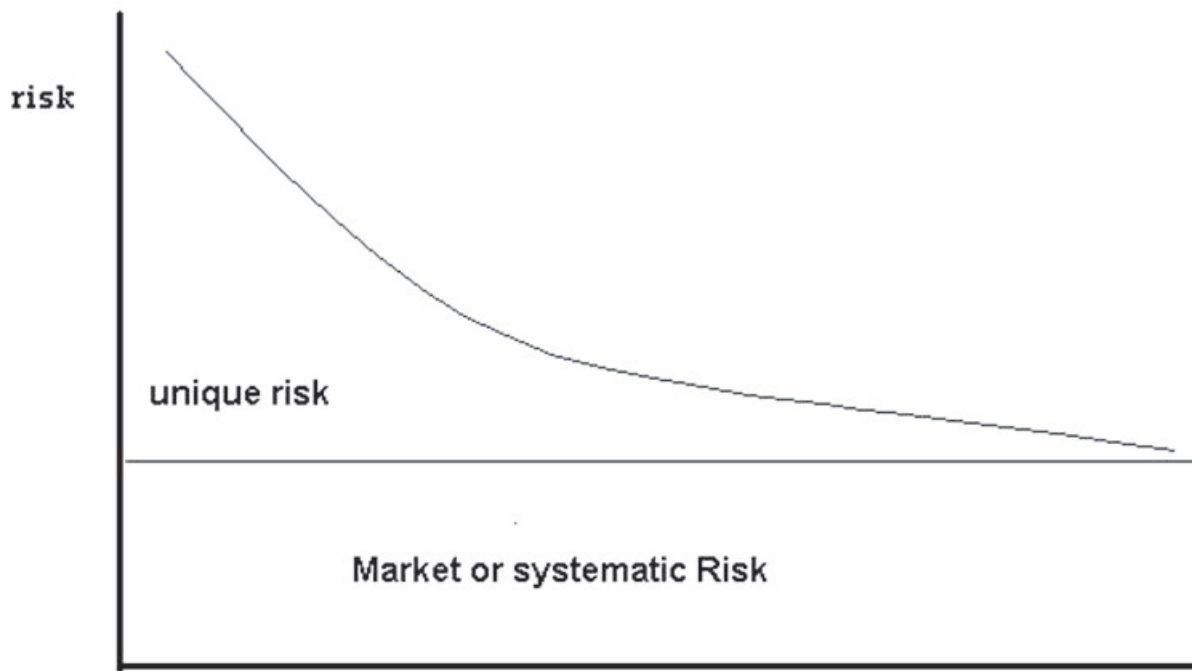


Figure 1

Figure 1, above, is drawn on the assumption that the securities in the portfolio are uncorrelated i.e. there is no relation between their returns. In reality shares in a stock market will have some degree of positive correlation with each other. This is due to macroeconomic factors that affect all shares. However, each will be affected differently. For example all shares are adversely affected by a rise in interest rates.

Diversification will tend to eliminate the risk pertaining individual company circumstances. The risk of a large well-diversified portfolio will depend more on general business conditions rather than the prospects of any individual share. All shares are affected by general economic conditions so any share is likely to be more highly correlated with such a portfolio than with a ten-security portfolio.



Figure

The calculations behind Figures 4 and 5 can be illustrated by examining the variance-covariance matrix of the portfolio.

The variance of an n-security portfolio can be computed by adding the “boxes” in the following matrix. The shaded diagonal boxes represent variance terms and the off-diagonals represent covariances.

1	1							
2		2						
3			3					
4				4				
5					5			
6						6		
N								N
	1	2	3	4	5	6		N

In terms of an equation adding the boxes is:

$$\sigma_p^2 = \sum_{i=1}^n x_i^2 \sigma_i^2 + \sum_{i=1}^n \sum_{\substack{j=1 \\ i \neq j}}^n x_i x_j \sigma_{ij}$$

If we assume that we have an equal amount invested in each asset, i.e.

x_i and $x_j = 1/n$ the following can be derived

It is clear from the above that as the size of the portfolio increases (n gets larger) the variance of the portfolio approaches the average covariance between all the assets in the portfolio. This is illustrated in Figure 2.

$$\sigma_p^2 = \frac{1}{n}(\bar{\sigma}_i^2 - \bar{\sigma}_{ij}) + \bar{\sigma}_{ij}$$

$\bar{\sigma}_i^2$ and $\bar{\sigma}_{ij}$ are the average variance and average covariance of the assets that comprise the portfolio respectively.

- (b) Bill has a one security portfolio, Azorian. To make matters worse he has all of his human capital tied up in Azorian. However, it should be noted that he is contributing to a pension fund. This is likely to be well-diversified so depending on the level of his pension fund and how diversified it is he may not be too badly off at all with respect to diversification. We would really need to know if the Azorian pension fund had invested in any hotels or the tourist industry.

