



Management Accounting Pillar

Strategic Level Paper

P3 – Management Accounting – Risk and Control Strategy

24 November 2005 – Thursday Morning Session

Instructions to candidates

You are allowed three hours to answer this question paper.
You are allowed 20 minutes reading time before the examination begins during which you should read the question paper, and if you wish, make annotations on the question paper. However, you will not be allowed, under any circumstances , to open the answer book and start writing or use your calculator during this reading time.
You are strongly advised to carefully read ALL the question requirements before attempting the question concerned (that is, all parts and/or sub-questions). The question requirements are contained in a dotted box.
Answer the ONE compulsory question in Section A on pages 2 and 3.
Answer TWO questions only from Section B on pages 4 to 7.
Maths Tables and Formulae are provided on pages 9 to 12. These pages are detachable for ease of reference.
Write your full examination number, paper number and the examination subject title in the spaces provided on the front of the examination answer book. Also write your contact ID and name in the space provided in the right hand margin and seal to close.
Tick the appropriate boxes on the front of the answer book to indicate which questions you have answered.

P3 – Risk and Control Strategy

TURN OVER

SECTION A – 50 MARKS

[the indicative time for answering this section is 90 minutes]

ANSWER THIS QUESTION

Question One

VCF is a small listed company that designs and installs high technology computer numerical control capital equipment used by multinational manufacturing companies. VCF is located in one Pacific country, but almost 90% of its sales are exported. VCF has sales offices in Europe, Asia, the Pacific, Africa, and North and South America and employs about 300 staff around the world.

VCF has annual sales of \$200 million but the sales value of each piece of equipment sold is about \$2 million so the sales volume is relatively low. Sales are always invoiced in the currency of the country where the equipment is being installed. The time between the order being taken and the final installation is usually several months. However, a deposit is taken when the order is placed and progress payments are made by the customer before shipment and upon delivery, with the final payment being made after installation of the equipment.

The company has international patents covering its technology and invests heavily in research and development (R&D, about 15% of sales) and marketing costs to develop export markets (about 25% of sales). VCF's manufacturing operations are completely outsourced in its home country and the cost of sales is about 20%. The balance of costs is for installation, servicing and administration, amounting to about 15% of sales. Within each of these cost classifications the major expenses (other than direct costs) are salaries for staff, all of whom are paid well above the industry average, rental of premises in each location and travel costs. Area managers are located in each sales office and have responsibility for achieving sales, installing equipment and maintaining high levels of after-sales service and customer satisfaction.

Although the head office is very small, most of the R&D staff are located in the home country, along with purchasing and logistics staff responsible for liaising with the outsource suppliers and a small accounting team that is primarily concerned with monthly management accounts and end of year financial statements.

VCF has a majority shareholding held by Jack Viktor, an entrepreneur who admits to taking high risks, both personally and in business. The Board of four is effectively controlled by Viktor who is both Chairman and Chief Executive. The three other directors were appointed by Viktor. They are his wife, who has a marketing role in the business, and two non-executive directors, one an occasional consultant to VCF and the other a long-time family friend. Board meetings are held quarterly and are informal affairs, largely led by Viktor's verbal review of sales activity.

Viktor is a dominating individual who exercises a high degree of personal control, often by-passing his area managers. Because the company is controlled by him, Viktor is not especially concerned with short-term profits but with the long term. He emphasises two objectives: sales growth to generate increased market share and cash flow; and investment in R&D to ensure the long-term survival of VCF by maintaining patent protection and a technological lead over its competitors.

Viktor is in daily contact with all his offices by telephone. He travels extensively around the world and has an excellent knowledge of VCF's competitors and customers. He uses a limited number of non-financial performance measures, primarily concerned with sales, market share, quality and customer satisfaction. Through his personal contact and his twin objectives, Viktor encourages a culture committed to growth, continual innovation, and high levels of customer satisfaction. This is reinforced by high salary levels, but Viktor readily dismisses those staff not committed to his objectives.

The company has experienced rapid growth over the last 10 years and is very profitable although cash flow is often tight. A high margin is achieved because VCF is able to charge its customers premium prices. The equipment sold by VCF enables faster production and better quality than its competitors can offer.

Viktor has little time for traditional accounting. Product costing is not seen as valuable because the cost of sales is relatively low and most costs incurred by VCF, particular R&D and export marketing costs, are incurred a long time in advance of sales being made. R&D costs are not capitalised in VCF's balance sheet.

