

The Association of Corporate Treasurers

Examination Paper, Solutions and Examiners Report

Paper: MCT Case Study Exam

October 2011

All questions relate to Novitasan (NVS) Group Case Study.

QUESTION 1

Summarise the main strategic changes that have been made since 2007. Explain why the company needed to change, based on a summary SWOT analysis of the various businesses in 2006/7.

(10 marks)

QUESTION 2

At the end of the financial year March 2008 the company had achieved its target BB rating. However, eps had fallen by 7.7%, the shares had touched 377p compared with the 2007 high of 828p, and internal cash flow was severely negative.

Required:

- a) **Summarise the key strengths and weaknesses of the company's financials as at March 2008.**

(7 marks)

- b) **Summarise the main changes in the financial position and performance since then.**

(7 marks)

- c) **Summarise the likely impact of the changes on the company's credit rating and what you think it is now.**

(2 marks)

(Total 16 marks)

QUESTION 3

Required:

- a) **Given your responses to Questions 1 and 2, identify five major priority finance-treasury tasks/risks confronting NVS in 2011, with a brief one-sentence justification for each task/risk identified.**

(5 marks)

- b) **Looking ahead, what are the implications of the "focus, fix, grow" strategy for the future role of treasury?**

(7 marks)

(Total 12 marks)

QUESTION 4

The company now wants to grow so as to deliver shareholder value in the medium term and it is also considering what credit rating it might wish to target.

Required:

- a) What are the arguments, both theoretical and practical, for and against the company targeting a BBB rating, rather than a higher or a lower one at this point in time?

(6 marks)

- b) From your analysis of the financial and non-financial profile of the company, set out your proposals for how it might achieve its growth objectives and identify the main challenges for the company in achieving these objectives given the company's current competitive environment.

(6 marks)

(Total 12 marks)

QUESTION 5

After the announcement of the 2011 results the company's shares closed at 607p.

Positive market reaction following the release of the 2011 figures prompted analysts to raise their target prices by 60p to 785p.

A week later takeover rumours had lifted the price to 640p, with speculation about a potential bid price between 820p and 850p per share.

Analyst estimates of the next year's eps, currently and for previous years are as follows:

1-year estimate as at	March 2009	March 2010	March 2011
High	n.a.	46.97p	51.70p
Average	38.90	43.26p	48.50p
Low	n.a.	39.40p	43.30p
Share price as at March	276.0p	456.8p	593.5p

Required:

Evaluate these various share prices, both actual and potential, in relation to the underlying company performance in terms of key value drivers such as EBITDA, earnings and dividends, also bearing in mind the company's historical share price performance.

(12 marks)

QUESTION 6

Corn is a major raw material input for bulk ingredients. Price can be volatile and availability variable.

A subsidiary puts forward a proposal to modernise and expand silo capacity, citing assured availability and the feasibility to stock up when prices are low as key advantages.

Required:

a) How would you respond?

(3 marks)

A large customer for corn-based ingredients offers to assume the corn price risk and to pay NVS for the processing, provided NVS books the long term futures hedges in its name.

Required:

b) How would you respond?

(3 marks)

One of your bankers who provides hedging instruments proposes that as an alternative to providing collateral for mark-to-market exposures you pay an insurance premium on the nominal value of hedge instruments.

Required:

c) How would you respond?

(3 marks)

(Total 9 marks)

QUESTION 7

NVS is exposed to the conventional treasury risks of a large, multi-national manufacturer, including:

- Counterparty Credit Risk
- Liquidity Risk

Required:

For each of these two risks:

a) Identify source of risk and quantify materiality, stating assumptions where necessary.

(6 marks)

b) Determine policy for each risk.

(8 marks)

c) State purpose of policy for managing each risk.

(6 marks)

(Total 20 marks)

QUESTION 8

Required:

- a) On the Treasury Organisation Matrix pro-forma provided create a profile for the current NVS treasury by ticking the cell in the top left hand corner of the appropriate box. (2 marks)
- b) Given what you have read about NVS in the case study and the views you have formed about the business while thinking through your answers to earlier questions, what profile would you wish to adopt for the medium term? Tick the cell in the bottom right hand corner of the appropriate box. Justify your choice. (4 marks)

This pro-forma will be available as a handout.

Treasury Organisation Profile

ROLE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Advisory	Agency	In-House Bank
AUTHORITIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Decentralised	Centralised	Dynamic Balance
RESPONSE TO RISK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cost Centre	Cost-Saving Centre	Profit Centre
ORGANISATION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Elementary	Intermediate	Advanced

Example: If you think treasury is currently decentralised, but should move to centralised in the future, mark the grid as shown.

	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AUTHORITIES	Decentralised	Centralised	Dynamic Balance
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Existing → (pointing to the 'X' in the top-left cell)

Future → (pointing to the 'X' in the bottom-right cell)

- c) The new strategy to “fix the organisation” includes moving management closer to the business, eg to address the issues raised at Q7(a) and Q7(b). How would you seek to institutionalise this engagement between treasury and the business if you were NVS Group Treasurer? (3 marks)

(Total 9 marks)

**MCT ADVANCED DIPLOMA
CASE STUDY
BACKGROUND INFORMATION**

Based on Novitasan (NVS) Group

October 2011 Exam

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1.0 INTRODUCTION

Overview (2010)

“NVS is a global provider of ingredients and solutions to the food, beverage and other industries. Through our production facilities around the world we turn raw materials into distinctive, high quality ingredients for our customers. Our ingredients and solutions add taste, texture, nutrition and increased functionality to products that millions of people around the world use or consume every day.

NVS was founded in the UK in 1921 but its roots can be traced back to a number of companies established in the middle of the 19th century that focused on sugars in Europe, and corn milling in the USA and Europe. NVS is headquartered in the UK and operates more than 45 production facilities around the world.”

Summary Financials

	2010 £m	2011 £m
Turnover (including discontinued operations)	3,506	3,607
Turnover (continuing operations)	2,533	2,720
EBIT	8	303
PAT	23	196
Net Debt	805	460
Shareholders' Funds	854	973
Market Cap	1678	2,358

Purpose and Strategy (2010)

“NVS’s purpose is to become the leading global provider of speciality food ingredients and solutions.

Our strategy is to deliver sustainable long-term growth and returns for our shareholders through:

- disciplined focus on growing our speciality food ingredients business:
 - deeper customer understanding, continuous innovation and agility
 - stronger positions in high-growth markets
- driving our bulk ingredients and sugars businesses for sustained cash generation to fuel this growth.”

2.0 NVS GROUP BUSINESS PROFILE

2.1 Historical Background

Around the turn of the 20th Century, NVS could be characterised as a sugar (50%) and related commodities (50%) business, with 40% of its sales in Europe, 40% in the Americas and 20% in the rest of the world. Its traditional markets were mature and already extensively consolidated.

In 2007 analysts were valuing NVS based on a medium-term CAGR of 0%. The P/E multiple exhibited considerable volatility between 6 times and 14 times, averaging 10 times. This reflected earnings volatility due to adverse combination of commodity-based profits and the earnings impact of cyclically high capex. Profit forecasting was accordingly difficult and unreliable. Coincidence of positive factors in several businesses led to excellent profits in 2006 but the opposite combination occurred in 2003 and 2009.

The company was exposed to risks of fluctuating commodity prices, fixed by annual negotiations, additional volatility in sugar pricing caused by the changing EU sugar regime and the likelihood of generic legal challenges to the very lucrative, growing and monopolistic Sweetea patented business. Sweetea is a sucralose-based high intensity artificial sweetener. High sugar prices meant higher profits but also increased investment both in inventory and in futures contracts through the company's extensive sugar trading activity.

NVS held the number 3 spot in the American cereal and starches market, but with pressure on margins due to increasing competition and commoditisation. The US-based high fructose corn sweetener (HFCS) business is characterised by tight supply-demand conditions and the customer base, consisting of the large global carbonated soft drink manufacturers, is highly concentrated. Long-running issues were the Mexican 20% tax on HFCS-sweetened drinks and the US/Mexican HFCS/sugar agreement.

The company held a historically significant share of the European sugar-refining market, which helped it offset the adverse combination of declining prices, increasing energy costs and over-supply. The main goal of EU sugar reform was to reduce the amount of beet production in the EU to cope with the WTO ban on EU sugar exports (2005) and allow unlimited tariff-free imports from developing countries (2009).

By 2006 the core added-value side of the business was picking up momentum as the benefits of new products and investment began to come through, boosted by selective acquisitions and continuing investment in R&D. The food ingredient businesses were moving from single-digit to double-digit growth rates, based on trends in food manufacture linked to an increased consumer focus on health, convenience foods and out-of-home dining as well as food producer outsourcing.

Capital investment was at an all-time high of £271 million, reflecting new plant for the commodities, sugar refining and trading, and for the newer businesses e.g. £140 million for a new corn wet mill in the US to produce ethanol and starches.

The following segmental information shows the progression of the business from 2006 to 2011. In 2010 the strategy to focus on speciality food ingredients was implemented.

£ m	Segment Information (2006 - 2011)						
	Food & Industrial Americas	Ingredients Europe	Sweetener	Sugars Americas Europe		Discontinued Operations	Total
<u>2006</u>							
Sales	1,127	719	142	96	1,381	255	3,720
Operating profit	138	(217)	64	10	52	47	28
Segment assets	911	570	258	208	770	-	2,717
<u>2007</u>							
Sales	1,255	825	147	95	1,492	256	4,221
Operating profit	127	68	86	11	41	41	374
Segment assets	976	639	309	89	577	101	2,691
<u>2008</u>				<u>Total Sugars</u>			
Sales	1,386	461	148	1,429		394	3,818
Operating profit	171	(11)	62	24		105	320
Segment assets	1,250	601	297	821		75	3,102
<u>2009</u>							
Sales	1,797	539	169	1,048		852	4,405
Operating profit	165	43	(29)	3		(21)	143
Segment assets	1,723	606	272	512		175	3,469
<u>2010</u>							
Sales	1,855	491	187	973		101	3,607
Operating profit	(70)	43	9	52		(2)	6
Segment assets	1,183	563	178	478		71	2,571

	Speciality Food Ingredients	Bulk Ingredients	Discontinued Operations	Total
<u>2010</u>				
Sales	788	1,745	1074	3,715
Operating profit	83	(101)	50	6
Segment assets	216	386	222	835
<u>2011</u>				
Sales	805	1,915	590	3,310
Operating profit	186	166	(45)	258
Segment assets	207	511	40	771

Notes: Central costs have been excluded so rows may not add correctly. The turnover and profit figures for 2010 were re-stated in the 2011 accounts, so that 2011 and 2010 can be compared on a consistent basis. The size and frequency of such re-statements is largely because of the prevalence of “discontinued operations” almost every year in NVS.

£m	External Sales by Destination (2006-2011)				Total
	UK	Other Europe	N. America	Rest of World	
2006	666	784	1,301	714	3,465
2007	732	890	1,511	681	3,814
2008	606	641	1,470	707	3,424
2009	461	954	1,748	390	3,553
2010	473	768	1,656	609	3,506
2011	65	432	1,746	477	2,720

2.2 Product-Market Overview (2011)

Speciality Food Ingredients

Customers	Products
<ul style="list-style-type: none"> • Large, multi-national food and beverage manufacturers • Small and medium-sized food and beverage manufacturers • Private label food and beverage manufacturers 	<ul style="list-style-type: none"> • Starch-based speciality ingredients: <ul style="list-style-type: none"> - Speciality starches including fat-replacers and stabilisers - Speciality sweeteners including crystalline fructose - Soluble corn fibres • High-intensity sweeteners <ul style="list-style-type: none"> - Sweetea - Fruitea

Bulk Ingredients

Customers	Products
<ul style="list-style-type: none"> • Large, multi-national food and beverage manufacturers • Paper and board producers • Fuel and gasoline suppliers • Textile manufacturers • Animal feed compounders 	<ul style="list-style-type: none"> • Liquid sweeteners including corn sugar, dextrose and glucose • Industrial starches • Citric acid • Bio-fuels • Animal feed including corn gluten feed and corn gluten meal

2.3 Group Strategy: Focus, Fix, Grow (2011)

“NVS’s strategy is to grow our Speciality Food Ingredients business supported by cash generated from Bulk Ingredients. To deliver on this strategy, and to reinvigorate NVS, we have taken a number of steps during the year to ‘focus, fix and grow’ the business:

1) Focus

We have disposed of a number of businesses and assets to ensure that our resources are focused on delivering our strategy and maximising returns to shareholders. During the year we sold EU Sugars and Molasses and, after the year-end, we announced the conditional sale of our Vietnam sugar interests. As a result of these disposals, NVS is a more focused, less complex business with a reduced exposure to commodity markets.

