

# STRATEGIC CORPORATE FINANCE

## PROFESSIONAL 2 EXAMINATION - APRIL 2017

### 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. The pass mark required is 50% in total over the whole 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

# STRATEGIC CORPORATE FINANCE

## PROFESSIONAL 2 EXAMINATION - APRIL 2017

Time Allowed: 3.5 hours, plus **20 minutes** to read the paper.

**Section A** - Answer Question 1; **and**

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

**Note:** *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 to hand will be marked.*

### CASE STUDY – Persepolis Plc

Jimmy Rodgers is the founder and Chief Executive Officer (CEO) of Persepolis Plc an Irish-based technology company. Jimmy arrives at the office of his accountant, Dermot Dermody, on 20th April 2017. He is out of breath as he has been rushing. As per usual, Jimmy has been tinkering with his smart phone and has not given himself enough time to complete the journey to Dermot's office. The meeting with Dermot is particularly important since Jimmy has received an offer from a US-based company, RKZN Industries, to buy all of the equity in his company Persepolis for €350 million. While Jimmy is delighted to be offered this amount of money for the company, he has no idea as to whether this is a good deal from his perspective. One aspect of the offer that has caused him some concern is the fact that €100 million of the consideration is to be in the form of shares in RKZN Industries.

Jimmy's company, Persepolis, is well-established and develops and sells useful 'Apps' that assist people and companies in the management of their profiles on modern media. Persepolis also provides bespoke personal media management services to companies and individuals who desire to manage how they are perceived by "the world". Persepolis has quite a number of well-known companies, politicians, celebrities and professional sports people on its books. However, its core business remains the development and marketing of 'Apps' that allow people to manage the plethora of social and business media tools now available to them.

Jimmy founded Persepolis about 11 years ago, initially to develop and market a single 'App'. This 'App' proved very popular and soon Jimmy had to raise additional finance from a venture capital company, Dillinger, to expand the business. Five years ago, Persepolis achieved a quotation on the Enterprise Securities Market (ESM) in Dublin. The proceeds of the flotation were used, amongst other things, to buy out Dillinger, the venture capitalist. In place of Dillinger, Persepolis acquired some institutional shareholders. Also, after the flotation, Jimmy retained 40% of the equity share capital in Persepolis. In the intervening five years, the general structure of Persepolis' ownership, which is outlined in Table 1 (shown on Page 2), has not changed significantly.

As a result of the flotation and in particular the change in ownership, Persepolis further modified its corporate governance to better comply with the UK Code on Corporate Governance. Before Dillinger (the venture capitalist) became involved, Jimmy and his wife May, were the sole owners and directors of the company. Persepolis went public so that Dillinger could cash out its stake and Persepolis could raise additional finance to expand to an even greater extent. When planning to go public, Persepolis had made a further investment in its corporate governance and expanded its board. Little has changed with respect to the board structure over the years since Persepolis' initial flotation. The current board structure is outlined in Table 2 (shown on Page 3).

**Table 1: Major (greater than 3%) Shareholders in Persepolis Plc as of 31 March 2017**

<b>Name</b>	<b>Ownership</b>
James (Jimmy) Rodgers	40%
Titmarsh Titan Fund (UK)	15%
Scottish Widowers and Orphans Pension Fund (UK)	12%
European Diversified Fund	10%
Proper & Prudential Pension Fund (UK)	7%
Pilkington Hedge Fund (UK)	6%
Sinical Hedge Fund (UK)	5%

The remaining 5% of the share capital is owned by much smaller shareholders. The largest of these shareholders is the company's marketing director, Jack Bell, who owns 0.001% of Persepolis.

The full name of the US company that has made the offer of €350 million for the share capital in Persepolis Plc is RKZN Industries (RKZN). RKZN is a large US company that operates primarily in the Information and Communications Technology (ICT) industry. Until now, RKZN Industries the company operated exclusively in the United States and was considering acquiring a UK company until Brexit loomed large in June 2016. Accordingly, RKZN Industries now feels that an Irish company, such as Persepolis is a much better target.

Approximately 80% of Persepolis' turnover comes from sales of 'Apps'. The remaining 20% is accounted for by bespoke media management services which are sold mainly to wealthy UK and Irish clients. The Persepolis 'Apps' are developed in County Cork, and are sold all over the world.

