LEADING TREASURY PROFESSIONALS

MCT ADVANCED DIPLOMA

GENERAL EXAMINATION

Paper, Solutions and Examiner's Report

Monday 10 April 2017 09.30 – 13.00

Instructions:

Answer **SEVEN COMPULSORY** questions.

Time allowed: **3 hours + 30 minutes reading time.**

During the reading time you may annotate the examination paper but you may not write in your answer booklet or use your calculator.

- Enter your student number on the answer booklet: **do NOT write your name**
- You must write in blue or black ink and ensure your handwriting is legible.
- Enter the order in which questions are answered in the box provided on the front of the answer booklet.
- Ensure that all additional submissions (if applicable) are attached to the answer booklet by the tag provided and write your student number on all items to be marked.
- Show all your workings and state your assumptions in all questions, as appropriate.

QUESTION 1

Your company has operating subsidiaries, associates and joint ventures (where no single party has control) around the world. When establishing new overseas operations, the initial shareholding and funding structure is an important consideration.

Required:

Draft a paper covering the differing funding issues for 100% subsidiaries and joint ventures, in particular the following;

- **the main types of funding,**
- **the main considerations relevant to the choice of capital structure**
- **the key advantages and disadvantages of each type of funding, for 100% subsidiaries and joint ventures respectively.**

(11 marks)

QUESTION 2

You are the Finance Director of a diversified group that is considering the disposal, within a 5-year time-frame, of its healthcare business which was acquired some twenty years ago, and you have been asked to carry out a multi-period DCF valuation of the business i.e. the value to the group as of now.

The 2016 financials are summarised in the table below. This particular business is seen as having an average level of (un-levered) equity risk and stable businesses in the sector have average valuation multiples.

Based on your understanding, EBITDA (and depreciation) are forecast to grow over the next five years at an annual rate declining from 10% to 2%, with stable-state growth thereafter. It is generally agreed that working capital management needs to be improved, to bring it in line with the industry average ratio of Net Working Assets / Sales of around 19%. Capital expenditure should only need to be at replacement levels throughout the period, bearing in mind the average age of assets and the low inflation environment.

Healthcare Ltd.		
	GBP mill.	2016
Sales		747.0
EBITDA		216.0
(Depreciation)		(20.0)
EBIT		196.0
(Tax) @	20%	(39.2)
Profit after Tax		156.8
Dividend		(80.0)
Retained profit		76.8
Tangible fixed assets		252
(Accumulated depreciation)		(100)
Net fixed assets		152
Financial investments		60
Inventories		112
Trade receivables		133
Total assets		609
(Trade payables)		(66)
(Pension and tax provisions)		(226)
(Total liabilities)		(292)
Equity and reserves		317

Required:

a) **Forecast appropriate cash flows for the next five years. In line with City conventions estimate a disposal value at the end of year 5 based on a prospective EBITDA multiple, rather than a DCF perpetuity. Calculate an appropriate discount rate, then calculate the value of the company based on its forecast operating performance using your calculated discount rate. Pay particular attention to the assumptions you use in defining and calculating the cost of capital, bearing in mind the current and likely future level of interest rates and related equity returns. Explain all your assumptions.**

(13 marks)

b) **Select and quantify which, out of all the assumptions used, would affect the valuation most.**

(3 marks)

c) **Explain why this two-part valuation method is particularly appropriate in this situation and why other popular valuation methods might be less appropriate, namely;**

P/E multiple
Dividend yield
EV/EBITDA multiple
DCF perpetuity

(5 marks)

d) **How would you allow for the "financial investments" and the "pension and tax provisions" in calculating the Enterprise Value?**

(2 marks)

(Total 23 marks)

QUESTION 3

A major global shipping, transportation and oil-related business group, domiciled in Denmark, asked the finance and treasury team to re-think its financing strategy following the global financial crisis in 2008. At the time the group was listed but closely-controlled, with over 70% of shares held by family interests. The 20 largest institutional shareholders still hold only 12.4% of the shares and the company is still controlled by third-generation family members. A Director of The Danish Shareholders Association has expressed a view that the company "wasn't especially shareholder friendly", while a financial journalist said that "the company is not terribly concerned about what banks or analysts believe it should be doing".

The company was the largest un-rated bond issuer in Europe 2010 to 2012 and, since its initial rating in 2013, company debt has been rated as Baa (Moody's) and BBB (S&P).

Selected financial data are given in the table, also details of the debt portfolio. Note that the table on Capital Market Issues is illustrative of the changing issue pattern and the total does not correspond closely to any of the annual capital market totals in the Gross Debt Summary because of the pattern of repayments.

Global Shipping Group

Selected Financial Data

USD (m)	2008	2009	2010	2011	2012	2013	2014	2015
Revenue	61,270	48,580	56,090	49,917	49,491	47,386	47,569	40,308
Total assets	64,925	66,511	66,756	70,444	72,396	74,509	68,844	62,408
Net debt	17,282	18,119	14,586	15,317	14,489	11,642	7,698	7,770
Total equity	29,972	30,610	34,376	36,190	39,324	42,513	42,225	35,739
Market capitalisation	22,002	30,231	38,741	28,018	31,876	46,305	42,848	27,587
EBITDA	16,478	9,293	15,867	14,861	11,797	11,372	11,919	9,074

Gross Debt Summary

USD (bn)								
Bank debt	8.756	6.148	4.320	5.921	3.276	2.669	1.599	1.270
Shipping finance & leases	7.164	8.480	6.840	6.303	6.006	4.553	3.321	2.794
Export credits	3.980	4.876	4.500	4.393	4.004	3.297	2.706	2.286
Un-rated European bonds	0	1.696	2.340	2.483	4.914	5.181	3.424	4.100
Rated US bonds	0	0	0	0	0	0	1.250	2.250
Gross debt (USD bn)	19.9	21.2	18.0	19.1	18.2	15.7	12.3	12.7

Capital Market Issues (not fully comprehensive)

Issue year	currency	amount (m)	rate	maturity	USD equiv.(m)
2009	NOK	2,751	NIBOR+2.1	2014	478
2009	NOK	3,000	6.250%	2014	522
2009	NOK	2,000	NIBOR+2.1	2014	348
2009	NOK	2,000	6.250%	2016	348
2010	EUR	500	4.375%	2017	668
2011					
2012	EUR	750	3.375%	2019	942
2012	SEK	1,400	3.750%	2018	209
2012	SEK	1,100	STIBOR+2.1	2018	164
2012	NOK	3,000	NIBOR+2.1	2017	519
2013	GBP	300	4.000%	2025	456
2013	NOK	3,000	FRN	2017	517
2014	USD	500	3.750%	2024	500
2014	USD	750	2.550%	2019	750
2015	EUR	600	1.500%	2022	639
2015	USD	500	3.875%	2025	500
2015	USD	500	2.875%	2020	500

Required:

a) Summarise the main changes in the company's capital structure and debt profile since 2008. Illustrate your answer with quantified metrics wherever possible.

(6 marks)

b) Suggest why the company needed to change its financing strategy after 2008 and the likely benefits.

(7 marks)

c) Set out the issues and any difficulties the Group Treasurer was likely to have faced in delivering the changes.

(3 marks)
(Total 16 marks)

QUESTION 4

Summary financial statement data for ABC Inc., a US-based global computer technology company, are set out below.