Although budgets are used for expense control and monthly management accounts are produced, they have little relevance to Viktor who recognises the fluctuations in profit caused by the timing of sales of low volume but high value capital equipment. Viktor sees little value in comparing monthly profit figures against budgets because sales are erratic. However, Viktor depends heavily on a spreadsheet to manage VCF's cash flow by using sensitivity analysis against his sales and cash flow projections. Cash flow is a major business driver and is controlled tightly using the spreadsheet model.

The major risks facing VCF have been identified by Viktor as:

- competitor infringement of patents, which VCF always meets by instituting legal actions;
- adverse movements in the exchange rate between the home country and VCF's export markets, which VCF treats as an acceptable risk given that historically, gains and losses have balanced each other out;
- the reduction in demand for his equipment due to economic recession;
- a failure of continued R&D investment to maintain technological leadership; and
- a failure to control costs.

Viktor considers that the last three of these risks are addressed by his policy of outsourcing manufacture and continuous personal contact with staff, customers and competitors.

Required:

(a) Identify and evaluate the existing controls within VCF (including those applied by Viktor). **(20 marks)**

(b) Write a report to the Board of VCF recommending improvements to the company's corporate governance, risk management strategy, and internal controls.

Note: You should use examples from the case to illustrate your answer. **(20 marks)**

(c) Identify the exchange risks faced by VCF and recommend the methods that could be used to manage those risks.

(10 marks)
(Total for Question One = 50 marks)

End of Section A. Section B starts on the next page

TURN OVER

SECTION B – 50 MARKS

[the indicative time for answering this section is 90 minutes]

ANSWER TWO QUESTIONS ONLY

Question Two

As a CIMA member, you have recently been appointed as the Head of Internal Audit for SPQ, a multinational listed company that carries out a large volume of internet sales to customers who place their orders using their home or work computers. You report to the Chief Executive, although you work closely with the Finance Director. You have direct access to the Chair of the Audit Committee whenever you consider it necessary.

One of your internal audit teams has been conducting a review of IT security for a system which has been in operation for 18 months and which is integral to internet sales. The audit was included in the internal audit plan following a request by the Chief Accountant. Sample testing by the internal audit team has revealed several transactions over the last three months which have raised concerns about possible hacking or fraudulent access to the customer/order database. Each of these transactions has disappeared from the database after deliveries have been made, but without sales being recorded or funds collected from the customer. Each of the identified transactions was for a different customer and there seems to be no relationship between any of the transactions.

You have received the draft report from the Internal Audit Manager responsible for this audit which suggests serious weaknesses in the design of the system. You have discussed this informally with senior managers who have told you that such a report will be politically very unpopular with the Chief Executive as he was significantly involved in the design and approval of the new system and insisted it be implemented earlier than the IT department considered was advisable. No post-implementation review of the system has taken place.

You have been informally advised by several senior managers to lessen the criticism and work with the IT department to correct any deficiencies within the system and to produce a report to the Audit Committee that is less critical and merely identifies the need for some improvement. They suggest that these actions would avoid criticism of the Chief Executive by the Board of SPQ.

Required:

- (a) Explain the role of internal audit in internal control and risk management. (5 marks)
- (b) Analyse the potential risks faced by SPQ that have been exposed by the review of IT security and recommend controls that should be implemented to reduce them. (8 marks)
- (c) Discuss the issues that need to be considered when planning an audit of activities and systems such as the one undertaken at SPQ. (5 marks)
- (d) Explain the ethical principles you should apply as the Head of Internal Audit for SPQ when reporting the results of this internal review and how any ethical conflicts should be resolved. (7 marks)

(Total for Question Two = 25 marks)

Question Three

A large doctors' practice, with six partners and two practice nurses has decided to increase its income by providing day surgery facilities. The existing building would be extended to provide room for the surgical unit and storage facilities for equipment and drugs. The aim is to offer patients the opportunity to have minor surgical procedures conducted by a doctor at their local practice, thus avoiding any unfamiliarity and possible delays to treatment that might result from referral to a hospital. Blood and samples taken during the surgery will be sent away to the local hospital for testing but the patient will get the results from their doctor at the practice. It is anticipated that the introduction of the day surgery facility will increase practice income by approximately 20 per cent.