When Persepolis raised additional finance from the venture capitalist, Dillinger, nine years ago it took on two non-executive directors (NEDs) as part of this funding arrangement. One of these NEDs, John Barnwell, has remained with Persepolis and is now the non-executive Chairman. John, has previously worked in fund management. Over the years, John has become quite friendly with Jimmy and his wife May. He is quite keen for Jimmy to take the offer from RKZN Industries and argues that Jimmy has virtually all of his wealth stored in Persepolis and is concerned that his wealth is not as diversified as it should be. Jimmy argues that he owns €3 million worth of shares in Facebook, Google and Twitter and, therefore, he has diversified away from Persepolis.

Jimmy is clearly considering the offer made by RKZN Industries very seriously. In his mind, Persepolis is his company. The institutional shareholders are merely investors in the company: He is different - He is the founder, the owner and the main driving force behind the company. Jimmy sees the institutional investors as 'money-men' who have to be promised a rate of return that is quite high relative to bankers, but who as a result of the high rate of return are relatively more patient than bankers (lenders).

In addition, if Jimmy and Persepolis' other shareholders refuse the offer from RKZN Industries they will have some issues regarding the corporate governance of Persepolis Plc to deal with. At the most recent Annual General Meeting (AGM) some of the smaller investors, as well as the European Diversified Fund representatives expressed some concerns with regards to what they perceive as shortcomings in the corporate governance of Persepolis. Jimmy reckons that if he does not sell to RKZN Industries he will have to deal with these issues in the near future.

Jimmy wishes to address the primary issue and asks Dermot Dermody if the offer being made by RKZN Industries values Persepolis fairly. He is also concerned about a new 'App' that he is developing and is considering using Persepolis to undertake this task if he does not sell out to RKZN industries. However, even if he does sell out to RKZN Industries he will have substantial funds from the sale to RKZN Industries to set up a new company. This new 'App' will not impinge at all on Persepolis's existing business so the idea of a fresh start with a new company which would not be subject to the scrutiny of outsider investors appeals to Jimmy.

**Table 2: Board of Directors of Persepolis Plc**

Jimmy Rodgers, 45, CEO	Founder and staunch Liverpool supporter.
Jack Bell, Marketing Director	Has been with Persepolis since 12 months before its flotation.
John Barnwell, 60	Non-executive Chairman, Former Fund Manager and Banker.
Patrick Enthwistle, 45	Non-executive director, Entrepreneur and 'App' developer, Long-time friend of Jimmy Rodgers.
Joyce Jones, 55	Founder of Jones Hair Salons and holder of seven NEDs on Irish Companies.
Peter Casey 45	Small businessman and landlord and owner of the Fox and Geese Public House in Tipperary. Friend of Jimmy Rodgers since schooldays and also a staunch Liverpool supporter.
Reginald Attwater, 61	Nominee of Titmarch Titan Fund. Former investment banker.
Roy Power, 63	Nominees of Proper and Prudential Pension Fund and Scottish Widowers and Orphans Fund, former fund manager.

The board has met four times over the past 12 months. Peter Casey has attended only one meeting but feels that he keeps up to date due to his regular contact with Jimmy Rodgers since they attend at least one Liverpool football match together every month.

Jimmy hands over the most recent accounts to Dermot Dermody, his accountant (see Table 3 shown on Page 4). He also supplies him with projections until 2021. In the ensuing conversation, Dermot ascertains that the long-run growth rate for Persepolis after 2021 under its current ownership is in the order of 2%. He also ascertains that the beta of Persepolis is 0.97.

The correlation between the return on Persepolis' shares and those of RKZN Industries is estimated at 0.85. The correlations between the returns on shares in Facebook, Google and Twitter and the returns on shares in RKZN Industries are 0.87, 0.71 and 0.93 respectively.

The risk-free rate of interest is 0.1 of one percent. The interest rate on Persepolis' debt is expected to remain at 4% per annum. The market risk premium,  $R_m - R_f$ , is equal to 5.5%.

The projections of Persepolis until 2021 are outlined in Table 4 (shown on Page 4).