Financial Statement Data

ABC Inc.		
Balance Sheet	**2015 USD bn**	**2016 USD bn**
Cash & Equivalents	21	20
Short-term Marketable Securities	21	47
Long-term Marketable Securities	164	171
Tangible Assets	22	27
Acquired Intangible Assets	4	3
Goodwill	5	5
Other	53	49
Total Assets	**290**	**322**
Debt	64	87
Equity	119	128
Other	107	107
Total Liabilities	**290**	**322**
Profit & Loss		
Revenue	234	216
PBT	73	61
PAT	53	46

ABC Inc. distinguishes between operational and strategic liquidity, the former held in cash and equivalents and short-term marketable securities and the latter in long-term marketable securities which the company actively manages.

Long-term Marketable Securities 2015 (2016 n.a.) USD

• US Treasury Securities	31,584
• US Agency Securities	4,270
• Non-US Government Securities	6,056
• Certificates of Deposit & Time Deposits	877
• Commercial Paper	-
• Corporate Securities	104,214
• Municipal Securities	904
• Mortgage & Asset-Backed Securities	16,160
	164,065

Required:

a) **Comment critically on the policy of retaining and managing such large amounts of strategic liquidity.**

(7 marks)

b) **Explain how you would manage the strategic liquidity in the form of marketable securities on the ABC Inc. balance sheet.**

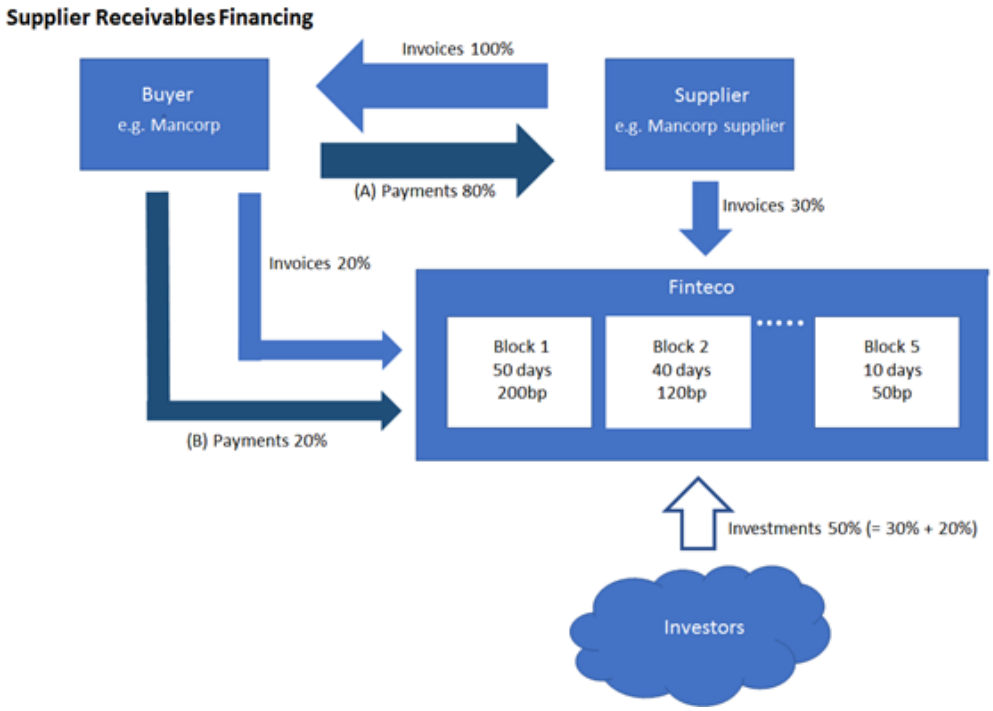
(8 marks)

(Total 15 marks)

QUESTION 5

Your company (Mancorp) has appointed a new non-executive director (NED) with a background in digital technology business applications in order to stay abreast of and if possible outstrip competition. Mancorp is an engineering manufacturer which has component suppliers worldwide.

The NED advises your Finance Director (FD) that a non-bank fin-tech company (Finteco) is conducting a "proof of concept" exercise which applies blockchain (distributed ledger) technology to the financing of suppliers' receivables. The FD requests a note explaining the potential issues raised by such a product – see figure below



Normally, Mancorp would make a payment (A) to its suppliers after the agreed term, say 60 days. With the Finteco platform, 30% of supplier may decide to copy their invoices to Finteco and seek payment after, say, 20 days, ie with 40 days to still run, receive payment after 20 days and accept a discount of 120bp.

The payment by Finteco is financed by investors which wish to buy, say, 40-day term receivables at the quoted discount. At term the supplier pays back the investors via Finteco out of the payment by Mancorp.

Alternatively, Finteco may offer the product to the buyer (eg Mancorp) which then offers it to its suppliers. For those suppliers which accept, say 20%, Mancorp copies their invoices to Finteco and at term pay Finteco (B). Meantime, Finteco finances the receivables from investors.

So as well as approaching suppliers directly, Finteco also intends signing up companies like Mancorp which can then offer its suppliers the opportunity to arrange early payment of receivables through Finteco – ie a buyer-facilitated (rather than buyer-driven) receivables programme.

Required:

Draft a note for the FD identifying and explaining the issues raised for your company if this type of product were adopted

(10 marks)

QUESTION 6

Your company, a successful UK utility, has GBP 4bn. of debt, with some maturities stretching out 15 yrs, comprising a bank RCF, bonds and EMTNs. You seek term fixed rate finance.

You are considering a GBP 500m 7-year syndicated loan involving five lenders, including two relationship banks, to fund both new growth and maturing facilities.

Interest rates, both term and the appropriate margin are currently considered low and you wish to lock in these rates and factor them into future investment plans. You also wish to be able to submit future actual rates to the regulator. In addition, you also wish a drawdown date some six to nine months in the future, thus making this a forward start facility.

You are approached by an insurance company from which you already have a £100m private placement and which is prepared to provide the full amount. Credit margins are comparable with the bank offering but the insurance company is prepared to accommodate the forward start date for a nominal commitment fee, i.e. much lower than offered by the banks. It is also prepared to provide the funding in three tranches out to 15 yrs to smooth refinancing requirements. Finally, the insurance company offers to provide the interest rate swaps required at below the bank quote.

Required:

a) **Compare critically the two funding offers, state and justify your preference.**

(9 marks)

b) **Q6.b.Explain why the insurance company might be able to undercut the commitment fee, provide the funding in tranches out to 15 years and undercut the swap rate.**

(3 marks)

(Total 12 marks)

QUESTION 7

Many banks have had to re-align dramatically their business models because of the financial crisis and consequent loss of balance sheet capacity due to impairment and deleveraging, due to legacy problems such as customer conduct issues and due to radically new regulations, as well as ongoing global political and economic rebalancing. Bank subsidiaries now also need to be viable on a stand-alone basis, country by country, to minimise contagion due to failure. As one treasurer recently commented in a treasury publication:

"There is less choice for treasurers today. Banks are retreating into the same products and markets where they make the most money whilst taking on the least risk."

and another:

"Banks are altering the services they provide to their corporate clients. And some are pulling out of certain services and/or areas even when there is significant client demand."

From the same publication, two individual treasurers' also commented about their bank relationship preferences:

"Banks have to understand our business and become a strategic partner rather than just looking at us as a sales opportunity."

"I want to work with a bank that will be there for us in the long-term and who understands our business and the direction we are heading in. This is an absolute must in today's environment."

The above quotes by treasurers attribute to banks a narrowing product-market focus while as corporate treasurers they have an increasing need for a broader focus on individual corporate needs.