2) Fix

The new operating model implemented on 1 June 2010 is based on two global business units, Speciality Food Ingredients and Bulk Ingredients, supported by a global unit dedicated to driving growth, Innovation and Commercial Development, and shared support services is being embedded. This new operating model is simple and transparent and provides an efficient platform for future growth, both organically and through bolt-on acquisition. We have also taken steps to strengthen the customer-facing areas of our business - for example, the commercial organisations of the speciality and bulk businesses have been separated and are now fully focused on serving their different end markets.

In May 2010, we announced two major two-year initiatives to transform our operational capabilities - firstly, to implement a common global IS/IT platform and secondly, to provide global support services through the use of shared service centres. After a detailed and thorough planning process, both initiatives were launched on 1 January 2011 and are making good progress. Following an evaluation of a number of different locations, the decision was made to locate our global Shared Service Centre in Lodz, Poland. The new Centre is expected to be operational by the end of 2011 with the various services to be provided migrated to the new Centre in a phased process over a 12 to 15 month period. The new IS/IT platform will also be implemented via a phased process starting in the first half of 2012.

Building a high-performance culture is a key part of the ‘fix’ phase. To help achieve this, during the year we put in place a new global performance management system, a new global sales incentive system and established common global metrics in areas such as working capital, customer service and quality. Ensuring we have the right skills and talent in the business is also very important. We are developing our high potential employees by providing them with more training and opportunities to learn, particularly with international assignments, and are also recruiting new staff both to fill skills gaps and to refresh our talent base.

The new process for capital investment planning and implementation has now been fully embedded within the organisation. All new investments are now evaluated against clear strategic and financial criteria with greater security and clear execution milestones for approved investments.

3) Grow

The Innovation and Commercial Development (ICD) group, which was formed on 1 June 2010, has made good progress during the year working closely with customers on product development and innovation initiatives. ICD is responsible for the innovation pipeline and, during the year, the processes used by ICD to manage and review the pipeline, and the way it launches new products, were completely overhauled. During the year we launched a bakery cream starch in Europe and Soluble Corn Fibre 85 in the US and Latin-America. We also recently announced a five-year strategic partnership agreement with Vita-Bio for the exclusive global marketing and distribution rights for Vita-Bio's monk fruit extract, marketed under the Fruitea brand name. Fruitea is the only fruit-based calorie-free sweetening ingredient available today and is a good addition to our sweetener and wellness portfolio.

To enhance how we engage with our customers, and improve our access to them, in October 2010 we announced that we would be establishing a new Commercial and Food Innovation centre in Chicago, Illinois. The Centre, which is due to be operational in early 2012, will be the global headquarters of ICD and will feature laboratories, a demonstration kitchen, sensory testing, analytical and pilot plant facilities.

The underlying global consumer trends of health and wellness and convenience continue to underpin long-term growth in the Speciality Food Ingredients market. Customer demand for both new and existing products that meet consumers' needs in these key areas remains strong, particularly for products that can help address rising levels of diabetes and obesity in the developed and, increasingly, the developing world. Cost optimisation in the face of high and volatile commodity (eg sugar) prices is also driving demand. In light of the strong pipeline of demand for Sweetea both from existing and new customers and having carried out a comprehensive review of the available options, we have decided to restart production at our mothballed facility in McIntosh, Alabama. The restart of production, which we expect to take place during the first half of the financial year 2013, reinforces our commitment to the sucralose business, provides further resilience in our supply chain and further strengthens our position as the leading global manufacturer and supplier of sucralose.

We are also looking to build our business and capabilities in two areas where we see long-term growth - new customer segments and emerging markets. Dedicated resources have now been put in place in Europe and the US to serve small and medium enterprise (SMEs) and private label customers. In emerging markets we have changed our senior management team in Asia Pacific to provide fresh impetus in our efforts in that region. We are also building new application laboratories in Mexico and Brazil to add to our global network, and have strengthened our sales teams in both Latin America and China.

In our Bulk Ingredients division, we are looking at ways to diversify our business by leveraging our fermentation expertise and facilities to partner with businesses in the bio-based materials industry. In November 2010, we signed an agreement with Amyris under which NVS will produce farnesene at its facilities in Illinois with the end product being distributed by Amyris. Farnesene converts feedstocks such as sugar into useful molecules for products such as diesel fuel, detergents and cosmetics. Then in March 2011, we signed an agreement with Genomatica under which we will dedicate a demonstration-scale production facility in Illinois for exclusive use by Genomatica for the scale-up of the Bio-BDO which produces an intermediate chemical used in everyday products such as running shoes and electronics”

2.4 Management of Financial Risk

The key financial risks faced by the Group are credit risk, liquidity risks and market risks, which include interest rate risk, foreign exchange risk and certain commodity price risks. The Board regularly reviews these risks and approves written policies covering the use of financial instruments to manage these risks and sets overall risk limits.

The Chief Financial Officer retains the overall responsibility for management of financial risk for the Group. Most of the Group’s financing, interest rate and foreign exchange risk are managed through the Group treasury company NVS Finance PLC, whose operations are controlled by its Board. The treasury company is chaired by the Chief Financial Officer and has other board members who are independent of the treasury function. The board of NVS International Finance PLC approves policies and procedures setting out permissible funding and hedging instruments, and a system of authorities for the approval of transactions and exposures within the limits approved by the Board of NVS PLC.

Group interest rate and currency exposures are concentrated either in the treasury company or in appropriate holding companies through market-related transactions with group subsidiaries. These positions are managed by the treasury company within its authorised limits.

Commodity price risks are managed through divisional commodity trading functions in the USA and Europe. These functions are controlled by divisional management who are responsible for ratifying general strategy and overseeing performance on a monthly basis. Commodity price contracts are categorised as being held either for trading or for hedging price exposures. Commodity contracts held for trading within the Group are limited, confined only to tightly controlled areas within the corn pricing areas.

The derivative financial instruments approved by the Board of NVS PLC to manage financial risks include swaps, (both interest rate and currency), swaptions, caps, forward rate agreements, financial and commodity forward contracts and options, and commodity futures.

Market risks

Foreign exchange management

NVS operates internationally and is exposed to foreign exchange risks arising from commercial transactions (transaction exposure), and from recognised assets, liabilities and investments in overseas operations (translation exposure).

Transaction exposure

The group's policy requires subsidiaries to hedge transactional currency exposures against their functional currency once the transaction is committed or highly probable, mainly through the use of forward foreign exchange contracts.

The amounts deferred in equity from derivative financial instruments designated as cash flow hedges are released to the income statement and offset against the movement in underlying transactions only when the forecast transactions affect the income statement.

Translation exposure

The Group manages the foreign exchange exposure to net investments in overseas operations, particularly in the USA and Europe, by maintaining a percentage of net debt in US dollars and euro to mitigate the effect of these risks. This is achieved by borrowing principally in US dollars and euro, which provides a partial match for the Group's major foreign currency assets. The Group also manages its foreign exchange exposure to net investments in overseas operations through the use of currency swap contracts. The amount deferred in equity from derivative financial instruments designated as net investment hedges is offset against the foreign currency translation effect of the net investment in overseas operations, and is released to the income statement upon disposal of those investments.

A weakening of the US dollar and euro against sterling would result in exchange gains on net debt denominated in these currencies which would be offset against the losses on the underlying foreign currency assets. At the year end, net debt amounting to £464 million (2010 - £814 million) was held in the following currencies: net borrowings of US dollars 98% (2010 – 20%), net deposits of pounds sterling 28% (2010 – net borrowings of 7%) and other currencies 5% (2010- 3%). The Group's interest cost through the income statement is impacted by changes in the relevant exchange rates.

The following table illustrates only the Group's sensitivity to the function of the major currencies on its financial assets and liabilities.

	<u>31 March</u> <u>2011</u>		<u>31 March</u> <u>2010</u>	
	<i>Income statement</i> - / + £m	<i>Equity</i> - / + £m	<i>Income statement</i> - / + £m	<i>Equity</i> - / + £m
<i>Sterling / US dollar 5% change</i>	1	23	-	28
<i>Sterling/ euro 5% change</i>	-	11	-	15

Interest rate management

The Group has an exposure to interest rate risk arising principally from changes in US dollar, sterling and euro interest rates. The risk is managed by fixing or capping portions of debt using interest rate derivatives to achieve a target level of fixed/floating rate net debt which aims to optimise net finance expense and reduce volatility in reported earnings. The Group's policy is that between 30% and 75% of group net debt (excluding the Group's share of joint-venture net debt) is fixed or capped (excluding out-of-the-money caps) for more than one year and that no interest rates are fixed for more than 12 years. At 31 March 2011, the longest term of any fixed rate debt held by the Group was until November 2019 (2010 - November 2019). The proportion of net debt at 31 March 2011 (excluding the Group's share of joint-venture net debt) that was fixed or capped more than one year was 85% (2010 - 82%). A derogation of the maximum percentage of fixed rate debt was approved by the NVS Board until 30 June 2011.

The Group considers a 100 basis point change in interest rates a reasonably possible change except where rates are less than 100 basis points. In these instances it is assumed that the interest rates increase by 100 basis points and decrease to zero for the purpose of performing the sensitivity analysis. The impact is calculated with reference to the gross debt and cash held as at 31 March 2011 assuming that other variables remain unchanged.

If interest rates increase by 100 basis points, Group profit before tax will increase by approximately £2 million (2010 - £1 million). If interest rates decrease by 100 basis points, or less where applicable, Group profit before tax will decrease by approximately £1 million (2010 - £1 million).

Price risk management

NVS participates mainly in four markets: food and beverage, industrial ingredients, pharmaceutical and personal care; and animal feed. Food and beverage and industrial ingredients are the most significant. All ingredients are produced from renewable crops, predominantly corn (maize).

NVS is exposed to movements in the future prices of commodities in those domestic and international markets where the Group buys and sells corn and energy for production. Commodity futures, forwards and options are used where available to hedge inventories and the costs of raw materials for unpriced and prospective contracts not covered by forward product sales. In most cases, these hedging contracts mature within one year and are either traded on recognised exchanges or over the counter.

The table below illustrates the sensitivity of the Group's commodity pricing contracts as of 31 March to the price movement of commodities.

	31 March 2011		31 March 2010	
	Income statement -/+£m	Equity -/+£m	Income statement -/+£m	Equity -/+£m
Corn 30% change	2	-	2	-

The majority of the Group's commodity pricing contracts are held for trading and changes in mark to values of these contracts are taken directly into the income statement. Amounts deferred in equity form commodity pricing contracts designated as cash flow hedges are released to the income statement and offset against the movement in underlying transactions when they occur.

Credit risk management

Counterparty credit risk arises from the placing of deposits and entering into derivative financial instrument contracts with banks and financial institutions, as well as credit exposure inherent within the Group's outstanding receivables.

The Group manages credit risk by entering into financial instrument contracts only with highly credit-rated authorised counterparties which are reviewed and approved annually by the Board.

The Group has approved maximum counterparty exposure limits for specified banks and financial institutions based on the long-term credit ratings of Standard & Poor's and Moody's (typically single A long-term credit ratings or higher). Trading limits assigned to commercial customers are based on ratings from Dun & Bradstreet and Credit Risk Monitor. In cases where published financial ratings are not available or inconclusive, credit application, reference checking, and obtaining of customers' confidential information such as liquidity and turnover ratio, are required to evaluate customer's credit worthiness.

Counterparties' positions are monitored on a regular basis to ensure that they are within the approved limits and there are no significant concentrations of credit risks.