**Table 3: Financial Statements for the Year ended 31 January**

**Persepolis Plc Statement of Profit or Loss and Other Comprehensive Income  
for the Years Ending 31 January**

	<b>2016</b>	<b>2017</b>
	<b>€'000</b>	<b>€'000</b>
Sales	430,000	450,000
Operating Expenses	417,000	435,000
Operating Income	13,000	15,000
Interest	1,300	1,300
PBT	11,700	13,700
Taxation	<u>1,462</u>	<u>1,712</u>
Net Profit After Tax	10,238	11,988
Dividends (Note 1)	<u>1,800</u>	<u>2,000</u>
Addition to Equity	<u>8,438</u>	<u>9,988</u>

**Statements of Financial Position as at 31 January**

	<b>2016</b>	<b>2017</b>
	<b>€'000</b>	<b>€'000</b>
Fixed Assets	90,000	100,000
Net Current Assets	18,000	19,000
Operating Assets	108,000	119,000
Cash	<u>1,012</u>	<u>0</u>
Net Assets	<u>109,012</u>	<u>119,000</u>
Shareholder's Equity	79,012	89,000
Debt	30,000	30,000
Total Financing	<u>109,012</u>	<u>119,000</u>

*Note 1: Dividends are shown here for the purpose of this question.*

**Table 4: Projected Statements of Profit or Loss or Other Comprehensive Income for the following years:**

	<b>2017actual</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>
Sales	450,000	459,000	468,180	477,544	487,094
Operating Expenses	435,000	443,700	452,574	461,625	470,858
Operating Income	15,000	15,300	15,606	15,919	16,236
Interest	<u>1,300</u>	<u>1,200</u>	<u>1,352</u>	<u>1,602</u>	<u>1,492</u>
PBT	13,700	14,100	14,254	14,317	14,744
Taxation	<u>1,712</u>	<u>1,762</u>	<u>1,782</u>	<u>1,790</u>	<u>1,843</u>
Net Profit After Tax	11,988	12,338	12,472	12,527	12,901
Dividends	<u>2,000</u>	<u>2,000</u>	<u>2,000</u>	<u>2,000</u>	<u>2,000</u>
Addition to Equity	<u>9,988</u>	<u>10,338</u>	<u>10,472</u>	<u>10,527</u>	<u>10,901</u>

**Statements of Financial Position as at 31 January**

	<b>2017 Actual</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>
Fixed Assets	100,000	114,750	121,727	128,937	136,386
Net Current Assets	19,000	18,360	28,091	28,652	24,355
Operating Assets	119,000	133,110	149,818	157,589	160,741
Cash	0	20	30	50	50
Net Assets	<u>119,000</u>	<u>133,130</u>	<u>149,848</u>	<u>157,639</u>	<u>160,791</u>
Shareholders' Equity	89,000	99,338	109,810	120,337	131,238
Debt	30,000	33,792	40,038	37,302	29,553
Total Financing	<u>119,000</u>	<u>133,130</u>	<u>149,848</u>	<u>157,639</u>	<u>160,791</u>

**END OF CASE STUDY**

**SECTION A - Compulsory Question**

**1.**

**REQUIREMENT:**

- (a) Critically evaluate the offer of €350 million from RKZN Industries for all of the share capital of Persepolis. Does this offer value Persepolis Plc fairly? Justify your answer.  
(30 Marks)
- (b) Outline and explain the likely rationale behind RKZN Industries offering €100 million of the consideration for Persepolis Plc in the form of shares in RKZN Industries.  
(10 Marks)
- (c) Aside from the €140 million, what other benefits does the RKZN Industries' offer convey to Jimmy?  
(10 Marks)

**[Total: 50 Marks]**

**SECTION B – Answer only 2 questions**

**2.**

**REQUIREMENT:**

- (a) Analyse and explain the various types of foreign exchange risk to which the purchase of Persepolis Plc will expose RKZN Industries. Which type of foreign exchange risk is the most serious from RKZN Industries' perspective, and why?  
(10 marks)
- (b) RKZN Industries had been considering the acquisition of a UK company before the results of the Brexit referendum in June 2016. Appraise additional risks which acquiring a UK company might bring to a US firm. Argue why the acquisition of a UK company may be less attractive from a US company's perspective following the result of the Brexit referendum in June 2016.  
(10 marks)
- (c) There are a number of ways of classifying the takeover of Persepolis Plc by RKZN Industries. List and clearly explain two of the classifications that might be used to describe the takeover of Persepolis by RKZN Industries.  
(5 Marks)

**[Total: 25 Marks]**

**3.**

**REQUIREMENT:**

- (a) Prepare a note of the fundamental advice that should be offered to Jimmy Rodgers regarding the investment of €140 million that he may receive for his shares should Persepolis Plc decide to sell. (15 Marks)
- (b) Critically appraise on Jimmy's strategy for reducing risk by investing in growth stocks (stocks with low book-to-market values or high P/E ratios) in the ICT industry, which are well known to him. Do you agree with Jimmy that investing in Facebook, Twitter and Google has allowed him to diversify his wealth away from Persepolis? Explain your answer. (10 Marks)