Required:

a) **Identify and discuss the general implications for corporate treasurers seeking dependable and responsive providers of financial services.**
(9 marks)

Your company is a German-based international manufacturer of precision engineered components used across a wide range of industrial sectors. Its revenues derive in roughly equal amounts from Western Europe, North America and Asia Pacific. It manufactures locally so there is relatively little export or inter-company trading. The Group Treasury is currently centralised. It aspires to add value to the business by encouraging dialogue with the business at the operational level. Future growth will be achieved by internal growth and acquisition.

b) Identify and explain four of the most important implications for your company concerning the provision of financial services.

(4 marks)

(Total 13 marks)

ADVANCED DIPLOMA

GENERAL EXAMINATION - NOTE FORM ANSWERS

APRIL 2017

QUESTION 1 Funding of Subsidiaries, Associates and Joint Ventures
[19.8 mins, 11 marks]

[Marking scheme: I have 46 detailed points so ¼ mark for each good point].

- **Main Types of Funding**
  Parent company on-lending; [1]
  Parent company equity investment; [2]
  Intra-group loans (as loans or in cash management arrangements such as pooling) or equity; [3]
  Local bank debt; [4]
  Local capital market debt; [5]
  Local equity, private; [6]
  Local equity, public; [7]
  Trade finance, asset finance etc; [8]

- **Considerations**
  Local tax rates and DTTs, for after-tax costs of debt. [9]
  Thin cap regulations [10]
  Tax status of overseas entity, utilisable start-up or existing tax losses. [11]
  Trapped cash. [12]
  Differential local incentives or penalties. [13]
  Ability and cost of dividend remittances, including company structures for efficient
  remittance. [14]
  Sophistication and development of local debt and equity markets. [15]
  Level of risk to overseas venture, especially political risk [16]
  Solvency and credit status of any counter-parties and partners and their willingness to invest further. [17]
  Medium to long-range projections for overseas venture, especially projected earnings, dividends, cash flows, investment requirements. [18]
  Group-wide dividend policy and dividend capacity of external shareholders. [19]
  Group polices on e.g. asset finance, leasing, receivables financing [20]
  (Plus 3 marks for drafting as a Board Paper)
  Guarantee and risk sharing arrangements in cash pooling mechanisms
  Subsidy to (minority) equity holders by providing intra-group or guaranteed loan finance

- **Key advantages and disadvantages of funding types**

Inter-company debt and equity, which are inter-changeable [21] to suit the situation

Parent company finance is usually the cheapest [22] and most easily controlled from the centre, [23] (detailed terms and conditions can be decided by head office, subject to tax and other laws). At risk if venture likely to fail. [24] Debt attractive because of tax shelter, [25] but limited by thin-cap rules. [26]

External, bank or capital market debt, including leasing etc.

May be on favourable terms because of local issues. [27] May be desirable to reduce financing risk of parent [28] or build local bank or capital market relationships. [29] May be seen as mitigating commercial risk of new venture. [30] Debt attractive because of tax-sheltered cost, especially if high tax rate. [31]

With-holding tax may favour local debt versus parent debt or equity. [32]
Useful in non 100% situations to preserve effect of equity percentage holdings and avoid subsidy of minorities but could be negated by guarantee arrangements

Third party equity.

May be attractive if gearing a problem. [33] Use of local equity markets attractive for risk mitigation as for local debt. [34] Also local participation may be desirable or required by law or custom and practice. [35]
Needs care to preserve risk and reward intentions, especially with shareholder loans or other credit services such as guarantees or letters of credit.

Development finance with preferential terms.

Maximise use unless onerous strings attached. [36]

Government grants.

Maximise use unless onerous strings attached [37]

100% subsidiaries - control of strategic and financial policies, [38] including dividends means much freer, less constrained, [39] choice among the various sources of funding eg debt vs equity, internal vs external funding, so easier to plan least-cost (after tax), flexible, [40] funding over the total planning horizon. [41]

Can easily be included in typical treasury arrangements such as cash pooling, netting, intercompany loans, letters of credit / guarantees and working capital schemes.
Typically, can adopt company name with low reputational risk.
Expectation of parent of funding under all circumstances.

Joint Ventures (i.e. less than or equal to 50%) - essentially “club-type” deals between a number of partners, [41] tightly structured legally. [42] Equity and debt contributions usually all pro-rata [43] so often determined by weakest partner. [44] Often highly leveraged on external debt [45] with minimum partners’ equity/subordinated [46] debt.
No expectation of one major shareholder support. Unlikely to share company name so reputational risk minimisation.

Subsidiaries with minorities (i.e. control but less than 100% (50% > x > 100%)). These can cause special difficulty as they may carry the company name and reputation and hence possible obligation to fund under all circumstances, thus subsidising the minority. Hard to place in cash pooling (which is a funding arrangement) and other company cost reduction arrangements. They may also be described as subsidiaries in loan agreements which can cause covenant issues.

QUESTION 2 Valuation [41.4 mins, 23 marks]

Q2.a Cash flow forecast and DCF valuation (23.4 mins, 13 marks)

[Marking scheme: I have 45 detailed steps in the calculation, so ⅓ mark for each correct piece of calculation or logic].

Healthcare Ltd.								
GBP mill.	2016	2017	2018	2019	2020	2021	2022	
Sales	747.0	822	888	941	979	999	1009	1, 2, 3
growth rate EBITDA, depn,sales		*10.0%*	*8.0%*	*6.0%*	*4.0%*	*2.0%*	*1%*	
EBITDA	216.0	238	257	272	283	289	292	4, 5, 6
(Depreciation)	(20.0)	(22)	(24)	(25)	(26)	(27)	(27)	
EBIT	196.0	216	233	247	257	262	265	7, 8, 9
(Tax) @ 20%	(39.2)							
Profit after Tax	156.8							
Dividend	(80.0)							
Retained profit	76.8							
Tangible fixed assets	252							
(Accumulated depreciation)	(100)							
Net fixed assets	152							
Financial investments	60							
Inventories	112							
Trade receivables	133							
Total assets	609							
(Trade payables)	(66)							
(Pension and tax provisions)	(226)							
(Total liabilities)	(292)							
Equity and reserves	317							
Cash Flow Forecast	*(all figures rounded)*				stable-state growth rate		1%	
GBP mill.	2016	2017	2018	2019	2020	2021	2022	
EBITDA		238	257	272	283	289	292	
Change in NWA		(10)	(6)	(2)	2	6	(3)	10, 11
Capex		(24)	(26)	(28)	(29)	(30)	(30)	12, 13
Tax @ 20% on EBIT		(43)	(47)	(49)	(51)	(52)	(53)	14, 15, 16
Cash from ops. after tax		161	178	193	205	213	206	17 to 23
DCF Valuation	5.5%				Multiple-based TV			
Terminal value						4,380	15	32, 33
Total cash flow		161	178	193	205	4,593		
NPV (Enterprise Value)	£4,157							34, 35, 36
Workings								
Net working assets	179	189	195	197	195	189	192	24, 26, 27
NWA % sales	24.0%	23.0%	22.0%	21.0%	20.0%	19.0%	19.0%	25, 28, 29
Capex%depreciation		110%	110%	110%	110%	110%	110%	
Accum depn/ deprn (years)	5.0							31
Capex/deprn uplift @2%	110%							
WACC	**5.5%**							43, 44, 45
Debt/ Debt+Equity	25%							
Cost of debt (after tax)	**4.0%**		**Cost of equity**		**6.0%**			42, 39
LIBOR	2.0%		ERP		4.0%			37
Margin over LIBOR	3%		RFR		2.0%			38

Assume "average, conservative" gearing, [40] therefore levered beta of 1.0 [41] (unlevered 0.8).