The Group considers its maximum exposure to credit risk as follows:

	31 March	
	2011 £m	2010 £m
Cash and cash equivalents	654	504
Trade and other receivables	274	398
Derivative financial instruments – assets	183	199
Available-for-sale financial assets	19	14

The Group's trade receivables are short term in nature and largely comprise amounts receivable from business customers. There are no amounts included in trade receivables in respect of securitised receivables (2010-£nil). Concentrations of credit risk with respect to trade receivables are included due to the Group's having a number of key quality customers and a customer base which is large, unrelated and internationally dispersed.

Liquidity Risk Management

The Group manages its exposure to liquidity risk and ensures flexibility in meeting changing business needs, by maintaining access to a wide range of funding sources, including capital markets and bank borrowings. Capital market issues outstanding at 31 March 2011 include the US\$300 million 6.125% 144A bond maturing in June 2011, the £100 million 6.50% bond maturing in June 2012, the US\$500 million 5.00% 144A bond maturing in November 2014, the US\$250 million 6.625% 144A bond maturing in June 2016 and the £200 million 6.75% bond maturing in November 2019.

The Group ensures that it has sufficient undrawn committed bank facilities to provide liquid back-up to cover its funding requirements for the foreseeable future. The Group has a core committed bank facility of US\$1 billion which matures in October 2012. This facility is unsecured and contains common financial covenants for NVS and its subsidiary companies that the pre-exceptional and amortisation interest cover ratio should not be less than 2.5 times and the multiple of net debt to EBITDA, as defined in our financial covenants, should not be greater than 4.0 times.

The Group monitors compliance against all its financial obligations and it is Group policy to manage the consolidated statement of financial position so as to operate well within these covenanted restrictions. In both the current and comparative reporting period, the Group complied with its financial covenants on all measurement points. The majority of the group's borrowings are raised through the Group treasury company, NVS International Finance PLC and are then on-lent to the business units on an arm's length basis.

Current Group policy is to ensure that, after subtracting the total of undrawn committed facilities, no more than 10% of gross debt matures within 12 months and no more than 35% has a maturity within two and a half years. At 31 March 2011, after subtracting total undrawn committed facilities, there was no debt maturing within two and a half years (2010- none). The average maturity of the Group's gross debt was 4.8 years (2010 – 5.4 years). At the year end the Group held cash and cash equivalents of £654 million (2010 - £504 million) and had committed facilities of £623 million (2010 - £659 million) of which £623 million (2010 - £515 million) was undrawn. These resources are maintained to provide liquidity back-up and to meet the projected maximum cash outflow from debt repayment, capital expenditure and seasonal working capital needs foreseen for at least a year into the future at any one time.

The table below analyses the Group's non-derivative financial liabilities and derivative assets and liabilities based on the remaining period at the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

Liquidity analysis	31 March 2011		
	<1 year £m	1-5 years £m	>5 years £m
Borrowings including finance leases	(229)	(436)	(418)
Interest on borrowings	(52)	(151)	(68)
Trade and other payables	(406)	(1)	–
Derivative contracts:			
– receipts	361	970	–
– payments	(346)	(990)	–
Commodity contracts	(5)	–	–

Liquidity analysis	31 March 2010		
	<1 year £m	1-5 years £m	>5 years £m
Borrowings including finance leases	(191)	(653)	(435)
Interest on borrowings	(61)	(185)	(96)
Trade and other payables	(474)	(1)	–
Derivative contracts:			
– receipts	407	778	–
– payments	(394)	(802)	–
Commodity contracts	(123)	(3)	–

Included in borrowings are £2,394,000 of 6.5% cumulative preference shares. Only one year's worth of interest payable on these cumulative preference shares is included in the less than one year category above.

Interest on borrowings is calculated based on borrowings held at year end without taking into account future issues. Floating-rate interest is calculated using forward interest rates derived from interest rate yield curves as at year end.

Derivative contracts include currency swaps, forward exchange contracts and interest rate swaps. All commodity pricing contracts such as options and futures are shown separately under commodity contracts.

Commodity contracts include only net settled commodity derivative contracts and gross settled commodity purchase contracts with negative fair values. Purchase contracts outflows represent actual contractual cash flows under the purchase contracts and their fair values. Cash outflows from the purchase contracts are offset by cash inflows received from sale contracts; however these inflows are not included as part of this analysis.

Financial liabilities denominated in currencies other than pounds sterling are converted to pounds sterling using year end exchange rates.

Capital Risk Management

The Group's primary objectives in managing its capital are to safeguard the business as a going concern; to maintain sufficient financial flexibility to undertake its investment plans; to retain as a minimum an investment grade

credit rating which enables consistent access to debt capital markets; and to optimise capital structure in order to reduce the cost of capital. The Group's financial profile and level of financial risk is assessed on a regular basis in the light of changes to the economic conditions, business environment, the Group's business profile and the risk characteristics of its businesses.

NVS has contractual relationships with Moody's and Standard and Poor's (S&P) for the provision of credit ratings, and it is the Group's policy to keep them informed of all major developments. At 31 March 2011, the long-term credit rating from Moody's was Baa3 (stable outlook) and from S&P was BBB-(stable outlook). The Group is committed to maintaining investment grade credit ratings.

The Group regards its total capital as follows:

	31 March	
	2011 £m	2010 £m
Net debt	464	814
Total shareholders' equity	973	854
Total capital	1 437	1 668

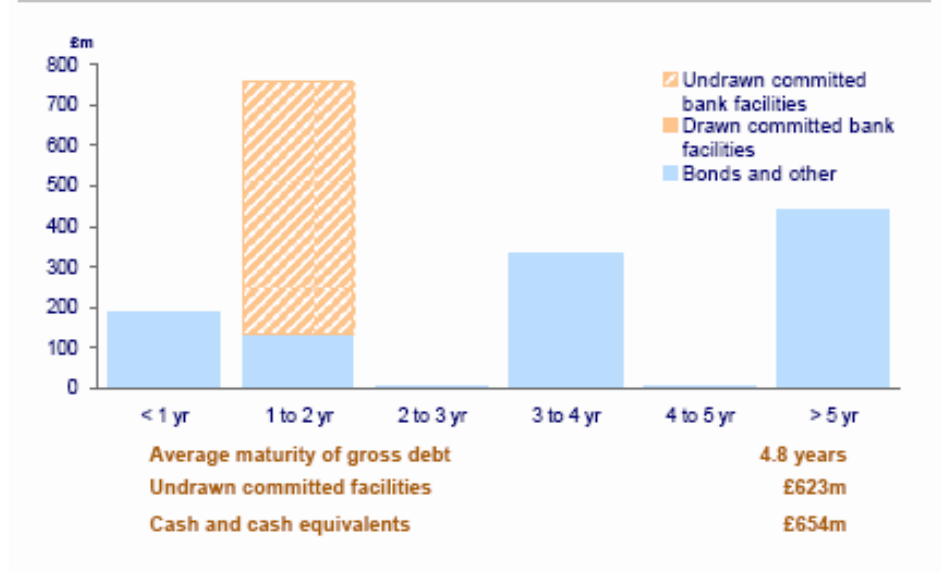
The Board of NVS PLC has set two ongoing key performance indicators (KPIs) to measure the Group's financial strength. The target levels for these financial KPIs are that the ratio of net debt/EBITDA should not exceed 2.0 times and interest cover should exceed 5.0 times. These ratios are calculated on the same basis as the external financial covenants noted above. The ratios for these KPIs for the financial years ended 31 March 2011 and 31 March 2010 are:

	31 March	
	2011	2010
Net debt/EBITDA	1.1	1.8
Interest cover	6.9	5.8

2.5 Debt

Debt Maturity Profile

March 2011



Source: company presentation

3.0 SECTOR OVERVIEW

This overview is derived from a Deutsche Bank research note.

FOOD INGREDIENTS - A RECIPE FOR GROWTH (5 DECEMBER 2010)

Introduction

A valuable link in the food chain

Speciality food ingredients present an attractive opportunity to invest in the growth of the global food industry. The sector has high margins, strong returns on capital and superior earnings growth, supported by high barriers to entry.

Some major players are Kerry Group, Christian Hansen, Danisco, Novozymes, Novitasan and Suedzucker.

Food science generates attractive returns

Food ingredients producers offer an alternative way to invest in the global food industry with attractive margins and returns relative to other companies operating in the food chain. The technology and know-how of food ingredients companies serves as a barrier to entry, allowing double-digit margins to be maintained. Food ingredients value-add and low relative cost to a producer, together with a tendency for inclusion early in the development process lead to interdependence with food manufacturers, which further protects profitability.

The ingredients sector enjoys high rates of top-line and earnings growth

Innovation is core to the growth of consumer staples companies and food ingredients suppliers play a significant role in this process. Two of the key growth drivers of innovation in the food industry disproportionately benefit food ingredients manufacturers. 1) Health and wellness trends require fat and sugar to be cut and nutritional ingredients to be added to packaged foods. 2) Demand for convenience necessitates greater food flexibility such as preservation and stability at extreme temperature. These trends drive increased penetration of specialty food ingredients in consumer foods.

Executive Summary

An Appetising Part of the Food Chain

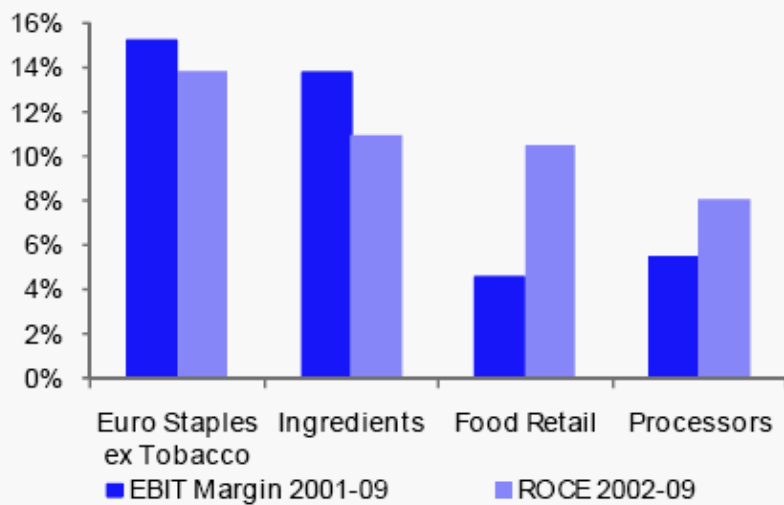
Introducing the beneficiaries of innovation in food and beverage

The food ingredients sub-sector provides an attractive way to invest in the growth of the global food industry. The sector offers high margins and strong returns on capital relative to other parts of the food chain, Figure 1.

Sales of food ingredients will grow faster than the market for food. This is because food and beverage companies innovate in order to compete with their rivals but also to drive growth in the categories in which they operate. We discussed the importance of innovation for consumer staples in our previous report, *'Forget pushing price, pump up the volume'* published 20th August 2010. As we believe innovation is important to the sales growth of food and beverage companies, this should lead to a continuous stream of projects for food ingredients companies to work on.

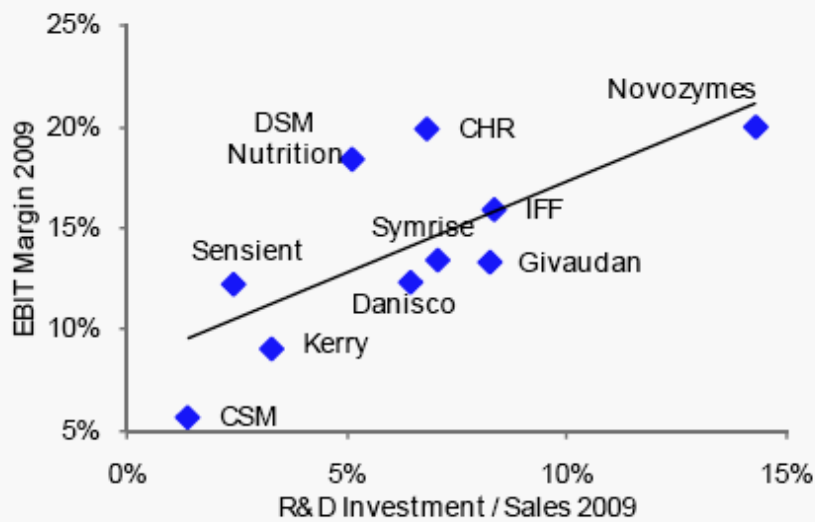
Two key drivers of innovation in the food market are convenience and health and wellness. These trends are driving an increased penetration of specialty ingredients in food. Convenience means using preservatives to increase the shelf life of products, stabilizers to increase thermo-stability and growth in categories of foods such as snacks and ready meals which generally require greater use of specialty ingredients. Health and wellness leads to increased demand for food ingredients in three ways: replacement of undesirable ingredients, addition of nutritional ingredients and clean-labeling. When ingredients such as fats and sugars are removed, to improve the nutritional value of food, specialty ingredients such as sweeteners and texturants replace them. Nutritional additives such as omega-3 oils and probiotic cultures are increasingly being added to foods to increase their perceived nutritional benefit. There is increasing skepticism from consumers over the safety of consuming food additives and this is leading producers to develop products with 'clean-labels' i.e. a reduced number of ingredients with non-natural sounding names. This trend benefits the ingredients providers who are able to create solutions that use fewer additives or that use process aids such as enzymes which do not require listing on the product label.