**[Total: 25 Marks]**

**4.**

**REQUIREMENT:**

- (a) Critically evaluate the corporate governance generally of Persepolis Plc as of Spring 2017 outlined in the case. Your answer should make particular but not exclusive reference to the board of Directors. (10 Marks)
- (b) Assume that you have been requested to assess the standard of Persopolis Plc's corporate governance as of March 2017. Discuss the additional information required so that a full assessment can be carried out. (10 Marks)
- (c) Who will make the decision whether or not to sell Persepolis Plc to RKZN Industries? (5 Marks)

**[Total: 25 Marks]**

**END OF PAPER**

## SUGGESTED SOLUTIONS

# THE INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS IN IRELAND STRATEGIC CORPORATE FINANCE

PROFESSIONAL 2 EXAMINATION - APRIL 2017

### SOLUTION 1

- (a) The solution here involves undertaking a valuation of Persepolis based on the information in the case study.

First we estimate the cost of capital for Persepolis

Calculation of the Cost of Capital or WACC.

We begin with computing the cost of equity using the CAPM.

We then compute the cost of Debt and the WACC.

Rf	0.1
Rm-Rf	5.5
Beta	0.97
Cost of Equity	5.435
Cost of Debt (1-T)	0.035
Market Value of Equity	350
Value of Debt	30
Value of Company	380
E/V	0.921053
D/V	0.078947
WACC	5.008684

If we had not adjusted the cost of debt for taxation the computation would be

Rf	0.1
Rm-Rf	5.5
Beta	0.97
Cost of Equity	5.435
Cost of Debt	0.04
Market Value of Equity	350
Value of Debt	30
Value of Company	380
E/V	0.921053
D/V	0.078947
WACC	5.009079

It makes no difference here to adjust for taxation or not.  
Given that this is an estimate we settle on 5% as our WACC.



Computation of Free Cash Flow				
Operating Income After Tax	13,538	13,824	14,129	14,393
ΔNOA	14,110	16,708	7,772	3,152
Free Cash Flow (OI - ΔNOA)	-573	-2,883	6,357	11,242
Calculation of FCF from Cash Flow Statement				
Dividends	2,000	2,000	2,000	2,000
Increase (Reduction) in Cash	20	10	20	0
Reduction (Increase) in Debt	-3,793	-6,245	2,735	7,750
Interest on Debt	1,200	1,352	1,602	1,492
FCF	-573	-2,883	6,357	11,242
FCF	-573	-2883	6,357	11,242
Discount Factor	1.050	1.103	1.158	1.216
DVCF	-545	-2,615	5,491	9,249
Terminal Value				382,216
PVDFCF to 2019	11,579			
PVTV	314,450			
Enterprise Value	326,029			
Value of Debt	30,000			
Value of Equity	296,029			

This can also be done using the residual income valuation model to get exactly the same answer.

Operating Income Aft Tax	13,538	13,824	14,129	14,393
Capital Charge	5,950	6,656	7,491	7,879
ReOI	7,588	7,169	6,638	6,514
Discount Factor	1.050	1.103	1.158	1.216
Discounted ReOI	7,226	6,502	5,734	5,359
TV				221,475
PV of ReOI to 2019	24,821			
PV of TV	182,208			
Book Value	89,000			
Value of Equity	296,029			

Thus we estimate the valuation of Persepolis to be in the order of €296 million. Thus we consider the price of €350 offered by AA Industries as very fair. It gives a premium on the current price of about 18%.

- (b) It is likely that since this is the first cross-border acquisition done by RKZN Industries that they are using their own shares as part consideration to reduce the risk involved by sharing this risk with Persepolis' shareholders. If they overpay it will damage the share price of RKZN Industries. To mitigate this damage using some of their own shares as consideration will share any losses with the vendors. (Jimmy would lose out as well if RKZN Industries price fell so he won't have been paid as much as he thought)

Another possible reason for using shares as part consideration is that RKZN Industries is short of ready cash. We are not given any information in the case study about this so it remains a possible reason for the use of RKZN Industries own shares as part of the consideration.

RKZN Industries will be taking on FX rate risk. Paying in its own shares which are quoted in US dollars will eliminate some the FX risk from the purchase price. However, RKZN Industries will be subject to economic and translation risk in the future.

Finally, if RKZN Industries shares are overvalued it is exchanging its overvalued equity for shares in Persepolis (which also may be overvalued especially since RKZN Industries is paying a premium on acquisition).