Uses 15 times EBITDA as exit multiple calculation.

Q2.b Sensitivity of value to key assumptions (5.4 mins, 3 marks)

[Marking scheme: flexible, based on the three main factors identified plus associated comments].

• Growth rate in EBITDA
For example, changing sales growth by +/- 3% throughout changes the value by +/- 35 to 45%.

• Terminal Value multiple
For example, changing the Terminal Value multiple to 10 or 20, from 15x, changes the value by +/- 27%

• WACC
For example, changing the WACC by 1½% either side of 5.5% changes the value by only +/- 6 to 7%.
Capex and working capital assumptions have very little impact.

Q2.c Strengths of valuation model (9.0 mins, 5 marks)

[Marking scheme: I have 13 points so 0.4 mark for each good comment]

This method (DCF for the first five years then a discounted exit multiple (easier for market to **1** understand than a DCF growing perpetuity[2]) is suitable because there is a period of rapid **3** but falling growth in profits plus cash flow changes followed by expected stability, i.e. two behaviours requiring two valuation methods. With regard to the more popular valuation models:

• P/E multiple – would have to allow for 34% **4** growth over 5 years.
Our valuation **5** is at 26.5x. Valuation would be based on current, zero debt. **6**

• Dividend yield – would also have to be adjusted for growth **7** but the current dividend is for a group **8** subsidiary so not a reliable guide to value. Current yield is 1.92% **9** of our valuation

• EV/EBITDA multiple – better than **10** the above two but needs to reflect future growth prospects, say 17.5 **11** instead of stable state 15.0(?).

• DCF perpetuity (at 2016) Growth rate not stable although cash flows close to a sustainable cash **12** flow. Our value and WACC give stable, perpetuity growth rate of 1.63%. **13**

Q2.d Inclusion of financial assets and pensions (3.6 mins, 2 marks)

[Marking scheme: ⅓ mark for each good point]

EV is the total value of the business ignoring financial assets and liabilities; and based on profits/cash flow before interest received and paid, (but after tax).

So these items do not change the EV, [1] only the equity value. [2]

We have calculated the value of the company's cash flows/EBITDA [3] to obtain the Enterprise Value (EV) already.

• Since EV = Equity value + debt – cash, we would need to deduct debt and add cash to obtain the equity value to shareholders. There is no debt, but since pensions and tax liabilities are increasing treated as quasi debt [4] we should deduct 226 and then add the financial investments [5] of 60, giving 4157 + 60 – 226 = 3,991. [6]

• So, 4,217 is the total value of cash flows plus financial investments (+ cash), but with 226 external claims on that value.

• Equity value = EV + cash – debt – valuation of non-quoted companies
  ↑ derived by formula
  ↑ calculated from cash flows

• EV = market cap. + debt – cash – calculated of EV for quoted companies
  ↑ derived by formula
  ↑ taken from the market value

QUESTION 3 Funding of global family-controlled shipping business.
[28.8 mins, 16 marks]

Q3.a Changes in financing structure and mix. (10.8 mins, 6 marks)

[Marking scheme: ⅓ mark for each good point or correct metric]

Briefly, transition from predominantly bank [1] debt (44%) [2] plus shipping finance [3] (36%), [4] no Bonds. [5] Via un-rated European bonds/notes [6] (33% [7] in 2013). To USD rated bonds 8 (18%), [9] total bonds now 50%, [10] banks 10%, [11] shipping finance 22%.[12]
Also a de-gearing [13] in relation to total assets (27% [14] down to 12%), [15] balance sheet equity (leverage 37% down to 18%), market cap. (market leverage 44% [16] down to 22%), [17] and EBITDA [18] (1.05 down to 0.86). [19]
Reduction in total debt by 36% [20] and market cap. up by 25%. [21] Total assets down by 4%. [22]

Interesting that this theme is broadly replicated across many other sectors, such as Housing Associations in the UK and industrials in the UK and across Europe. Even Private Equity has less bank debt in it these days.

Q3.b Reasons for change.
(12.6 mins, 7 marks)

[Marking scheme: 0.4 marks for each good point]

Company results, like many others, almost certainly hit by financial [1] crisis (market cap. down at 22bn, only 2.38x EBITDA) [2] and very concerned about continuing solvency [3] of banks, on which heavily reliable for [4] debt finance (44% of debt, zero capital market issues). Most banks' credit down-graded. [6] More heavily regulated [18] and less able to lend.
Shipping leases, from a few? specialist banks, [5] another 36% - again concentrated risk. [7]
Over-riding requirement to diversify [8] funding sources/instruments.
Reducing the average cost of debt. [9]
Flexibility - need access to a variety of markets [10] so able to fund in most attractive market then swap into required currency, also to minimise cost of debt.
Traditional, conservative, [11] family-controlled company, probably predominantly using Danish and other Scandinavian banks, with long-standing relationships – exacerbated the bank "problem"
Local funding not matching global [12] spread of market-leading business.
Capital-intensive business, with continuing requirement for funding of replacement+ capex, [13] plus re-financing of (medium-term) debt. [14]
Needed ability to access deep [15] capital markets.
Maybe a desire (new Treasurer) to put the finance and treasury function on a more rigorous basis, [16] with implications also for general financial and strategic management of the company's businesses. [17]

Q3.c Difficulties and problems of changing.

(5.4 mins, 3 marks)

[Marking scheme: ⅓ mark for each good point]

Rigorous financial and strategic discipline [1] required and costly to [2] get rating and issue USD bonds, but company did it in easy stages [3] over time, via un-rated European bonds in Scandinavian currencies, then Euros, although arguably an unrated bond is harder to sell than a rated bond.

Approval of controlling family is absolutely essential [4] – preparation of detailed brief in advance to inform them about the markets, instruments, requirements, advantages, risks, process – to inform and persuade. [5]
New culture of transparency will have to be built [6] within the company.
Need to establish knowledge and reputation of the company [7] in new markets by gradual process of (for the company) new issues [8] in new markets – road shows instead of cosy bank visits! [9] Build investor relations.
Treasury skill set – bond issues versus bank relationships. [10]

QUESTION 4 **[27 mins, 15 marks]**

Q4.a (12.6 mins, 7 marks)

Comment critically on the policy of retaining and managing such large amounts of strategic liquidity.

[Marking scheme: to pass, five explanatory factors including 2 from factors 1 to 4 listed below, together with credible narrative].

Below are recast balance sheets for ABC Inc. 2015 and 2016, separating the operating assets and operating liquidity from the strategic liquidity:

SUMMARY B/S, P/L £bn

ASSETS		2015		2016	LIABILITIES	2015	2016
Assets:					**Equity**	**119**	**128**
- Tangible	22		27				
- Intangible	9	**31**	8	**35**			
Other		**53**		**49**			
					Debt	**64**	**87**
Operating Liquidity							
- Cash and Equivalents	21		20				
- Short-term marketable securities	21	**42**	47	**67**			
		126		**151**			
Strategic Liquidity					**Other**	**107**	**107**
- Long-term marketable securities		**164**		**171**			
		290		**322**		**290**	**322**

REVENUE	234	216
PBT	**73**	**61**
PAT	**53**	**46**

Given that there is already substantial operational liquidity, plausible explanations for such a large level of strategic liquidity would include:

1. Anticipation of a mega acquisition opportunity
2. Build-up of strategic liquidity in the continued absence of an attractive acquisition opportunity
3. Precaution against another deep financial crisis where funding markets shut down
4. Trapped cash (for some reason, typically tax rates on repatriated capital).