Figure 1: EBIT Margins and Average ROCE 2001-2009



Source: Deutsche Bank

Figure 2: Investment in R&D protects EBIT margins



Source: Deutsche Bank

Knowledge, rather than branding, drives sales growth and profitability

Research and Development (R&D) is a large proportion of sales relative to other consumer staples companies. It is a barrier to entry (Figure 2) but also a driver of the sales growth of food ingredients specialists. We believe there are efficiencies from the pooling of R&D across products. As food ingredients companies work on multiple projects for competing food manufacturers they will accumulate scientific expertise and application know-how. This should benefit the industry as a whole as it allows better solutions and faster innovation. For this reason, we believe, the food manufacturers are increasingly outsourcing their R&D responsibilities to food ingredients companies.

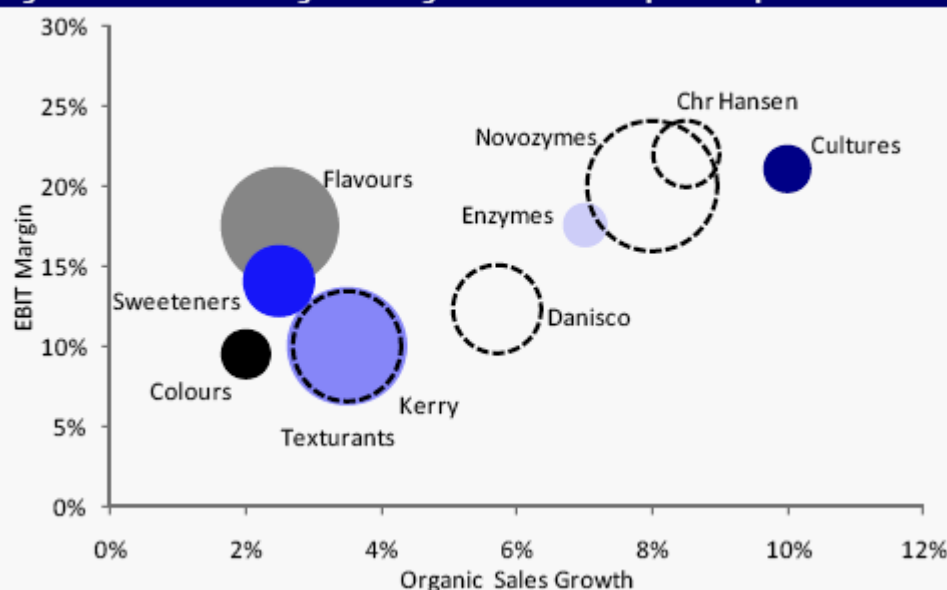
We believe that the regulation of health claims made by food manufacturers will, in the long-run, increase the value of food ingredients suppliers to the industry. This is due to their ability to provide scientific support, which will be required to support specialist claims and potential to become a specialist, acquainted with the application procedure. In the short-run there is uncertainty surrounding how the European Food Safety Authority (EFSA), which has responsibility for verifying scientific substantiation of health claims, will operate. Numerous general claims made regarding the health benefits attributable to consumption of probiotics have been rejected and outstanding general claims are expected to be rejected too. It is hoped that specific claims will subsequently be made and approved over the next 18 to 24 months.

We like category leaders and specialists

While the food ingredients industry is fragmented, many categories within it have a more consolidated supply. There are great differentials between the growth rates and profitability of various categories within food ingredients and we believe category exposure to be a key determinant of EPS growth. We estimate sales growth and margin for certain categories against the margin and sales growth of the companies over the past four years in Figure 3.

We believe that the category leaders are able to command significantly higher margins than their competitors and in some instances grow sales faster. One might expect those ingredients companies able to offer a broad range of solutions to grow sales faster than their specialist competitors; however, we do not believe this to be the case. Therefore, we prefer category leaders and specialists.

Figure 3: Growth and Margin of Categories and the Companies Exposed to Them



***Bubble size indicates total sales for categories and market capitalisation for companies**

Source: Deutsche Bank

Non-food applications such as Ethanol are also important for Novozymes

Supplying enzymes to the ethanol industry is now 18% of Novozymes's sales and Danisco is also engaged in this business. The market for ethanol has boomed in recent years, mainly due to increased use of corn-ethanol in the US. We believe there is still growth in first generation ethanol in Europe and also in the US. In addition, there is a large profit opportunity from the potential development of a second generation bioethanol market as their production will require much greater use of enzymes. There is currently political support for second generation biofuels in the US with RFS II mandating blending of cellulosic ethanol with gasoline from next year and we believe the use of non-food feedstocks is likely to make ethanol more attractive to European and Chinese policymakers. While alternative technologies may replace fossil fuels in the long-term, we believe ethanol is the medium-term solution.

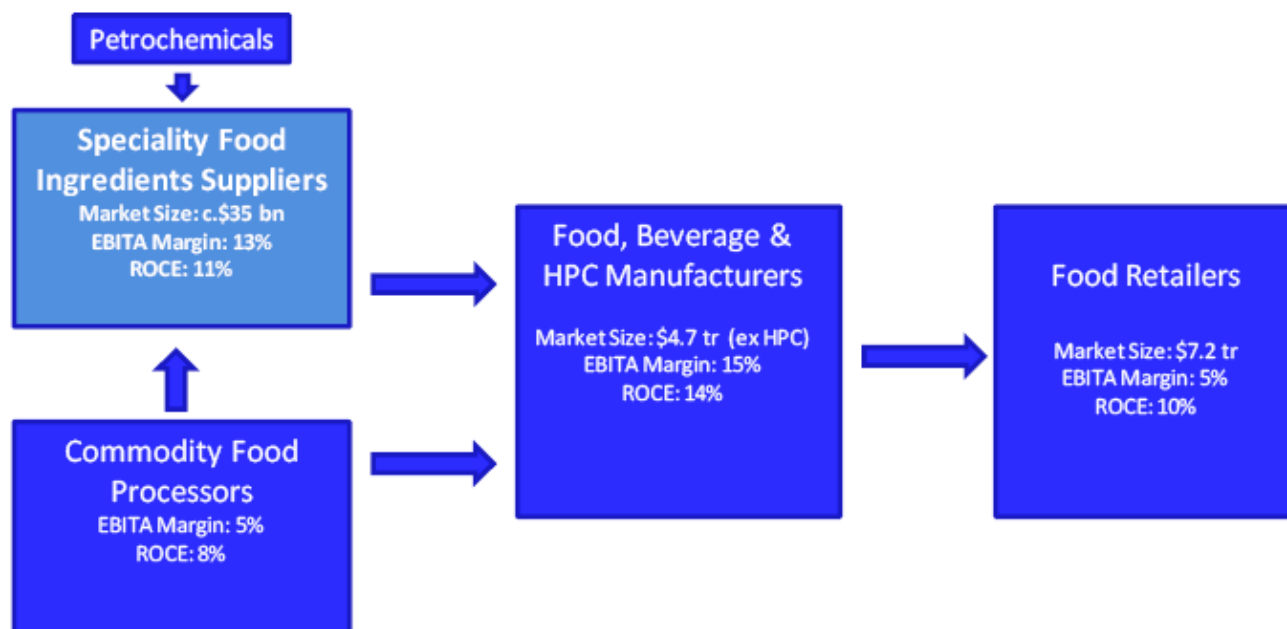
Risks

The main risks to the food ingredients companies are from commodity cost volatility, movements in FX rates and margin pressure from customers. Additional, longer-term risks would include: the ability of low-cost manufacturers to overcome technological barriers and replicate non-patented ingredients, regulation (including EFSA regulation of health claims pertaining to food ingredients) and reduced innovation from the food and beverage manufacturers. There is risk from health scares leading to a loss of consumer acceptance for specific ingredients, a more serious risk would arise should consumers seek to further reduce their consumption of additives (although even this scenario may benefit some ingredients and processing aids).

The Food Chain

The Food Ingredients sub-sector is a fundamentally attractive one due to its high EBIT margin and ROCE compared to the other stages in the food chain.

Figure 5: The Margins and ROCE of Key Participants in the Global Food Market

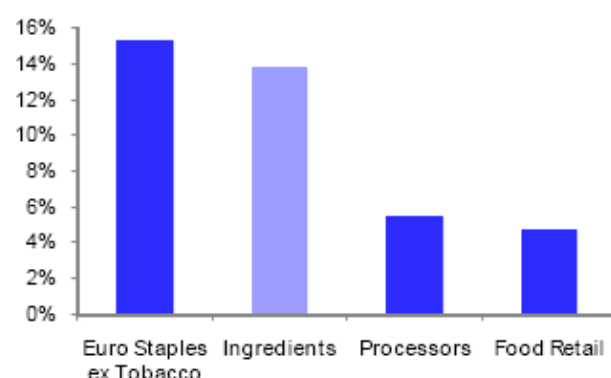


Source: Deutsche Bank, Company reports

Specialty Food Ingredients are an attractive part of the food chain.

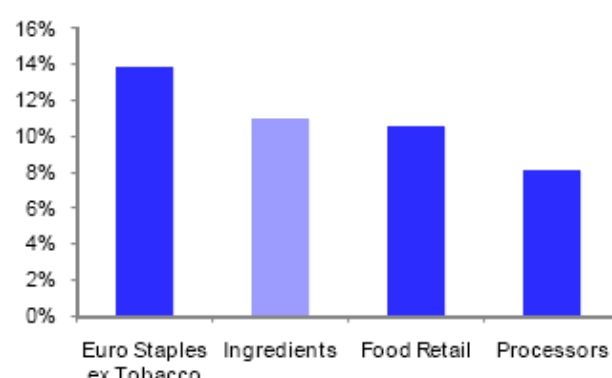
Margins and ROCE have been significantly higher for the Speciality Ingredients and Consumer Staples manufacturers than the commodity ingredient processors and food retailers over the past 10 years. For the food, beverage and HPC companies this is primarily due to the strength of the brands the companies own and low asset intensity required.

Figure 6: Average EBITA Margins 2001-2009



Source: Deutsche Bank, Company Data

Figure 7: Return on Capital Employed 2002-2009



Source: Deutsche Bank, Company Data

The smaller speciality food ingredients market is estimated to be worth \$30-50bn globally. However, it delivers similar margins to staples manufacturing and a greater ROCE than food retail or agricultural processors.