Required:

- (a) Identify the additional risks that the doctors' practice may expect to face as a consequence of the introduction of the new facility, and explain how a model such as CIMA's risk management cycle might be used to understand and control such risks. *(12 marks)*
- (b) Explain the meaning of the term "risk appetite" and discuss who should take responsibility for defining that appetite in the context of the scenario outlined above. *(5 marks)*
- (c) Critically discuss the role of systems based internal auditing in relation to the assessment of risk management procedures in any organisation. *(8 marks)*

(Total for Question Three = 25 marks)

Section B continues on the next page

TURN OVER

Question Four

- (a) LXN is a large book retailer in France and as a result of recent rapid sales growth has decided to expand by opening six new branches in the south of France. The estimated set up cost per branch is €250,000 and LXN wishes to raise the required funding (plus an additional 20 per cent for increased working capital requirements) via borrowing. The Treasurer at LXN is concerned about interest rate risk however, and is unsure about whether to opt for a fixed or floating rate loan. LXN's Board of Directors has indicated that it wishes to maximise the company's use of opportunities to hedge interest rate risk.

LXN currently has €2,000 million of assets and the following long-term debt in its balance sheet:

€15 million [(6% fixed rate) redeemable 2010]
£18 million [(Sterling LIBOR plus 3%) redeemable 2007]

All rates are quoted as an annual rate. The current exchange rate is € / £ 0.684.

Required:

Discuss the factors that should be taken into account by the Treasurer of LXN when deciding whether to raise fixed rate or floating rate debt for the expansion project and whether to hedge the resulting interest rate exposure.

(10 marks)

- (b) LXN's Treasurer has negotiated a fixed rate of 6% or a variable rate of Euro LIBOR plus 1.5% for the required borrowing. In addition, a counterparty (MGV) has offered to convert any new fixed rate debt that LXN takes on into synthetic floating rate debt via a swap arrangement in which the two companies will share the quality spread differential equally.

MGV, the counterparty, can borrow at a fixed rate of 7.2% or at a variable rate of Euro LIBOR plus 2.5%.

Euro LIBOR is currently 5%. All rates are quoted as an annual rate.

Required:

- (i) Briefly discuss the advantages and disadvantages of interest rate swaps as a tool for managing interest rate risk.

(5 marks)

- (ii) Draw a diagram to illustrate how the transactions between LXN and MGV and the two lenders will operate if the swap is agreed.

(4 marks)

- (iii) Calculate the interest rate terms payable by LXN. Evaluate the potential annual saving resulting from borrowing at a fixed rate and engaging in an interest rate swap, as against a straightforward floating rate loan.

(6 marks)

(Total for requirement (b) = 15 marks)

(Total for Question Four = 25 marks)

Question Five

Required:

- (a) Identify the key reasons for the emergence of corporate governance regulations around the world.
(5 marks)
- (b) Explain the core principles that underpin corporate governance regulations.
(10 marks)
- (c) Discuss the role and responsibilities of audit committees as laid down in the Combined Code.
(10 marks)

(Total for Question Five = 25 marks)

(Total for Section B = 50 marks)

End of question paper

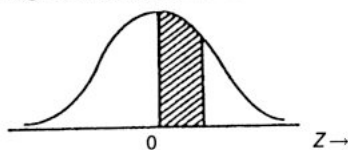
Maths Tables and Formulae are on pages 9 to 12

TURN OVER

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AREA UNDER THE NORMAL CURVE

This table gives the area under the normal curve between the mean and a point Z standard deviations above the mean. The corresponding area for deviations below the mean can be found by symmetry.