Beyond the above, there are less obvious explanations:

5. Is it common practice for peer group technology companies?
6. Precaution against a mega new product launch failure where the yield on “actively managed” strategic liquidity helps to compensate in part for loss of business earnings.
7. Precaution against a mega new product launch failure where the existence of so much strategic liquidity allows the firm the chance to have “another go” at a different product, in fact several goes, in this case.
8. The alternative to hoarding strategic liquidity is to give it back to shareholders to re-invest in other equities; however, if it is invested by ABC to earn an equity return there may be less pressure to return funds to shareholders.
9. Taking scenario (7) a step further, does a relatively very large strategic liquidity portfolio help to reduce the volatility of earnings inherent in technology companies?
10. Protection against other risks, such as Black Swan type risks.
11. Management inertia.

Q4.b **(14.4 mins, 8 marks)**

Explain how you would manage the strategic liquidity in the form of marketable securities on the ABC Inc. balance sheet.

[Marking scheme: to pass, 6 credible elements, with explanatory narrative].

The conventional approach to managing necessary balance sheet liquidity is summed up in the acronym “SLY”, i.e. security, (ensuring par value, minimising credit risk) first, liquidity (maximising accessibility) second and – given achievement of these two – yield third.

However, the question narrative notes that ABC distinguishes between operational and strategic liquidity and notes that the latter is held in long-term marketable securities which the company “actively manages.”

This implies that strategic liquidity is managed for yield with a longer (strategic) time horizon. Indeed, it is difficult to imagine how a firm carrying over 50% of its balance sheet in marketable securities (over and above the 15% to 20% in operational liquidity) could do otherwise without shareholders clamouring for their money back. So part (b) of the question is about how this active management might be accomplished.

The issues which arise include:

1. Investment policy (risk-return) in the context of the core business shareholders and the overall balance sheet profitability.
2. Expertise to manage such a large sum
3. Manage in-house or outsource, i.e. develop the expertise and infrastructure to manage the funds in-house, or manage the relationship with an outsourcing entity which manages comparable funds.
4. Managing in-house requires systems for:
   - dealing mandates and limits

- transacting
- reporting
- monitoring
- valuation
- accounting

5. Outsourcing requires:
   - oversight of performance
   - valuation
   - accounting

Footnote:

ABC Inc's strategic liquidity is USD 171bn (2016) and ABC's balance sheet, net strategic liquidity, is only USD 151bn (2016), of which USD 67bn is short-term (operational) liquidity. To put these numbers in context, the largest corporate acquisitions to date have been in the region of USD 150bn, eg Anheuser-Busch InBev's purchase of SAB Miller for USD 117bn (2015). The Qatar Sovereign Wealth Fund is USD 335bn (2017). So, USD 171bn is a large number, in both relative and absolute terms.

ABC Inc. is based on a real company with a subsidiary which manages the cash of the parent company. The subsidiary is located where the income on the cash investments receives favourable tax treatment. The Times article of 04.05.17 below tracks the growth of cash since 2006 (operational and strategic liquidity in the language of Q4). So there is some substance to explanation (4) in Q4.a (trapped cash).

Apple smartphone sales in decline

TIMES 04-05-17

Continued from page 39

Apple has paid less attention of late to its line of Mac laptop and desktop computers. The standard MacBook laptop received its last update in early 2015 and the iMac desktop later that year. The more powerful and expensive MacBook pro laptop was overhauled at the end of last year.

Sales of all Mac computers rose to 4.2 million units in the second quarter from four million units a year ago. Revenue from Mac sales climbed to $5.8 billion from $5.1 billion.

Second-quarter revenue from sales of "other products", which include Apple Watch, Apple TV and Beats headphones, rose to $2.9 billion from $2.2 billion a year ago. Income from "services", which includes the App Store and Apple Pay, climbed to $6 billion.

Apple's towering cash pile grew further to $256.7 billion in the second quarter from $246 billion in the first. Nearly 95 per cent of Apple's foreign profits are held outside of America to avoid paying US corporation tax.

President Trump signalled last month that he intended to make good a campaign promise to allow American companies to repatriate overseas profits with a special one-time tax rate. However, Mr Trump did not say what the tax rate would be and did not provide specifics.

Tim Cook, chief executive of Apple, said this year that he intended to repatriate cash if the circumstances were favourable. Some analysts believe that Apple could use the funds to buy a big media company such as Walt Disney.

$238 bn Y/E 2016

Strong signal

Apple's amassed cash, cash equivalents and marketable securities, $bn

Sources: ONS, Bank of England, London Stock Exchange, Apple

How it compares, $bn

ABC Inc. exemplifies the new breed of technology-based, fast growth, very large global businesses which are stretching the boundaries of corporate treasury thinly.

Of particular interest here is the idea that much of this cash might be invested in equities (note 8

to part a)). This could arguably be an approach which meets several needs. The assets are available to meet the risk management requirements suggested above without approaching shareholders. The assets are earning equity returns which is all they would earn if distributed and re-invested by shareholders. This would perhaps make the firm more an investment trust than a technology company and therefore more difficult for investors to understand - they may prefer to choose the investments themselves. However, it is a step beyond merely investing the assets in Treasuries to meet the S in SLY.

QUESTION 5 **[18.0 mins, 10 marks]**

Context: FinTech originally referred to computer technology applied to the back office of banks or trading firms but now describes a broad variety of technological interventions into personal and commercial finance. Payments systems operated by banks have been a prime target because many types of payments are not regulated and do not need a banking licence. Adding a funding dimension such as crowd funding or retail bonds to a payments system can create a financial intermediary. FinTech companies like these are not regulated in respect of capital adequacy and liquidity, as banks are which operate payments systems alongside deposit-taking and lending. Understanding this reality, together with the likelihood that innovators often end up marketing solutions which are looking for problems, would help in answering this question.

Required:

Draft a note for the FD identifying and explaining the issues raised for your company if this type of product were adopted.

(18.0 mins, 10 marks)

[Marking scheme: to pass, demonstrate understanding of the main factors of the two alternatives, identify and explain two credible buyer issues for Alternative A and an additional two buyer issues for Alternative B].

Supply chain management as a general area is very topical: this Question is about the financing of suppliers' receivables by a non-bank entity, Finteco.

There are two ways of using the product:

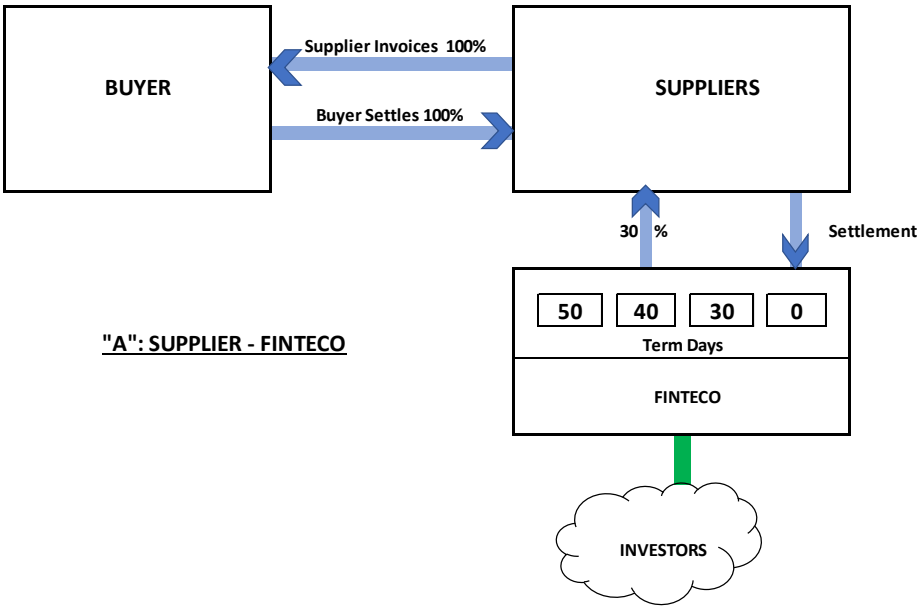
- Alternative A: product is used by the supplier, wholly independent of the buyer
- Alternative B: the buyer is party to the arrangement.