- (c) The offer will give Jimmy the capital to set up another company to develop the new App mentioned in the case. However, it should be noted that €40 million of the €140m for Jimmy will be in the form of AA Industry Shares

It will also allow Jimmy to diversify away from having the vast bulk of his wealth tied up in Persepolis and three other firms in the ICT industry. (In effect he is very undiversified).

The partial share offer will defer capital gains tax. However, given that Jimmy is likely to divest himself of most of the RKZN Industries shares fairly quickly much of this benefit is likely to be illusory from Jimmy's perspective. However, it may be real from the perspective of the smaller institutional shareholders who will be getting shares that are worth more and are more liquid in exchange for their shares in Persepolis.

## SOLUTION 2

- (a) RKZN Industries will be liable to economic exposure. It will buy a Euro denominated asset which earns in Euro and Sterling and many other currencies. The price competitiveness of Persepolis will change as the Euro appreciates or depreciates relative to other currencies.

AA will also be liable to transactions exposure on contractual cash flows in non-US dollar denominated currencies.

It will also be subject to translation exposure when it comes to bringing all its accounts to US dollars.

By far the most serious risk is the long-run risk to the price competitiveness of Persepolis' business should the Euro appreciate and damage price competitiveness. However, if this happens the inflation in the Eurozone should be lower than in other countries so overall its price competitiveness may not be too badly affected. Remember that currencies with high inflation will depreciate relative to currencies with low inflation. In fact, it is the uncertainty and volatility of the currency and prices that cause most of the issues for companies.

- (b) Any cross border acquisition brings some political and cultural risks. These would not have been that serious for a US company acquiring a UK company before Brexit. However, US administrations are getting more concerned regarding the "Export" of US jobs and taxes to other countries.

Brexit may preclude access by UK based companies to the single European market. This is a major drawback for UK-based companies and US companies with UK subsidiaries.

Since Ireland plans to remain in the EU it is not a problem when an Irish company is acquired. In addition, the tax rate being much less again in Ireland makes Ireland a good location for a takeover motivated by tax inversion. The idea here is to move operations (or at least Head Office) to a country where corporate profits are taxed at a lower rate and thus create value for shareholders at the expense of the US government. Ireland will be the only English-speaking country remaining in the EU following Brexit. However, there will be some uncertainty regarding the ease of access to the UK market for Irish companies following Brexit.

Brexit has already induced volatility in the Euro-Sterling exchange rate which has not helped either British or European business.

- (c) The first obvious classification of the takeover is that of a cross-border acquisition.

It is clearly a horizontal acquisition since the target and the acquirer are in the same industry.

A third classification is that the takeover may be considered tax inversion.

The relative tax rates in the US (35%) and the UK (20%) and Ireland (12.5%) would give rise to a suspicion of tax inversion. Moving a company's country of residence to exploit a lower tax rate. To make this work RKZN Industries could organise that Persepolis takes it over and the Head Office would be moved to Ireland.

### SOLUTION 3

- (a) Jimmy needs to diversify his wealth away from his human capital and his existing portfolio. Both financial and human wealth are tied to the ICT industry which is not ideal. Jimmy is very undiversified.

The idea of diversification is to reduce risk without sacrificing return. The lower the correlation coefficient between new securities and Jimmy's existing portfolio and human capital the greater is the scope for risk reduction.

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

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

A more efficient method for Jimmy 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 Jimmy to fine tune his risk better. For example, he could avoid investing in the ICT industry 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 Persepolis and hence the ICT industry. He can achieve this by purchasing shares in business that have very low correlations with the ICT industry. A simple way of doing this is to purchase shares in industries which are unrelated to ICT 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 are likely to have lower correlations with Persepolis since they may not be at all exposed to the Irish economy. Note he can purchase Eurozone companies and not take on any FX risk while diversifying abroad. In any event the FX risk can be diversified also.

- (b) Jimmy has a 4 security portfolio, Persepolis plus the Facebook, Google and Twitter. However, we see that the worth of the investment in Persepolis is worth  $350 \times 4 = €140$  which is almost 47 times the value of other three shares put together. To make matters worse he has all of Jimmy's human capital tied up on Persepolis. He is hopelessly under-diversified the three stocks mentioned give very little in any diversification from Persepolis or Jimmy's human capital. The correlation coefficients are all  $> 0.7$  with Persepolis which bears testament to this under-diversification.