$Z = \frac{(x - \mu)}{\sigma}$	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	.0000	.0040	.0080	.0120	.0159	.0199	.0239	.0279	.0319	.0359
0.1	.0398	.0438	.0478	.0517	.0557	.0596	.0636	.0675	.0714	.0753
0.2	.0793	.0832	.0871	.0910	.0948	.0987	.1026	.1064	.1103	.1141
0.3	.1179	.1217	.1255	.1293	.1331	.1368	.1406	.1443	.1480	.1517
0.4	.1554	.1591	.1628	.1664	.1700	.1736	.1772	.1808	.1844	.1879
0.5	.1915	.1950	.1985	.2019	.2054	.2088	.2123	.2157	.2190	.2224
0.6	.2257	.2291	.2324	.2357	.2389	.2422	.2454	.2486	.2518	.2549
0.7	.2580	.2611	.2642	.2673	.2704	.2734	.2764	.2794	.2823	.2852
0.8	.2881	.2910	.2939	.2967	.2995	.3023	.3051	.3078	.3106	.3133
0.9	.3159	.3186	.3212	.3238	.3264	.3289	.3315	.3340	.3365	.3389
1.0	.3413	.3438	.3461	.3485	.3508	.3531	.3554	.3577	.3599	.3621
1.1	.3643	.3665	.3686	.3708	.3729	.3749	.3770	.3790	.3810	.3830
1.2	.3849	.3869	.3888	.3907	.3925	.3944	.3962	.3980	.3997	.4015
1.3	.4032	.4049	.4066	.4082	.4099	.4115	.4131	.4147	.4162	.4177
1.4	.4192	.4207	.4222	.4236	.4251	.4265	.4279	.4292	.4306	.4319
1.5	.4332	.4345	.4357	.4370	.4382	.4394	.4406	.4418	.4430	.4441
1.6	.4452	.4463	.4474	.4485	.4495	.4505	.4515	.4525	.4535	.4545
1.7	.4554	.4564	.4573	.4582	.4591	.4599	.4608	.4616	.4625	.4633
1.8	.4641	.4649	.4656	.4664	.4671	.4678	.4686	.4693	.4699	.4706
1.9	.4713	.4719	.4726	.4732	.4738	.4744	.4750	.4756	.4762	.4767
2.0	.4772	.4778	.4783	.4788	.4793	.4798	.4803	.4808	.4812	.4817
2.1	.4821	.4826	.4830	.4834	.4838	.4842	.4846	.4850	.4854	.4857
2.2	.4861	.4865	.4868	.4871	.4875	.4878	.4881	.4884	.4887	.4890
2.3	.4893	.4896	.4898	.4901	.4904	.4906	.4909	.4911	.4913	.4916
2.4	.4918	.4920	.4922	.4925	.4927	.4929	.4931	.4932	.4934	.4936
2.5	.4938	.4940	.4941	.4943	.4945	.4946	.4948	.4949	.4951	.4952
2.6	.4953	.4955	.4956	.4957	.4959	.4960	.4961	.4962	.4963	.4964
2.7	.4965	.4966	.4967	.4968	.4969	.4970	.4971	.4972	.4973	.4974
2.8	.4974	.4975	.4976	.4977	.4977	.4978	.4979	.4980	.4980	.4981
2.9	.4981	.4982	.4983	.4983	.4984	.4984	.4985	.4985	.4986	.4986
3.0	.49865	.4987	.4987	.4988	.4988	.4989	.4989	.4989	.4990	.4990
3.1	.49903	.4991	.4991	.4991	.4992	.4992	.4992	.4992	.4993	.4993
3.2	.49931	.4993	.4994	.4994	.4994	.4994	.4994	.4995	.4995	.4995
3.3	.49952	.4995	.4995	.4996	.4996	.4996	.4996	.4996	.4996	.4997
3.4	.49966	.4997	.4997	.4997	.4997	.4997	.4997	.4997	.4997	.4998
3.5	.49977									

PRESENT VALUE TABLE

Present value of \$1, that is $(1+r)^{-n}$ where r = interest rate; n = number of periods until payment or receipt.

Periods (n)	Interest rates (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149

Periods (n)	Interest rates (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.079	0.065
16	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045
18	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
19	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031
20	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026

Cumulative present value of \$1 per annum, Receivable or Payable at the end of each year for n years $\frac{1-(1+r)^{-n}}{r}$

Periods (n)	Interest rates (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201
19	17.226	15.679	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365
20	18.046	16.351	14.878	13.590	12.462	11.470	10.594	9.818	9.129	8.514

Periods (n)	Interest rates (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
16	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
17	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775
18	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
19	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
20	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870

Formulae

Annuity

Present value of an annuity of £1 per annum receivable or payable for n years, commencing in one year, discounted at $r\%$ per annum:

$$PV = \frac{1}{r} \left[1 - \frac{1}{[1+r]^n} \right]$$

Perpetuity

Present value of £1 per annum, payable or receivable in perpetuity, commencing in one year, discounted at $r\%$ per annum:

$$PV = \frac{1}{r}$$

Growing Perpetuity

Present value of £1 per annum, receivable or payable, commencing in one year, growing in perpetuity at a constant rate of $g\%$ per annum, discounted at $r\%$ per annum:

$$PV = \frac{1}{r-g}$$

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Management Accounting Pillar

Strategic Level Paper

*P3 – Management Accounting - Risk
and Control Strategy*

November 2005

Thursday Morning Session