Finteco is a non-bank fin-tech company which aims to use investors' money to provide receivables finance to suppliers of product. Suppliers can choose the number of receivables' days which they wish to finance – say 40 days – and pay the appropriate rate of finance – say 120bp. Investors who wish to assume this type of risk do so through the Finteco platform. Finteco is rewarded either solely by the transactional fees or also in addition by an element for credit/liquidity risk depending on how the overall funding of Finteco is structured – and not largely by the credit margins as a bank would be.

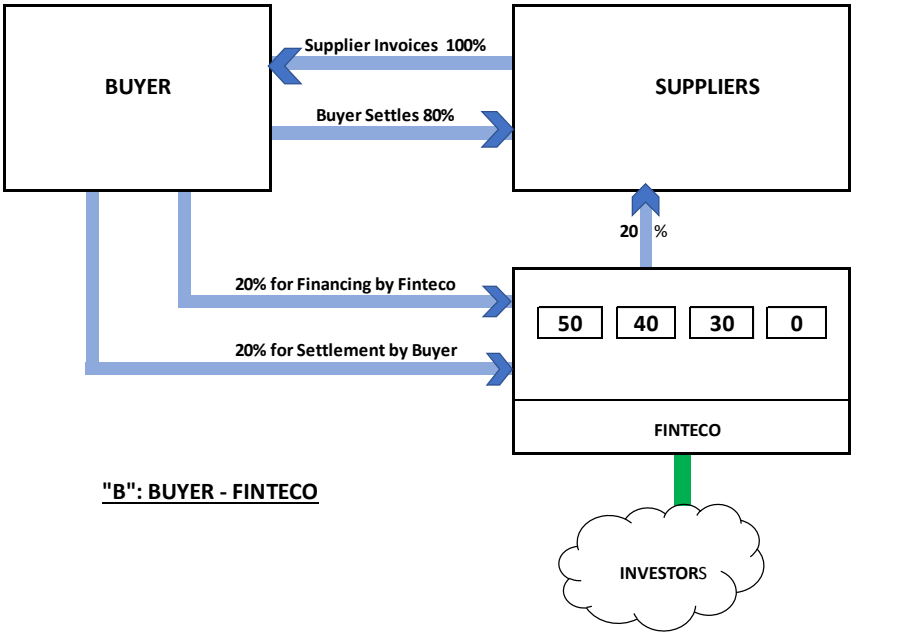
- Alternative A: companies wishing to finance receivables deal directly with Finteco, and settle the amount financed when their customer/buyer pays against their invoices. The customer/buyer is not involved. Diagram "A" depicts a buyer 30% of whose suppliers deal with Finteco.

- Alternative B: a customer/buyer which wishes to help financially weaker suppliers obtain receivables finance but does not itself wish to improve its payment terms arranges with Finteco to provide this type of finance. Diagram "B" depicts a buyer 20% of whose suppliers have chosen this option. When

one of these suppliers submits an invoice, the buyer notifies Finteco which provides the finance at the appropriate discount rate. When payment on the buyer's terms is due, the buyer settles with Finteco.



"A": SUPPLIER - FINTECO



"B": BUYER - FINTECO

The question does not indicate whether Finteco is solely a disintermediated operator or if it can on occasion act as a lender on its own account. This has implications for the risks for Mancorp. If it is solely a disintermediated operator then liquidity depends on the direct appetite of investors for the risk and reward that suppliers and Mancorp between them can offer. If t has its own money to lend, then Finteco may wish to provide liquidity to support the reputation of its business model. However, both these approaches have their own risks, there is no guarantee of funding as there might be with, say, a bank sponsored BDRP.

Issues for Buyer with "A"

- Finteco is unable to find investors to fund supplier(s)

- Supplier cannot suddenly refinance so supplies may be disrupted unless buyer steps in.

Issues for Buyer with "B"

- Finteco is unable to find investors to fund supplier(s)

- Supplier cannot easily refinance

- Buyer which introduced Finteco may feel obliged to, or may of necessity need to, finance supplier
- Finteco may default on funder(s) and Finteco fails.

- Status of returns to supplier, e.g. quality failure after Finteco finances but before invoice is paid

- "B" is a "buyer facilitated" receivables programme, not a "buyer driven" programme (BDRP). So it may not pass on to suppliers the benefit to investors of the difference between the buyers and the suppliers credit risk, nor the opportunity for the buyer to *extend* payment terms, nor the data on suppliers financing behaviour.

- It is also not clear where recourse lies if Buyer fails. Can an investor recover from the Supplier? In most supply chain finance arrangements, this is usually very clearly laid out.

Issues for Buyer with Blockchain

A blockchain is a generic term which includes distributed ledger systems. Distributed ledger payment systems are designed to remove credit and liquidity risk by removing intermediaries between payer and payee and creating records and triggers for action which cannot be altered.

This is newish technology and is attracting a lot of investment by non-banks and now by banks, the former in order to disintermediate banks, the latter to defend against disintermediation by matching and out-stripping non-bank-led developments.

The risk for the buyer in the question is that either the technology fails or the boundaries around the blockchain do not provide complete protection from all credit and liquidity risks. For example, every invoice actually processed within Finteco may be secure but if investors sit outside the boundary and withdraw funding, then new invoices will not be accepted for financing by Finteco.

Reference

An early but very readable reference is “Innovations in payment technologies and the emergence of digital currencies”, Bank of England Quarterly Bulletin, 2014 Q3,
pp 7-11.

Footnote:

The FinTech product is an example of shadow banking, ie a non-bank undertaking what is traditionally a banking service.

The current regulatory view is that some types of shadow banking are “nasty” (structured investment products involving maturity transformation plus high leverage), while others are “necessary” (pension funds providing long-term large corporate debt without any maturity transformation and freeing up bank capacity for smaller businesses.)

This one could fall into either category, but the former is a real possibility: a key question is how is the payment to suppliers financed. There would need to be a source of liquidity somewhere to deal with volatility in demand, otherwise suppliers could be left in the lurch if their demand outstripped investor appetite at any point in time.

QUESTION 6 **[21.6 mins, 12 marks]**

Context: Basel III banking regulations, designed in response to the 2007 financial crisis now in course of implementation up to 2020, impose harsh capital adequacy and liquidity constraints on bank lending and how it is funded. To meet these regulations banks have needed to de-leverage (reduce lending), reduce dependence on non-customer-deposit funding and be selective in the services they provide in order to optimise regulatory costs (capital, liquidity, mark-to-market exposure) versus customer-product return. The consequent reduction in bank corporate lending availability has been cushioned by increased capital market funding, eg bond issuance and private placements (PP).