Since all three other shares are in the same industry as Persepolis so are not offering much by way of diversification away from either from Persepolis' or Jimmy's human capital or from each other. It is a bit like people who invested in AIB as well as Bank of Ireland for some diversification before the financial crisis – there really is very little diversification if you have all your shares in one industry. The correlation coefficient between RKZN Industries and Persepolis is 0.85 so Jimmy is remaining in the same industry. The shares he is getting in RKZN Industries are very highly correlated with his existing portfolio – whose shares are also very highly correlated!

Another point that requires to be made is dubious policy of investing in growth stocks. Growth stocks are stocks that are expected to grow revenues and profits into the future. A reasonably efficient market is cognisant of this and growth is usually reflected in the price of such stocks – making them expensive. If the rate of growth turns out to be less than anticipated, which it often does the prices of such stocks which are very much dependant on this growth being achieved, will fall. It is well known that the prices of growth stocks are very sensitive to earnings disappointments. Therefore, Benjamin Graham (Warren Buffet is a disciple of Graham) advocated value investing. Invest in stocks whose growth prospects were not already captured in their prices: buy value stocks. These value stocks have lower PE or MB ratios than growth stocks and are not as susceptible to earnings disappointments. Essentially what we are saying is that well-known and popular stocks will trade at a premium and buying such stocks is contrary to value investing where you buy low and hope to sell at a higher price.

It is also worth mentioning that risk is not reduced by investing in stocks that are “known to you”. What do you mean by “known to you”? This is a behavioural bias. What you really need to do to reduce risk is to buy stocks with low correlations with your existing securities and human capital.

## SOLUTION 4

- (a) We can start with the ownership structure. Agency issues generally stem from the ownership structure. Jimmy is clearly an insider. However, the conflict is not between Jimmy and lots of small outside shareholders since these atomistic shareholders only own about 5% of the company. There may be a conflict between the other shareholders and Jimmy. However, the other shareholders, at least the 6 mentioned in the case own more shares than Jimmy. They own 55% a majority of the company so they can sell "Jimmy's" company to RKZN Industries without any recourse to Jimmy. In fact, they are in a very strong position if they can cooperate with each other. This may be another reason for Jimmy to sell. While Jimmy is by far and away the largest single shareholder the concentration of the other shareholdings should ensure that there are no major agency problems in Persepolis. In this regard it is somewhat surprising that there is evidence of some concerns regarding the standard of corporate governance in the case. Perhaps the ownership structure is so strong that the board is relatively weak?

However, the 5% rump of small shareholders are depending on Jones as the only truly independent NED to represent them.

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.

Persepolis's board is well structured in the following respects:

1. It has a majority of independent NEDs
2. There is CEO/Chair Duality – but note chair is friendly with CEO – it happens!
3. It has some diversity of professions
4. It has good industry experience
5. 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 just one female member who has a number of different NED positions. It does not reflect diversity with respect to gender.

It is also clear that the majority of the board are not independent NEDs.

Barnwell, Enthwistle and Casey are not independent of Jimmy Rodgers. Attwater and Power are not independent of some large shareholders.

Joyce Jones is the only truly independent NED. But she is a busy lady being on six other boards in Ireland! Is there anyone looking after the small shareholders here. Is there a need for anyone to do so since the small shareholders only hold 5% of the company?

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

1. We need some information on the committee structure of the board.
  - a. three crucial committees
  - b. audit committee independence and has it financial expertise.
  - c. It is unlikely that any of the NEDs have Audit experience. Banking experience does not really count for audit purposes.
2. Are the other committees independent (i.e comprised mainly of independent directors) –it is of course impossible for them to be independent given the number of truly independent directors on the board.
3. The number of times the committees met. This does not look too promising given the few times the full board met.
4. The attendance of each of the board members.
5. The length of time each of the members has been on the board (after a period their independence wanes).
6. Details of their remuneration and how they are remunerated.
7. Detail of their contracts.
8. Who is the senior independent director?
9. Any business dealings the NEDs have with Persepolis.

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 Jimmy Rodgers: structure and amount
2. The market for corporate control in the App. Industry should be reasonably active.
3. What is the market like for managers of App businesses (managerial labour market)?

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

**(c)** Essentially the owners or shareholders of Persepolis, not Jimmy, will decide. It would appear that Jimmy is a strong position since he controls the board of directors. However, the ownership of Persepolis is fairly concentrated so it is not a forgone conclusion. The institutional shareholders may decide to sell to RKZN Industries regardless of what Jimmy thinks. This may come as a shock to Jimmy!