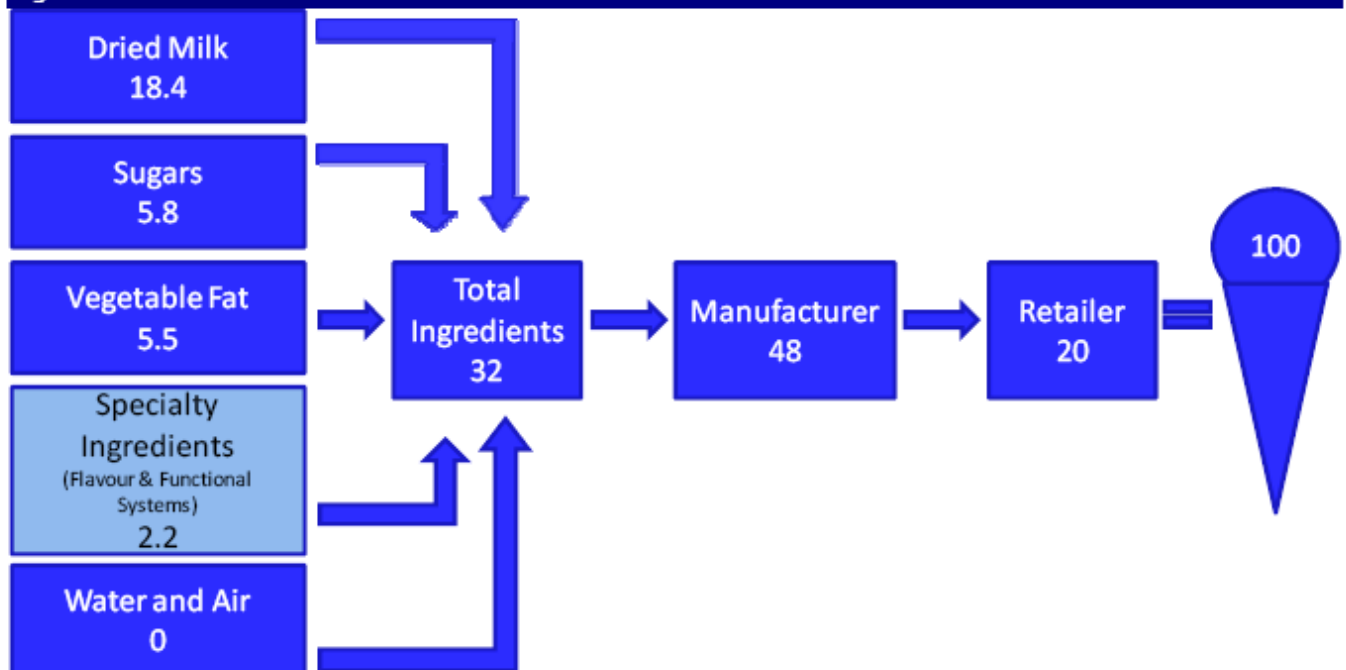
In this note we explore the reasons for these strong financial metrics including: technology, economies of scale and the relative fragmentation of the food and beverage production industry. In addition we analyse the long term growth trends and structure of the market.

A Diverse Market

Specialty ingredients remain a small proportion of products' cost and a niche industry...

Specialty food ingredients are typically only a very small proportion of the value of a final product. The example in Figure 8 demonstrates the cost of the specialty food ingredients in a complex product such as ice-cream. As can be seen once we deduct the gross profit of the retailer and manufacturer the total ingredients are 32% of the product's price but the specialty ingredients such as emulsifiers, stabilisers and flavours are just 2% of the product's retail price.

Figure 8: Value Breakdown of Ice-cream



Source: Deutsche Bank, Company Data

...yet, within the industry there is a broad range of sales growth rates and EBIT margins.

Despite this small relative size, the market is diverse. There are many varying definitions of what constitutes specialty ingredients. We believe there is a spectrum of ingredients from high value-add processing aids such as enzymes and cultures to more commoditised ingredients such as starches (a form of texturant). In Figure 9 we attempt to capture the relative category growth rates of sales (forecast for the next 4-5 years) and EBIT margins for the various categories of ingredients, while also displaying the relative size of these categories (bubble size). However, it should also be noted that within some categories there is a large range of products from the very specialised to the commoditised, one example of this is sweeteners, where we believe bulking polyols generate a margin of around 8-10% Whereas high intensity sweeteners are much more profitable.

4.0 FINANCIALS

Income Statement
Balance Sheet
UK-Style Cash Flow Statement
Share Price Data & Equity Analysis
Cash Flow Analysis
Financial Profile

Equity Analysis Model

Novitasan plc

Income Statement

	Accounts date Currency / units Audit / man / fcst Number of months	Historical Data				
		2007	2008	2009	2010	2011
		£mill	£mill	£mill	£mill	£mill
		audited	audited	audited	audited	audited
		12	12	12	12	12
Sales Revenue		3,225	3,424	3,553	3,506	2,720
a (Cost of Sales)						
a Gross Profit						
a (Total Overheads)						
a Other Operating (Costs) & Revenues						
a Exceptionals etc. +/-						
b Cost of Materials, Other External Purchases		(1,979)	(2,052)	(2,022)	(1,971)	(1,408)
b Value Added		1,246	1,372	1,531	1,535	1,312
b (Personnel Costs)		(212)	(234)	(257)	(262)	(247)
b (Depreciation & Impairment of Tangible Assets)		(80)	(100)	(112)	(116)	(91)
b (Amortisation of Intangibles excl. Goodwill)		(13)	(15)	(20)	(20)	(18)
b (R&D Costs)		(15)	(29)	(28)	(26)	(26)
b Other Operating (Costs) & Revenues		(624)	(720)	(831)	(827)	(622)
b Exceptionals etc. +/-		(13)	(59)	(119)	(276)	(5)
Operating Profit		289	215	164	8	303
Non-operating Income & Expenditure						
Exceptionals etc.						
(Amortisation of Goodwill)						
Financial Income						
Income from Investments, Participations etc						
Other Financial Income & Expenditure						
EBIT		289	215	164	8	303
Interest Received & Paid						
Interest Received		50	38	10	5	3
(Gross Interest Paid)		(86)	(80)	(61)	(74)	(61)
Profit before Tax		253	173	113	(61)	245
(Current tax)		(88)	(76)	(19)	84	(49)
(Deferred tax)						
Profit after Tax		165	97	94	23	196
Extraordinaries, (amortisation of goodwill) etc		52	90	(24)	(4)	(29)
Minority Interests		(3)	7	(5)	(4)	(4)
(Preference Dividends)						
Net Income / Earnings for Ordinary Shareholders		214	194	65	15	163
(Ordinary Dividends)						
Retained Profit for Year		214	194	65	15	163
Statement of Gains and Losses		(86)	48	98	(75)	17
Income after gains and Losses		131	235	168	(56)	184

EBITA (before exceptionals & Goodwill Amort.)	302	274	283	284	308
EBITDA (before Exceps. Deprn, & all Amortisn.)	395	389	415	420	417
Cash Earnings (Before Goodwill, Exceps.& Extraords)	175	163	208	295	197
Cash Retained Profit (Before Goodwill, Exceps & Extraords)	175	163	208	295	197

Equity Analysis Model
Novitasan plc
Balance Sheet

	Historical Data				
Accounts date Currency / units	2007 £mill	2008 £mill	2009 £mill	2010 £mill	2011 £mill
ASSETS					
Fixed Assets					
Intangible Fixed Assets	232	320	374	340	320
Property, Land & Buildings, Forestry Assets - net	261	247	303	286	212
Other Fixed Assets - net	956	949	1,245	922	643
Financial Investments, Tax & Pension Assets & Derivatives	69	112	143	229	249
Medium-term Trade-related Assets	64	11	5	2	1
Total Fixed Assets	1,582	1,639	2,070	1,779	1,425
Current Assets					
Stocks, Inventories, Work in Progress	503	562	538	409	454
Debtors, Prepayments, Receivables etc.	558	675	723	424	291
Cash and Short-term Investments	189	165	434	504	654
Tax Assets, Derivatives & Other Current Assets	230	293	234	172	227
Total Current Assets	1,480	1,695	1,929	1,509	1,626
Total Assets	3,062	3,334	3,999	3,288	3,051
LIABILITIES					
Current Liabilities (Creditors < 1 Year)					
Creditors, Accruals, Advance Payments etc.	420	488	538	485	406
Short-term Debt	271	360	523	190	227
Corporation Tax Payable	47	35	77	52	33
Provisions, Derivatives & Other Current Liabilities	195	321	279	151	175
Total Current Liabilities	933	1,204	1,417	878	841
Non-current Liabilities (Creditors > 1 Year)					
Medium & Long-term Debt	842	858	1,129	1,119	887
Medium-term Trade-related Liabilities	6	27	11	1	1
Deferred Tax, Pension & Other Long-term Provisions	286	295	429	436	349
Total Non-current Liabilities	1,134	1,180	1,569	1,556	1,237
Share Capital & Reserves					
Issued Share Capital	122	114	115	115	117
Share Premium Account, Treasury Shares	403	404	404	405	406
Revaluation Reserve					
Other Reserves	50	99	227	228	183
Retained Earnings / Profit and Loss	385	317	241	79	244
Total Capital and Reserves	960	934	987	827	950
Minority Interests	35	16	26	27	23
Total Shareholders' Funds	995	950	1,013	854	973
Accumulated depreciation	1,826	1,307	1,782	2,064	1,549

Equity Analysis Model
Novitasan plc
UK-Style Cash Flow Statement

	<i>Accounts date</i> <i>Currency / units</i>	Historical Data				
		2007 £mill 12	2008 £mill 12	2009 £mill 12	2010 £mill 12	2011 £mill 12
Number of months						
CASH FLOW FROM OPERATING ACTIVITIES						
Operating Profit		289	215	164	8	303
Tangible Asset Depreciation		80	100	112	116	91
Dec(Inc) in Stock / Inventories		(76)	(59)	113	113	(121)
Dec(Inc) in Debtors / Receivables		(78)	(64)	47	126	1
Inc(Dec) in Creditors / Payables & Advance Payments		50	89	(84)	84	88
All other non-cash adjustments & Exceptionals		115	(119)	239	240	(137)
Cash Generated from Operations		380	162	591	687	225
Dividends Received from Associates						
Tax Paid		(78)	(75)	(17)	(38)	(31)
Net Cash from Operating Activities		302	87	574	649	194
CASH FLOW FROM INVESTING ACTIVITIES						
Dividends Received from Investments						
Interest Received		33	53	17	3	3
(Purchase of Tangible Fixed Assets)		(251)	(264)	(224)	(79)	(58)
Disposal of Tangible Fixed Assets		8	7	5		37
(Purchase of Subs, Intang., Financial & Forestry Assets)		(13)	(86)	(18)	(55)	(22)
Disposal of Subsidiaries, Intangibles & Financial Assets			387	66		280
Net Cash from Investing Activities		(223)	97	(154)	(131)	240
CASH FLOW FROM FINANCING ACTIVITIES						
(Total Interest Paid)		(75)	(87)	(73)	(62)	(49)
New Shares Issued		16	8	3	2	2
(Repurchase / Redemption of Shares)			(159)		(6)	
(Costs of Issuing / Redeeming Equity)						
Total Increase in Debt		416	152	1	198	
(Total Decrease in Debt)		(305)	(24)	(17)	(465)	(131)
(Dividends Paid on Ordinary Shares)		(98)	(105)	(104)	(103)	(70)
(Preference and Minority Dividends Paid)		-	(1)	(1)	(2)	(18)
Movements Relating to Derivative Instruments						
Net Cash from Financing Activities		(46)	(216)	(191)	(438)	(266)
Net Cash Flow from Ops. Investing & Funding		33	(32)	229	80	168
Change in Cash		-	(24.0)	269.0	70.0	150.0
Change in Overdraft		33.0	(8.0)	(40.0)	10.0	18.0

Equity Analysis Model

Novitasan plc

Share Price Data

Accounts date Currency / units	Historical Data				
	2007 £mill 12	2008 £mill 12	2009 £mill 12	2010 £mill 12	2011 £mill 12
Number of Shares & Eps					
Earnings per Share (pence or equivalent)	44.30	40.90	14.20	3.30	35.30
Dividends Per Share (pence or equivalent)	21.50	22.60	22.90	22.90	23.70
Average number of common shares	482.8	474.7	456.5	457.0	461.5
Average number of preference shares					
Share Prices					
Common Share Price - Low (pounds or equivalent)	5.26	3.77	2.26	2.53	4.08
Common Share Price - High (pounds or equivalent)	8.28	6.70	5.30	4.81	6.15
Common Share Price - Average	6.77	5.23	3.78	3.67	5.11
Preference Share Price - Low (pounds or equivalent)					
Preference Share Price - High (pounds or equivalent)					
Preference Share Price - Average					
Risk rating					
Variability %	27	30	35	35	35
Beta (actual or estimate)	0.60	0.70	0.93	0.92	0.91
Assumed Market Risk premium	4.50	4.50	4.50	4.50	4.50
Actual / Assumed 10-year Gilt Yield	5.00	4.50	3.25	4.00	3.50
10-year Gilt spread over LIBOR	0.37	(0.82)	(2.64)	1.30	2.89
Market Capitalisation					
Market Capitalisation - Common Stock	3,267	2,484	1,725	1,678	2,358
Market Capitalisation - Preference Stock	-	-	-	-	-
Market Capitalisation - Total	3,267	2,484	1,725	1,678	2,358
Minorities	35	16	26	27	23
Net Debt	924	1,053	1,218	805	460
Enterprise value [EV]	4,226	3,553	2,969	2,510	2,841