Private placements from insurance companies have been increasingly common – insurance companies are no strangers to corporate risk via investment in public bond issues. Historically, private placements (and bond issues) were very inflexible when compared to bank lending because PP have historically comprised immediate drawdown, bullet repayment (not revolving), makewhole on early repayment and minimum tailoring to individual customer requirements and customer relationship management.

However, increasingly over the past several years private placements have begun to redress this lack of flexibility and the longer placements now often mimic the features of a traditional syndicated loan (SL), except that there is only one counterparty. This is the background to the deal which is the basis for this question (and in part for Question 7 too).

Q6.a. **(16.2 mins, 9 marks)**

Compare critically the two funding offers, state and justify your preference.

[Marking scheme: to pass, identify and compare four of the main features of the alternatives; state and justify your choice].

Main features of the facility:

Item	Bank SL	Insurance Co. PP
Term	7 years	Tranches out to 15 years
Amount and Counterparty Risk	£500mn, syndicate of five banks (two relationship)	Sole insurance company (already a counterparty)
Interest basis	Floating, as for all bank lending	Fixed, as is conventional for bond issue
Forward start	Fee reflecting regulatory capital cost of commitment to lend	Nominal fee only
Swap cost	Reflecting market rates for banks which now include capital costs for collateral under stress conditions	Potential to incorporate as a natural hedge
Cross-sell	Relationships banks expect ancillary business	No cross-sell pressure
Other desirable services	Available	Limited

Regulated utilities need to share with their regulator future capital investment plans during the periodic process of agreeing future prices for their customers. Therefore they need to fix costs as far as possible in advance, including interest rate costs. This is why the forward start is important for the utility. And because utilities usually have little discretion in pricing once it is agreed with the regulator, they will typically wish to fix the larger proportion of interest rate cost, e.g. 75% fixed.

Reverting to the features:

- Term: because of capital and liquidity regulations, banks have little appetite for anything beyond ten years. So the PP, with terms out to fifteen years, is a plus. So also is the offer to smooth future refinancing needs by tranching the funding.

- Amount and counterparty risk: bank diversification of credit risk, especially now (2017) limits appetite for large incremental exposures if they can be avoided, hence the SL proposal equating to £100mn per bank.

  From the borrower's viewpoint however, diversification of funders may be seen as a plus factor. That is so in this case as three of the SL banks are new counterparties – as long as no problems arise with the utility/facility. If problems do arise then the new counterparties may lose their appetite for the business and even the two existing relationship banks may not be enthusiastic about waivers if they – as banks – are still recovering from the crisis. So the utility may end up dealing with five potentially weak and reluctant banks.

  The PP principal may also share the same lack of enthusiasm as the banks but there is only one party to deal with and as an insurer it may be financially more sound than the average bank.

- Interest basis: if the utility prefers a majority of funding to be fixed e.g. 75% fixed, 25% floating, then the PP is preferable as only 25% needs to be swapped (to floating). This reduces the swap mark-to-market (MTM) exposure by two-thirds when compared to the bank loan (25% instead of 75% swapped).

- Forward start: for a six-month forward start the saving could be of the order of £1mn.

- Swap cost: difficult to estimate the saving but positive in the sense that a third party need not be involved. The related issue to clarify would be the MTM collateral terms.

- Cross-sell: because bank lending regulatory costs are high, banks need ancillary business which is profitable in order to render the overall relationship attractive. Insurance companies do not have the same imperative.

- Other desirable services (the other face of cross-sell): large corporates have need of a wide range of banking services and usually like to have several banks with which they have an on-going mutually beneficial relationship ("strategic partner" in terms of Q7). There is limited opportunity for this with the PP.

The ready availability of long maturity funds, easier terms and greater financial strength of some insurance companies relative to banks, favours the PP over the SL.

However, if the utility has a “strategic partner” relationship with one or several of the SL banks and desires to develop such a relationship, such considerations could favour the SL alternative.

Q6.b. **(5.4 mins, 3 marks)**

Explain why the insurance company might be able to undercut the commitment fee, provide the funding in tranches out to 15 years and undercut the swap rate.

[Marking scheme: to pass, identify and explain two reasons why the insurance company may be able to offer better terms for some features of the facility].

The insurance company can offer superior terms on some features:

- because it already has a predictable stream of premia to invest long term and does not have the liquidity risk associated with commercial banks’ maturity transformation . . . funding long term loans with short term customer deposits

- because it has the need to invest long term to match its long-term liabilities and can therefore offer longer term debt facilities

- because it has internal interest risk positions for which the swap for the utility may provide a natural hedge

- because it does not have bank levels of capital requirement for credit risk.

Footnote:

FinTech is also intruding on syndicated lending. Credit Suisse recently completed a proof of concept project involving a consortium of other banks to digitalise the agency process for syndicated loans as well as the related secondary trading of the principal.

QUESTION 7 **[23.4 mins, 13 marks]**

Context: The context for this Question is provided in the first paragraph of the Question's text and also in the Context piece at the beginning of the Question 6 Note Form Answer.

In addition Questions 4 to 6 of this General Exam paper all touch on aspects of fundamental on-going change within banks, corporates, financial institutions and markets which have implications for managing relationships with financial services providers.

Q7.a. **(16.2 mins, 9 marks)**

Identify and discuss the general implications for corporate treasurers seeking dependable and responsive providers of financial services.

[Marking scheme: to pass, identify and discuss four significant general implications for corporate treasurers].

Perhaps the most significant shift for large corporate treasurers to note is that as their companies strive to become increasingly global, banks are retreating in the opposite direction – a real paradox.

Banks are driven by the need to survive and by ever more stringent and restrictive regulations designed to make each subsidiary of a bank viable on a standalone country by country basis and in aggregate to ensure that at Group level each bank is no longer too big to fail.

Corporates are driven by the need to seek out growth markets and achieve economies of scale and of scope across country borders.

The resultant product-market voids, as flagged by the treasurer quotes in the question, signal the need to cast the net wider when establishing financial services relationships and to be open minded about new entrants.

So implications include:

- Banks no longer necessarily the dominant provider of financial services, especially for larger corporates. So corporates need to look for a wider range of financial service providers.

- Much greater need to understand the dynamics of product pricing (i) so that value is obtained for the corporate and (ii) so that the relationship with the provider is economically sustainable for the latter to ensure continuing good service.

- Much greater need for corporates to identify regional providers if international/global, as banks slim down their non-domestic operations.

- Need to extend counterparty risk assessment to new (non-bank) providers of

services previously provided by the lending/deposit-taking bank counterparty.

- Where banks have been dominant providers (i.e. because main source of funding coupled with cross-selling), corporates have depended on these relationship banks for advice about new initiatives (the "strategic partner" role flagged in the Question). As this dominant role diminishes/disappears treasurers must increasingly take on this role in-house, i.e. become the "in-house bank" where scale of operations justifies it.

Q7.b. **(7.2 mins, 4 marks)**

Identify and explain four of the most important implications for your company concerning the provision of financial services.

[Marking scheme: to pass, identify and explain four company-specific implications].

The company is EU-based, with self-sufficient manufacturing operations in Western Europe, North America and Asia-Pacific, growing organically and by acquisitions.

Treasury is currently centralised, aspiring to add value by encouraging dialogue with the business at the operational level.