It would appear however from the case that Bill feels a bit under-diversified. He and especially Glytherdale would be the beneficiaries of the takeover of the breweries by Azorian

The main issues that Bill should consider in constructing his portfolio:

1. the number of shares in his portfolio
2. the correlations between the returns on the shares in the portfolio

A more efficient method for Bill to achieve more diversification would be to invest in a mutual fund or an exchange traded fund (ETF) rather than purchase shares directly himself. The mutual fund or ETF purchase gives him a full portfolio for a modest cost. The ETF would have the lowest costs. However, the purchase of shares directly would allow Bill to fine tune his risk better. For example, he could avoid investing in the hotel business entirely if he constructed his own portfolio. This might be more difficult if he invests into a fund that someone else is managing. What he needs to achieve is diversification away from his human capital which is totally connected to Azorian and hence the hotel business. He can achieve this by purchasing shares in business that have very low correlations with the hotel business. A simple way of doing this is to purchase shares in industries which are unrelated to hotels e.g. pharmaceuticals, chemicals, engineering etc. This stratifying his portfolio by industry will ensure that he is investing in stocks with low correlation coefficients without having to estimate these correlations. He should also purchase shares in non-Irish companies since non-Irish companies will have lower correlations with an Irish hotel. Note he can purchase Eurozone companies and not take on any FX risk while diversifying abroad.

- (c) Conglomerate diversification is not a good reason for a takeover.

There are two essential points to be made in answering this question.

1. Firms usually have to pay a premium for control. So it will be more expensive for a firm to purchase another firm than for the shareholders of the purchasing firm to buy some shares in the target firm.
2. The shareholders of Azorian are generally institutions who will be well-diversified. They don't need Azorian to do something for them that they could do more cheaply themselves.
3. A minor supplemental point is that Azorian has no expertise in the Brewing industry so it is difficult to see how they can add any value with the takeover of the breweries.

SOLUTION 3

- (a) The purpose of the board of directors is to monitor management on behalf of the shareholders. The management are there to run the company; good corporate governance is there to ensure that the company is run properly in the interests of the shareholders (stakeholders?). For the board of directors to contribute to good governance it must be represent the shareholders and be independent of management.

Azorian's board is well structured in the following respects

1. It has a majority of independent NEDs
2. There is CEO/Chair Duality
3. It has a good diversity of professions
4. It has good industry experience
5. Its committee structure appears sound
 - a. three crucial committees
 - b. audit committee is independent and has financial expertise.
 - c. the other committees are independent or the majority independent.
6. The board is not too large or too small. Large enough for a diversity skills small enough for good communication.

However it is noted that the board has no female member. It does not reflect diversity with respect to gender.

- (b) Remaining with the board for the time being I would like to have information on the following:

1. The number of times it and the committees met.
2. The attendance of each of the board members.
3. The length of time each of the members has been on the board (after a period their independence wanes).
4. Details of their remuneration and how they are remunerated.
5. Detail of their contracts.
6. Who is the senior independent director?
7. Any business dealings the NEDs have with Azorian.

Corporate Governance goes beyond the board of directors. Other matters pertaining to corporate governance that I would be interested in finding out about are:

1. The remuneration of Bill Hoskins: structure and amount
2. The market for corporate control in the Hotel Industry in Ireland
3. What is the market like for managers of hotels (the managerial labour market)?

We know that the management do not have many shares in Azorian so there is a clear separation of ownership from control.

We also know that by and large the shareholders each have a relatively small stake in Azorian so there may be a free rider problem when it comes to monitoring: the board should help here.

We know that the leverage is low so that there will not be much if any monitoring by the banks.

SOLUTION 4

- (a) Bill is referring to the exchange risk here which would be occasioned by having hotel assets denominated in sterling.

However, to the extent that the tourist industry in Ireland and hence at least some of Azorian's customers are already based on non-Euro areas Azorian is already subject to FX risk. In fact it could be argued that having some sterling denominated assets may give some diversification of currency.

What would change is the nature of the FX risk. At the moment Azorian is subject to long-term operating FX risk. This refers to the price competitiveness of its product. So if sterling becomes weak relative to the Euro UK – based people find it more expensive to holiday in Ireland: US citizens will find that the UK becomes a more price competitive destination for their European holiday.

Having a chain of UK hotels would be different in that there would be translation exposure for the balance sheet. But the ex-ante version of translation exposure would also be new – Azorian would have assets whose Euro value could vary with the exchange rate with sterling.

- (b) From the perspective of Azorian the brewery project is conglomerate diversification

From Glytherdale's perspective it is a spin-off.

- (c) Growth in profits, cash flows, dividends and asset values is good. The reason that such growth is good is that it is an indication of value. The fundamental objective of the firm is to maximise shareholder value and it achieves this by maximising its own value.

However, there are dangers when acquiring another company. When you are acquiring a company sometimes as in the Azorian case you will pay for growth and you have to be careful that you do not pay too much. It is clear from the projections that the breweries are growing though the rate tapers off to a mere 1% after two years. Acquiring the breweries will certainly deliver growth for Azorian but it is a poor investment. Growth is not the primary objective of a business: maximising shareholder value is. Growth is just an indication of value creation. It is clear from the valuation of the breweries that they are overpriced at €560 million: this is the first reason that they are a poor investment. Azorian would be paying too much for the growth it acquired. The people who would exclusively gain from the increase in value that is derived from the growth in the breweries are the shareholders of Glytherdale.

The second reason that they are a poor investment is that diversification is something that Azorian's shareholders can do more cheaply and easily themselves. Thus the takeover would destroy shareholder wealth.