Equity Analysis

Equity Ratios					
Eps Growth %		(7.7%)	(65.3%)	(76.8%)	969.7%
P/E Ratio	15.3	12.8	26.6	111.2	14.5
Market / Book Ratio of Equity	3.40	2.66	1.75	2.03	2.48
Dividend Cover	2.06	1.81	0.62	0.14	1.49
Dividend Yield %	3.2%	4.3%	6.1%	6.2%	4.6%
Total Return to Shareholders %	31.2%	(18.4%)	(21.7%)	3.4%	43.8%
EV Valuation Multiples					
EV / Sales	1.31	1.04	0.84	0.72	1.04
EV / Book Capital Employed	2.20	1.77	1.33	1.51	1.98
EV / Total Assets	1.38	1.07	0.74	0.76	0.93
EV / EBITA	13.99	12.97	10.49	8.84	9.22
EV / EBITDA	10.70	9.13	7.15	5.98	6.81
EV / Sustainable Free Cash Flow	11.9		11.0	21.7	2,358.5
EV / Staff Costs	19.9	15.2	11.6	9.6	11.5
Yields and Implied Growth Rates					
Sust. Free Cash Flow / EV (WACC minus growth)	8.4%		9.1%	4.6%	0.0%
Real WACC	4.1%	4.6%	5.9%	1.3%	2.5%
Implied Sustainable Growth Rate	(4.3%)		(3.2%)	(3.3%)	2.4%

Equity Analysis Model
Novitasan plc
Cash Flow Analysis

	<i>Accounts date</i> <i>Currency / units</i>	Historical Data					Period Total
		2007	2008	2009	2010	2011	
		£mill	£mill	£mill	£mill	£mill	
Cash Flow Summary	Number of months	audited 12	audited 12	audited 12	audited 12	audited 12	
CASH FLOW FROM OPERATIONS							
Operating Profit		289	215	164	8	303	979
Other Non-cash & Exceptional Items		115	(119)	239	240	(137)	338
Investment Income							
"Cash Profit"		404	96	403	248	166	1,317
(Increase) / Decrease in Net Working Assets		(104)	(34)	76	323	(32)	229
Tangible Asset Depreciation		80	100	112	116	91	499
Net Capital Expenditure		(243)	(257)	(219)	(79)	(21)	(819)
(Tax Paid		(78)	(75)	(17)	(38)	(31)	(239)
(Dividends Paid)		(98)	(106)	(105)	(105)	(88)	(502)
Free Cash Flow before Interest		(39)	(276)	250	465	85	485
(Net Interest Paid)		(42)	(34)	(56)	(59)	(46)	(237)
Internal Cash Flow		(81)	(310)	194	406	39	248
ACQUISITION & FINANCING CASH FLOWS							
(Acquisitions), Disposals, (Investments)		(13)	301	48	(55)	258	539
Increase / (Decrease) in Share Capital		16	(151)	3	(4)	2	(134)
Increase / (Decrease) in Debt		78	136	24	(277)	(149)	(188)
(Increase) / Decrease in Cash			24	(269)	(70)	(150)	(465)
Net Financing Cash Flow		81	310	(194)	(406)	(39)	(248)

Equity Analysis Model
Novitasan plc

Financial Profile

Financial Profile		Historical Data				
	Accounts date Number of months	2007 12	2008 12	2009 12	2010 12	2011 12
Annual % Growth Rates						
Sales Growth		(6.9%)	6.2%	3.8%	(1.3%)	(22.4%)
Value Added Growth	Growth		10.1%	11.6%	0.3%	(14.5%)
Operating Profit Growth			(25.6%)	(23.7%)	(95.1%)	3687.5%
EBITA Growth			(9.3%)	3.3%	0.4%	8.5%
Net Earnings Growth before Exceps & Extraords.			(6.9%)	27.6%	41.8%	(33.2%)
Profitability and Cost Structure						
Value Added % Sales		38.6%	40.1%	43.1%	43.8%	48.2%
Overheads % Sales		(29.7%)	(33.8%)	(38.5%)	(43.6%)	(37.1%)
Exceptional & Other Financial Items % Sales (+/-)		(0.4%)	(1.7%)	(3.3%)	(7.9%)	(0.2%)
EBIT % Sales		9.0%	6.3%	4.6%	0.2%	11.1%
Personnel Costs % Sales		6.6%	6.8%	7.2%	7.5%	9.1%
Depreciation % Sales		2.5%	2.9%	3.2%	3.3%	3.3%
EBITA % Capital Employed (pre-exceptionals)		15.7%	13.7%	12.7%	17.1%	21.5%
Pre-tax Target Rate of Return On Book Value		23.2%	19.1%	9.0%	11.2%	19.1%
Pre-tax Target Rate of Return on Market Value		10.5%	10.8%	6.8%	7.4%	9.6%
EBITA % Market Enterprise Value		7.1%	7.7%	9.5%	11.3%	10.8%
Asset Utilisation / Capital Intensity						
Sales / Total Assets		1.05	1.03	0.89	1.07	0.89
Stocks % Sales		15.6%	16.4%	15.1%	11.7%	16.7%
Debtors % Sales		19.3%	20.0%	20.5%	12.2%	10.7%
Creditors & Advance Payments % Sales		13.2%	15.0%	15.5%	13.9%	15.0%
Net Working Assets % Sales		21.7%	21.4%	20.2%	10.0%	12.5%
Tangible Fixed Assets % Sales		38%	35%	44%	34%	31%
Depreciable Assets % Sales		30%	28%	35%	26%	24%
Net Capex % Annual Depreciation		304%	257%	196%	68%	23%
Average Age of Depreciable Assets (years)		22.83	13.07	15.91	17.79	17.02
Tax Ratios						
Effective Interest Rate [P&L] %		7.7%	6.9%	4.3%	5.0%	5.0%
Effective Tax Rate [P&L] %		34.8%	43.9%	16.8%	137.7%	20.0%
Cash Tax Rate [Cash Flow] %		30.8%	43.4%	15.0%	(62.3%)	12.7%

Capital Structure & Credit Status

	2007	2008	2009	2010	2011
Balance Sheet Gearing & Leverage					
Leverage: (Net Debt % Capital Employed)	48%	53%	55%	49%	32%
Net Debt % Enterprise Value	22%	30%	41%	32%	16%
Interest Cover Ratios					
Interest Cover: (EBITA / Net Interest Paid)	8.4	6.5	5.5	4.1	5.3
Interest Cover: (EBITDA / Net Interest Paid)	11.0	9.3	8.1	6.1	7.2
Cash Flow before Interest / Cash Net Interest	(0.9)	(8.1)	4.5	7.9	1.8
Income Leverage (Debt Repayment Ability)					
Net Debt / Retnd. Profit + Goodwill Amort.(years to repay)	5.3	6.5	5.9	2.7	2.3
Net Debt / EBITDA	2.3	2.7	2.9	1.9	1.1

CASE STUDY EXAMINATION - NOTE FORM ANSWERS

OCTOBER 2011

QUESTION 1

Total 18 mins (10 marks)

Summarise the main strategic changes that have been made since 2007. Explain why the company needed to change, based on a summary SWOT analysis of the various businesses in 2006/7.

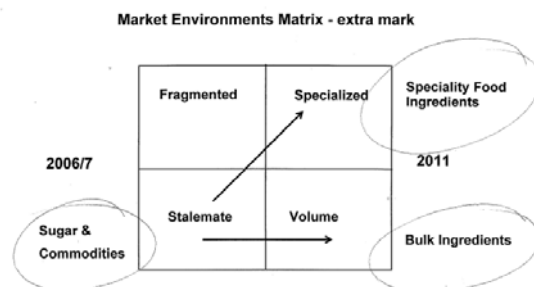
Background

Objectives 2010 : leading global provider of speciality food ingredients and solutions
: deliver long-term growth & returns to shareholders
: continuous innovation and stronger positions in high growth markets
: driving bulk ingredients and sugars businesses for sustained cash generation.

Strategic Changes

Marking Scheme I have 2-3 marks so $\frac{1}{3}$ mark for each good point.

Sold sugar businesses
Simple operation model
Shares support services
Bolt-on acquisitions
Focus on 2 sep. market segments
Geog. shift to low cost locations (ex UK)
High performance culture
Service, w.cap quality



Strengths

Marking Scheme 2 marks - $\frac{1}{3}$ mark for each good point

monopoly in Sweatea patented business 27% ROA
strong market position in sugar and related commodities
good profits from high sugar prices
no 3 in US cereals and starches
significant share of European sugar-refining market
high R&D and capex in new businesses

Weaknesses

Marking Scheme I have 2-3 marks so 1/3 mark for each good point.

CAGR 0%, Earnings & P/E volatile (6-14x), ROA 0.2 → 13.9%
Sweeteners only 4% sales
HFCS - light supply-demand conditions, 14% ROA 30% sales
sugar 7% ROA 40% sales, commodity profits, increased competition
Sugar-refining - declining prices, high energy costs, over supply
cyclical high capex
commodity price fluctuations
high working capital for sugar and futures
too many capital intensive businesses
high capex in commodity businesses

Opportunities

Marking Scheme I have 1-2 marks so 1/3 mark for each good point.

core added value businesses picking up momentum - new products & investments
continuing acquisitions & R&D investment
food ingredients business moving to double digit growth - trends in food manufacture, outsourcing consumer habits
SMEs, private label customers
emerging markets growth

Threats

Marking Scheme I have 1-2 marks - 1/3 mark for each good point)

general legal challenges to lucrative Sweetea business
increasing competition & commoditisation
Mexican tax & US/Mex annual sugar agreement
EU sugar reform to reduce European beet product
Unlimited EU tariff-free imports to Europe 2009
WTO ban on EU exports

QUESTION 2

Total 28.8 mins (16 marks)

At the end of the financial year March 2008 the company had achieved its target BB rating. However, eps had fallen by 7.7%, the shares had touched 377p compared with the 2007 high of 828p, and internal cash flow was severely negative.

Required:

2a) Summarise the key strengths and weaknesses of the company's financials as at March 2008.

Marking scheme I have 20 points so 0.4 mark for each good point.

12.6 mins (7 marks)

Credit

- BB rating
- interest coverage quite strong at 6.5 times, falling ¹
 - balance sheet leverage high at 53% rising ²
 - return on capital weak at 13.7 (target 19.1%) falling ³
 - cash flow cover for debt very weak ⁴

Repayment ability based on EBITDA and on retained profit looking acceptable ⁵ but rising (2.7 times and 6.5 years respectively).

Debt/market EV OK at 30%. ⁶

Operations

Sales growth fairly flat ⁷

Overheads high and growing - low and falling EBIT margin ⁸

Stocks and debtors high ⁹

Very high capex, ¹⁰ average age of depreciable assets very high ¹¹

Effective tax rate very high (international dimension) ¹²

Dividends increased but low cover

Cash Flow £mn (2008)

Cash profit after tax	21	(34)	Net working assets
		(157)	Depreciation less capex
		(106)	Dividends
		(34)	Interest
Disposals	301	(151)	Share buy-back
Net debt	160		

Too many (defensible) outflows ¹³ against totally ¹⁴ inadequate cash profit - not sustainable, so something has to change in future ¹⁵ - profit, capex, working capital or dividends.

The net cash from operations deficit took all the disposal ¹⁶ proceeds. Buy-back 100% ¹⁷ debt funded.

2b) Summarise the main changes in the financial position and performance since then.

Marking scheme I have 21 points so 0.4 mark for each good point.