One convenient way to frame a structured response would be to use the Treasury Organisation Profile:

Treasury Organisation Profile

ROLE	Advisory	Agency	In-House Bank
AUTHORITIES	Decentralised	Centralised	Dynamic Balance
RESPONSE TO RISK	Cost Centre	Cost-Saving Centre	Profit Centre
ORGANISATION	Elementary	Intermediate	Advanced

KEY EXISTING FUTURE

Shift towards the right-hand side, e.g:

- Develop some in-house bank expertise

- Allow for a degree of dynamic balance

- Adopt a value-added approach to risk management

- Regionalise elements of treasury to create links with the operational businesses and also with local treasury services providers.

Alternatively, without using the Treasury Organisation Profile and focussing on the aspiration to add value by local dialogue and grow organically and by acquisitions:

- Allow a degree of decentralisation with some regional presence in APAC and NA

- Engage with local businesses

- Develop relationships with local financial service providers, particularly for cash management, fx, and local currency funding. This includes both conventional banks and balance sheet lenders and Fintech type approaches with a ‘crowd funded’ approach.

- Establish contact with regional capital market intermediaries as additional sources of group funding and local acquisition opportunities.

Examiners' Report
Advanced Diploma - April 2017

OVERALL SUMMARY OF PERFORMANCE

	General Exam	Case Exam	Combined
Average mark	45.8%	43.0%	44.6%
Questions	7	8	15
Candidates	4	3	7
Passes # @50%	1	0	1
Passes # @45%	2	1	3
Pass % (50%)	25%	0%	14%
Pass % (45%)	50%	33%	43%

OVERVIEW

Only seven candidates in total sat these exams, two of them sitting both exams. All five candidates were re-sits. The average improvement in marks, compared with their last sitting, was 6.9%, but better in the General exam than in the Case exam. Significantly three candidates improved enough (up by 10.5%) to achieve a pass, so congratulations to them.

General exam 4 Candidates	marks available	50% passes ex. 4	average mark
Q1 (GI)	11	2	68%
Q2 (GI)	23	0	35%
Q3 (GI)	16	2	48%
Q4 (JB)	15	2	53%
Q5 (JB)	10	2	48%
Q6 (JB)	12	2	42%

Q7 (JB)	13	1	43%
Case exam 3 Candidates	**marks available**	**50% passes ex. 3**	**average mark**
Q1 (GI)	12	0	44
Q2 (GI)	13	0	33
Q3 (JB)	12	1	47
Q4 (GI)	10	0	21
Q5 (GI)	15	2	53
Q6 (JB)	14	1	44
Q7 (JB)	12	1	42
Q8 (JB)	12	1	47

Examiner's Report - General Examination

Question 1 **A question on funding sources and capital structure for 100% structures and joint ventures.**

All 4 candidates passed at the 45% level, two of which were excellent, with marks ranging from 48% to 91%. All candidates covered the main sources of funding and the considerations relevant structuring the funding, but the two weaker candidates were somewhat weaker in applying all that to the two contrasted group funding situations.

Question 2 **This was a four-part question on valuation, with calculation and discussion elements.**

This proved to be a challenging question, on an absolutely core topic, with the lowest average mark of the whole exam, because no candidate scored well on all four parts. The cash-flow forecasts saw the best answers, but the valuation calculations often contained basic errors. The other three parts, requiring evaluation and discussion of technical aspects of the valuation, were not very well answered.

Question 3 **This three-part question was about the re-structuring the debt of a family-owned global shipping group.**

The two successful candidates achieved very good marks on this question, whereas the other two missed the key focus of the first part of this question, namely the transition from bank local currency bank debt and shipping finance to EU and USD rated bonds. The other two parts of the question, asking for discussions of the reasons for the debt transformation and the likely challenges in doing so, saw very mixed results with marks ranging from 17% to 100%. Again, some candidates really latched onto the respective issues on one or other of the part-questions, reflecting wider experience or knowledge, while others did not. With its mix of quantitative and qualitative elements this question proved to be a good discriminator.

These three questions on corporate finance and funding resulted in one good pass, two marginal passes and one clear fail. For re-sit candidates there are some clear lessons; be sure to answer the question as set, make sure you are on top of the key quantitative corporate finance models and try to flesh out your answers rather than just cover the bare bones of the question.

Question 4 **Critique of corporate holding substantial strategic liquidity in addition to the usual operational liquidity.**

53% of this very large global technology company's balance sheet is invested in a "strategic liquidity" portfolio (long-term marketable securities) and is "actively managed"; the rest is "operational liquidity" (21%) and operating assets (26%). It is funded by 40% equity, 27% debt and 33% "other liabilities." Candidates were asked to comment on this policy of holding "strategic liquidity" and also, given it exists, how they would "actively manage" the portfolio.

There were two very good passes, a marginal pass and a fail. The candidates who did well were able to reconcile such an unusual asset mix with current environmental factors – global political shifts (Brexit, Euro), emerging markets (China, Middle East), mega acquisitions, another financial crisis – and also could imagine how such a fund might need to be managed for yield in order to justify not distributing it to shareholders. Candidates who did less well were perhaps unsettled by the scenario – or tried to apply "SLY" concepts.

Question 5 **Identify and explain issues raised by engaging with a Fintech non-bank provider of supplier receivables finance**

This question is about a receivables financing product, viewed from the perspective of a large buyer with many smaller suppliers. The basic product is akin to "invoice discounting" (by the buyer's suppliers) and the more complex version is akin to a "buyer *facilitated* (rather than *driven*) receivables programme." The novel feature is that the product provider is a non-bank Fintech innovator

using blockchain technology and funded by independent investors – it could be seen as an example of shadow banking. Identifying the potential issues for the buyer if its suppliers adopted either versions of this product is the core of the question. Again, two candidates passed, one failed and one was marginal, but the mix of candidate-grade was different. This question required an understanding of big buyer/small supplier receivables finance, the ability to identify the implications of the direct involvement of a non-financial non-bank provider and a very basic appreciation of blockchain-enabled payments.

Question 6 **Critical comparison of syndicated loan and private placement provided respectively by bank and non-bank financial institutions.**

Should a utility company with GBP5bn. of existing debt fund an additional GBP500m with a syndicated bank loan or an insurance company private placement where the PP terms seem to be slightly better and the utility already has funding from both parties? Two candidates passed comfortably on this question and two did not, evidencing a wide disparity in knowledge and understanding of this topical area.

There was quite a bit of discussion in the responses about whether the SL or the PP increased or decreased the borrower's diversification of funding sources. Each of the two who passed chose different providers.

Question 7 **Implications for corporate treasurers of the demise of relationship banking?**

At a time when larger corporates are thinking globally in pursuit of growth, scale/scope efficiencies and competitive position, many banks seem to be travelling in the opposite direction, frustrating corporate treasurer's search for bankers who can be strategic financial partners. The implication of this scenario for corporate treasurers is the basis for this last question.

Currently a much-discussed topic, grades were lower on this than on the previous treasury and risk management questions, with one good pass, one marginal pass and two fails. One of the causes may be that some candidates dwelt too much on the imperatives driving bank behaviour rather than on the implications for corporate treasurer behaviour . . . easy enough to do, I suppose on the last question!

These four questions on treasury and risk management resulted in two good passes and two fails. It is difficult to generalise about the causes with such a small cohort but if pressed I would stress the importance of understanding the defining characteristics of a specific business and translating them into treasury responses. Case studies and questions which use specific company scenarios are probably the best vehicles for developing this skill and it is a core element of what MCT is about. It is also helpful to read widely: the FT, the Economist, corporate treasury journals and the financial press from leading regional financial centres. It is perhaps also worth noting that almost all the questions on this paper are based on contemporary real-life situations and in aggregate demonstrate how diverse and dynamic corporate treasury management has become – so keep up to date!