12.6 mins (7 marks)

Operations

- Underlying sales still fairly flat ¹ - only 5% above 2008 levels but down 22% in 2011 because of rationalisations. ²
- Value added and EBIT margins up by 5% ³ and overheads now coming down but higher as a % than 2008. ⁴
- Debtors dramatically ⁵ reduced as % sales - NWA down from 21.4% to 12.5% saving millions.
- Capex dramatically reduced, ⁶ bringing fixed asset intensity down from 28% to 24% of sales - again saving millions.
- Effective tax rates (P & L) reduced from 44% to 20% ⁷ (but still volatile). Cash rate down to 12.7%.
- Return on book capital is up dramatically from 13.7% to 21.5%, ⁸ now above target. Return on EV also now above target.

Cash Flow

Total debt reduced by 402m, cash up by 489 so net debt down by 891m. ⁹

3-year Summary 2009 - 11 (£mn)

Cash profit after tax	800	(298)	Dividends	“cash profit” very strong, much better than operating ¹⁰ profit dividends frozen/reduced ¹¹
Net working assets	298	(161)	Interest	
Depreciation less capex	0			
Internal cash flow	639			net working assets squeezed ¹²
Net disposals	251	(891)	Net debt	capex cut to below depreciation levels last 2 years
Shares	1			net disposals instead of acquisitions ¹³
Financing cash flow		(639)		

Dramatic de-leveraging via cash flow management ¹⁴ - not repeatable ¹⁵ but created a great platform for the future.

NB This cash flow summary highlights most of the main points.

Shares

- EPS well on the way to recovery, shares still 20/25% below 2007 high. ¹⁶
- EV has reduced by 33% - rationalisation to a smaller, more profitable, less-gearred company. ¹⁷
- P/E back to a more normal level (14.5), similarly EV/EBITDA. ¹⁸
- Dividend cover back to a still low 1.5 times, ¹⁹ yield still very good at 4.6%. ²⁰
- EV to sustainable cash flow now seems to imply zero long-term ²¹ growth rather than negative 3 to 5% seen previously.

2c) Summarise the likely impact of the changes on the company's credit rating and what you think it is now.

Marking scheme

Mark based on overall assessment rather than detailed points which are numerous and varied.

3.6 mins (2 marks)

Investment grade credit rating ¹ - probably now (A ² or BBB) based on much improved profitability ³ (21% versus target 19% and 2008 figure of 13.7%), net B/S leverage reduced ⁴ (now 32%, was 53%), interest coverage improving again at 5.2 ⁵ times (was 6.5) and much stronger cash flow cover for debt. ⁶
Debt Repayment better - Debt/Retained Profit = 2.4 ⁷ years (was 6.5), Debt/EBITDA now 1.5 (was 2.7). ⁸

Also successful strategic repositioning and more viable, manageable less risky business model. ⁹

QUESTION 3

Total 21.6 mins (12 marks)

3a) Given your responses to Questions 1 and 2, identify five major priority finance-treasury tasks/risks confronting NVS in 2011, with a brief one-sentence justification for each task/risk identified.

9 mins (5 marks)

Marking Scheme

For a pass expect to get at least three out of five of the obvious risks/tasks, with credible suggestions for the other two. Thereafter, extra marks awarded for the quality of the justification for including the risk/task.

As worded, candidates may select “tasks”, ie along the lines of the five bullets immediately below, or chose from the more conventionally labelled financial risks reproduced from the 2011 accounts.

- Achieving target rating while subject to strategy change execution risk.
- Controlling commodity cost (raw material and energy) in face of rising and volatile prices.
- Balancing the timing and economics of divestments, acquisitions, capex and new funding/refinancing.
- Managing collateral exposure on derivatives (commodity, financial derivatives).
- Restructuring treasury to reflect changes in business strategy, eg “moving management closer to the business”.

The 2011 accounts list the following Financial Risk Factors:

- Market risks
 - Fx transaction exposure
 - Fx translation exposure
 - Interest rate management
 - Price risk management ie commodities and product ingredients
- Credit risk management
 - Counterparty risk
 - Trade receivables
- Liquidity risk management
 - Broadly defined to include diversifying debt terms
- Capital risk management eg
 - Ratings adequate to support funding appetite

Some students isolated “execution risk” as a factor in order to highlight the need to treat the “fix, focus, grow” strategy implementation as a joined-up process.

3b) Looking ahead, what are the implications of the “focus, fix, grow” strategy for the future role of treasury?

12.6 mins (7 marks)

Marking Scheme

For a pass expect at least five credible “implications”. Marks above a pass based on quality of discussion.

Some students answered this part of the question by focusing in turn on each of the three steps: fix, focus, grow. Others treated the three steps in aggregate.

The first steps in 2010-11 in the “fix, focus, grow” strategy have involved:

- Much more rigorous capex appraisal, approval, oversight.
- Working capital optimisation
- Focus on cash generation to fund growth.
- Delaying the organisation, moving management closer to the business, establishing a common set of performance metrics operating on a single global IS/IT platform.
- Shift investment focus from:
 - bulk to specialist ingredients
 - developed to emerging markets
 - very large customers to SME + private label customers
- Grow by acquisition as well as organically.

The implications for treasury are likely to be:

- More centralisation to optimise use of resources eg cash funding capacity, hedging potential for conflict or synergy with next bullet
- More direct involvement with businesses.
- Pressure for continuous improvements.
- More rigorous project appraisal + capital allocation.
- More divestments and acquisitions with consequent need to control intra-group legal/funding dependencies which can inhibit flexibility.
- More diverse geographic spread, with more sovereign risk and need to temper “centralisation” with dynamic “balance” where necessary.
- Significant increase in numbers and probable decrease in credit quality of debtors.
- More currencies and possibly need for more local bank relationships, some possibly with low ratings.

So more centralised control, more diverse activities, potentially more risk, more performance measurement, more direct business relationships, more education of internal clients about treasury implications of decisions.

QUESTION 4

Total 21.6 mins (12 marks)

Required:

- 4a) What are the arguments, both theoretical and practical, for and against the company targeting, say, a BBB rating, rather than a higher or a lower one at this point in time?

Marking scheme I have 25 points so 0.4 mark for each good point.

10.8 mins (6 marks)

BBB - Investment grade ¹

- Why target any level of rating? Constraining in an uncertain environment! ²
- Acceptable cost of debt, ³ acceptable risk to shareholders, ⁴ “near-optimal” WACC arguably in a stable, food business. ⁵
- Sufficient safety margin against routine down-turns ⁶ and (post 2008) more severe financial shocks. ⁷
- Good access to capital markets and credit generally. ⁸
- Financial management generally more “manageable”. ⁹
- Retain control of the business, independent of bank and bond holders. ¹⁰
- More generally retain independence of the company (less vulnerable ¹¹ to acquisition).
- More funds for growth strategy/acquisitions.

Lower than BBB

Against - company has experienced the dangers of targeting ¹² BB then performance “coming under threat” and subsequent “bankruptcy effect”. ¹³ More risky now after the global banking crisis. ¹⁴

For - higher leverage, especially in a high-tax regime ¹⁵ reduces the weighted ¹⁶ cost of capital despite higher debt costs ¹⁷ and higher required return to shareholders. ¹⁸

Higher than BBB

- Higher WACC, ¹⁹ though lower debt and equity costs, ²⁰ but not so important in a low-tax regime. ²¹
- Easier management of and access to funding. ²²
- More leeway for managing company, finances and treasury. ²³

- Issues and dynamics of changing gearing level. ²⁴
- Peer group referencing. ²⁵

4b) From your analysis of the financial and non-financial profile of the company, set out your proposals for how it might achieve its growth objectives and identify the main challenges for the company in achieving these objectives given the company's current competitive environment?

Marking scheme I have 22 points so 0.4 mark for each good point.

10.8 mins (6 marks)

Achievement of growth objectives

- Focus on and invest in value-added businesses for volume ¹ growth and increased profitability but more risky, ² volatile.
- Maximise cash generation ³ of bulk ingredients, businesses, also to provide a stable base ⁴
- Ruthless cost control ⁴ and maintenance/increase of market share in essential "commodity-type" businesses.
- Selective acquisitions ⁵ in both areas - "bolt-ons" ⁶ for speciality businesses, "add-ins" ⁷ for volume economies in bulk ingredients.
- Either selective acquisitions - mainly medium-sized, sometimes family,⁸ businesses or the occasional "life-changing" big acquisition ⁹ opportunity.
- R&D crucial, ¹⁰ especially in value-added businesses but also selectively in bulk ingredients.
- Maintain focus on working capital ¹¹ control and capex appraisal ¹² discipline, to maximise cash generation while maintaining business critical asset base.
- Increasing but managing debt levels should be easy given strong 2011 ¹³ balance sheet and modest growth prospects (unless a big acquisition presents itself). ¹⁴ Higher growth target would be more demanding in terms of both finance and funding opportunities. ¹⁵

Challenges

- Identifying ¹⁶ worthwhile R&D opportunities, potential acquisitions ¹⁷ and possible venture partners.
- Managing the "in-house" ¹⁸ schizophrenia of the two types of businesses with different financial priorities and cultures.

- Managing consistent cash-flow performance ¹⁹ after the big “easy” gains of the last few years.
- Pitching capex ²⁰ at the optimum level and a relatively stable level.
- Managing whatever credit status ²¹ is chosen as a target.
- “Barriers to entry” if different bids in SME and developing markets. ²²

QUESTION 5

21.6mins (12 marks)

Required:

Evaluate these various share prices, both actual and potential, in relation to the underlying company performance in terms of key value drivers such as EBITDA, earnings and dividends, also bearing in mind the company’s historical share price performance.

Marking scheme I have 20 points on a difficult question so 0.5 mark for each good point, with up to two extra marks for a strong underlying methodology and evidence of good understanding.

Consider P/E ratios:

From the case study the recent historical, average P/E “true” range is 13 to 15, historically 6, 14, average 10. ¹

		2009	2010	2011
Prospective P/E ratios	high	-	9.73	11.48
	average	7.10	10.56	12.24 ²
	low	-	11.59	13.71

From the case study exhibits EV/EBITDA range is 6 to 11 ³

%	Price		P/E versus eps estimates		
			low	average	high
		eps estimates	43.3	48.5	51.7
100	607	2011 results	14.0	12.5	11.7 ⁶
105	640	bid speculation	14.8	13.2	12.4 ⁷
129	785	expected improvement	18.1	16.2	15.2
135	820	potential bid price	18.9	16.9	15.9
140	850	potential bid price	19.6	17.5	16.4

Versus recent average of 12.6 (2007 historical high of 15.3)

Consider EV/EBITDA ratios

March price		276.0p	456.8p	593.5p
Market cap		1,260 mill	2,088 mill	2,739 mill
EV		2,506 mill	2,920 mill	3,222 mill
Following year's EBITDA		420 mill	303 mill	est 345 ⁴
EV/EBITDA multiples(prosp).		5.96	9.64	9.34 ⁵

Price	Estimated EBITDA 540m	Market Cap	EV	EV/EBITDA
607	No. of shares 461.5m	2,801	3,284	9.52
640		2,954	3,437	9.96
785		3,623	4,106	11.90
820		3,784	4,267	12.37
850		3,923	4,406	12.77

Consider Dividend yields

Historical yield 3.2% → 6.2% → 4.6% ¹²

	2011	2012
Dps	23.7	est 24.5 (3.5% growth) ¹³
Price		Yield
607		4.0% ^{14 15}
640		3.83%
785		3.12%
820		2.99%
850		2.88%

The prices up to 785p do not look out of line with historical (pre-crisis) ¹⁶ P/E and EBITDA multiples and dividend yields. 785p represents 29% improvement, not unreasonable for improving profits and restored confidence in management.

The speculative bid price range looks out of line regarding ¹⁷ underlying company performance but goes to the “expected normal bid premium” of 40%. ¹⁸

The “extra” price of 35p to 65p (to 820 and 850 respectively) therefore depends on synergies/savings to be achieved by the acquiror. ¹⁹

But if the underlying improvement could imply a price of 785p then maybe the top-side bid price should be more like (785 x 1.4) 1099p ! ²⁰

Examiners Note:

I have included detailed calculations in this question for the markers' and subsequent tutors' benefits - candidates would have to do a much quicker, “nastier” calculation of appropriate multiples.

QUESTION 6**TOTAL 16.2 mins (9 marks)****Marking Scheme****Q6 Parts a, b & c.**

Some students focussed on the process of arriving at a decision about each scenario, same on the possible outcomes. So this question was marked for a pass on the basis of whether a student demonstrated that he/she understood the issue(s) which each scenario raised.

Required:**6a) How would you respond?****5.4 mins (3 marks)**

- impact on cost of working capital.
- derivative markets exist to manage price risk which is, in part at least, a financial risk management function.
- holding stock may not be the most cost-effective way to improve availability.
- risk of spoilage.

6b) How would you respond?**5.4 mins (3 marks)**

- hedging the price requires decisions about (i) the maturity, (ii) volume of hedges and (iii) financing the collateral risk.
- decisions about (i) or (ii) can lock you into a high price relative to competitors if prices fall and may leave you over or under-hedged if demand changes. The customer wishes to assume responsibility for this which is helpful.
- however long term futures hedging can build up huge collateral calls which the customer's proposal means that you finance.
- therefore to accept this proposal you would need to have a say in (i) and (ii) and be comfortable with the consequences for (iii).

6c) How would you respond?**5.4 mins (3 marks)**

- financial cost is likely to be higher than funding the collateral calls, depending on how the bank is managing its own risk on this offering; however, it would remove the spikeyness of collateral calls for NVS
- could distinguish between OTC and exchange-traded.

The issues raised in this question are a classic example of the need for treasury to engage with the business so that the finance implications of commercial decisions are understood.

QUESTION 7

Total 36 mins (20 marks]

Required:

For each of these two risks (counterparty credit risk, liquidity risk):

7a) Identify source of risk and quantify materiality, stating assumptions where necessary.

Marking Scheme

6 marks total, ie 3 marks per risk. 10.8 mins ie 5.4 mins per risk.

For a pass, need to identify bank deposits and derivative mark-to-market as risks under CCR. For liquidity risk need to identify several common sources of inability to meet obligations; extra points for recognising opportunity cost of being unable to invest in unforeseen new ventures.

Counterparty Credit Risk (CCR)

NVS has financial institution and trade CCR.

Financial institution CCR arises from deposits with banks and from derivatives contracts when the mark-to-market differences between each side of the contract represent a net asset for NVS. Level of risk depends on quality of deposit banks, quality of derivative counterparty banks and volatility of derivative underlying prices eg commodities hedged, as well as the risk of losing a credit facility if the bank fails.

Trade CCR arises from trade receivables. Level of risk depends on level of open account receivables and can be expected to rise as NVS expands its customer base to less substantial customers.

Liquidity Risk (LR)

Liquidity risk shows itself in two ways: inability to meet unexpected obligations such as losses and inability to exploit unexpected opportunities eg windfall acquisitions.

Unexpected obligations arise from, eg, falling sales demand, build up of stock, project overspend and delays, litigation, inability to refinance, unusually high margin calls on hedge.

Unexpected opportunities include investment re-financings on better terms.

7b) Determine policy for each risk.

Marking Scheme

8 marks total, ie 4 marks per risk; 14.4 mins, ie 7.2 mins per risk

Expect a set of policy dimensions for each risk, say at least five, which in aggregate demonstrates a grasp of the nature of the risk.

Counterparty Credit Risk (CCR)

Dimensions of Counterparty Credit Risk:

- Credit rating agency/bureau threshold
- Diversification of counterparties
- Netting of FI exposures
- Structural hedges for trade CCR
- Assumption of new CCR
- Liaison with businesses/subsidiaries re. local imperatives.

Liquidity Risk (LR)

Dimensions of liquidity policy:

- Metrics/ratios
- Forecasting: payments/receipts, sources & applications, time frames
- Rating
- Flexibility
- Diversity
- Sources
- Instruments (& approvals)
- Counterparties
- Benchmarks
- Pooling: domestic, international

7c) State purpose of policy for managing each risk.

Marking Scheme

6 marks total, ie 3 marks per risk; 10.8 mins, ie 5.4 mins per risk

Expect a short statement about the core of what the policy is intended to achieve in this business.

This part of the question asks students to state succinctly what the policy is trying to achieve (in contrast to the dimensions of the policy in 7.b.)

Counterparty Credit Risk (CCR)

For FIs the purpose is to protect principal. For trade CCR it is to optimise the balance between sales growth and debtor default (there is also a supplier dimension).

Liquidity Risk (LR)

The purpose is to build in enough funding flexibility so that the necessary degree of operational and strategic management choice is maintained.

QUESTION 8

Total 16.2 mins (9 marks)

8a) On the Treasury Organisation Matrix pro-forma provided create a profile for the current NVS treasury by ticking the cell in the top left hand corner of the appropriate box.

3.6 mins (2 marks)

Marking Scheme

Q8 a & b. Expect responses to demonstrate an understanding of the dimensions of the Treasury Organisation Profile and the narrative in 8b to show some understanding of how Treasury will need to change in order to support the new business strategy.

The Treasury organisation Profile below summaries the responses of students to Q8a and Q8b.

Treasury Organisation Profile

ROLE	6%		82%		12%	
		Advisory		Agency		In-House Bank
		0%		6%		94%
AUTHORITIES	6%		65%		29%	
		Decentralised		Centralised		Dynamic Balance
		0%		76%		24%
RESPONSE TO RISK	31%		69%		0%	
		Cost Centre		Cost-Saving Centre		Profit Centre
		6%		75%		19%
ORGANISATION	6%		94%		0%	
		Elementary		Intermediate		Advanced
		0%		38%		62%

- 8b) Given what you have read about NVS in the case study and the views you have formed about the business while thinking through your answers to earlier questions, what profile would you wish to adopt for the medium term? Tick the cell in the bottom right hand corner of the appropriate box. Justify your choice.

7.2 mins (4 marks)

Given the drive for change and increased efficiency in a relatively short timescale, one would expect a period of strong centralisation, moving later to dynamic balance as treasury gets closer to the business. A shift to the right-hand side of the profile for the other three dimensions might be expected and responses reflected this, but stopped a bit short in the case of “response to risk”.

- 8c) The new strategy to “fix the organisation” includes moving management closer to the business, eg to address the issues raised at Q7a and Q7b. How would you seek to institutionalise this engagement between treasury and the business if you were NVS Group Treasurer?

5.4 mins (3 marks)

Marking Scheme

Q8c. Looking for the responses to focus on the managerial and structural dimensions of treasury; expect three credible proposals points for a pass.

- Seek to involve Group Treasury in the annual planning/budgeting process at subsidiary level.
- Schedule periodic visits to subsidiaries to establish and maintain personal relationships with commercial and technical managers.
- At local and group management get-togethers seek a slot to brief and update on treasury activities.
- Create deputy treasurer roles to provide support, guidance and oversight in SFI, BI & ICD.

Examiner's Report
Advanced Diploma - October 2011

OVERVIEW

	General Exam	Case Exam	Combined
Marks	46.6%	50.9%	50.9%
Questions	8	8	16
Students	16	17	17
Pass #	6	9	15
Pass %	38%	53%	45%

These average marks and pass rates are lower than average across both papers, but especially for the General Examination.

Corporate Finance and Funding Summary (both papers)

Overall my biggest concern is the lack of understanding of corporate finance principles and concepts. Candidates have some formulae, some facts and some practical knowledge but no reliable conceptual framework and a seeming reluctance or inability to rehearse the fundamental theories of corporate finance.

On the purely corporate finance question I passed only 4 out of 17, average mark 43%.

Treasury and Risk Management Summary (both papers)

As a general observation, students were better - and in some cases noticeably very good - at discussing treasury risk in broad terms eg General Exam Q4 Part 4b. However there was less appetite for the more quantitative/operational elements eg Case Exam Q6 and Q7.

Examiner's Report - Case Study Examination

Question 1 (10 marks), average mark 60.2%, passes 16/17

Question “Prepare a summary SWOT analysis”

This was straightforward and very well answered with only one failure and a very good average mark. The information for this question was virtually all on one page of the case-study background information but some candidates were rather poor at producing a comprehensive but brief summary. Better candidates made good use of the various analytical frameworks taught on the course. These were mainly descriptive rather than analytical.

Question 2 (16 marks), average mark 59.6%, passes 12/17

Question “Financial analysis related to the strategic changes over the last 3 years plus a credit rating assessment.” - a three-part question.

This was generally well done but the main relative weakness was cash flow analysis, which actually told the story of the company's turn-around better than the financial ratios. Shareholder ratios well covered by half, ignored by rest - interpretive judgement was weak, in my view eg as illustrated by frequent comments on interest cover of less than 2 as being “strong.”

They do know about credit ratings which was very well covered (13/17 passes, 70% average mark).

Question 3 (12 marks), average mark 53.5%, passes 12/17

Question 3a follows on logically from Questions 1, 2. It required students to identify the five most important finance-treasury risks/tasks confronting NVS currently (2011). The broad “risk/task” wording was used because NVS in 2011 was in process of implementing a fundamental shift in business strategy and some related projects were already in train.

Question 3b required students to look ahead and determine the implications of the new “fix, focus, grow” business strategy for the future role of NVS treasury. Some students tackled this by discussing in turn each of the three elements of the strategy; others discussed the three in aggregate. Several isolated “execution risk” as a significant higher level risk running through the medium term process of change.

Overall, as would be expected, this question was answered well, with 3a marks a bit ahead of 3b.

Question 4 (12 marks), average mark 55.2%, passes 10/17

Question 4a. The first part asked for the arguments, both theoretical and practical, for and against the company targeting a BBB rating. (Average mark 49%, passes 5/17).

Is this a credit qualification or a corporate treasury qualification? No-one gave a balanced answer in terms of “theory” and “practice”. All I got was the classic treasurers’ argument about a higher rating reducing the cost of debt (often referred to loosely as “cost of funds”). No-one fully articulated the MM arguments for or against different levels of gearing and the impact on WACC, only the cost of debt.

The shareholder perspective hardly received a mention eg minimum WACC, maximising shareholder value. I expected an exposition of the classical optimal capital structure arguments to be followed by a discussion about re-calibration/re-evaluation of the optimal capital structure following the impact of the credit crunch but I didn’t get it from anyone.

The only argument against a higher credit rating was that it might restrict capex, R&D and acquisitions and hence the company’s growth strategy - very good arguments, of course. They all know too much about ratings from a very narrow perspective!

No-one discussed the subtle difference between fewer, tighter financial requirements (low gearing, high interest cover) that comes with higher investment grades and the more restrictive non-financial covenants combined with looser financial requirements and covenants that comes with lower ratings. Very disappointing!

Question 4b. The second part of the question was mainly back to the non-financials plus selective financial information - how to achieve the declared growth strategy and what possible constraints. (Average mark 61%, passes 12/17) This required candidates to use case- study information selectively and add some value with analysis and lateral thinking. Overall this was very well answered but the failures didn’t make the connection back to their earlier analysis in questions 1 and 2.

Question 5 (12 marks), average mark 29.4%, passes 2/16

Question: “Evaluate a range of share prices against earnings, dividends and EBITDA”

This admittedly demanding question was really badly answered - only two passes! Quite a few candidates clearly were not confident about answering this question, left it till last and were short of time. Candidates could have answered this question, if short of time, by elaborating the principles behind the different share prices given in the question e.g. pre-results, immediately after good results, after full digestion of the good results, the size of a possible bid premium

and the impact of likely synergies, in relation to the volatile, improving earnings and forecast earnings (also dividends and EBITDA). If they did not have time to bottom the numbers they could have got a reasonable mark this way.

Many candidates started by saying that share prices (and company values) reflect future expected earnings/cash flows, but then proceeded to use only historic versions of PEs and other multiples, completely ignoring the forecasts given in the question which enabled them to calculate prospective ratios. If short of time they could, indeed, have used the historical multiples given in the case study background material, rather than prospective multiples, and achieved a reasonable mark. But even this was not done well eg averaging PEs of 66, 15.3, 12.8, 26.6, 111.2 and 14.5 to get 36.1 is mathematically correct but stupid and shows a total lack of understanding of the various drivers behind PE ratios and how to use them.

Most candidates got lost between muddled concepts and faulty arithmetic - unfortunately a fatal combination.

Question 6 (9 marks), average mark 46.7%, passes 7/17

This question was in three parts, all relating to the availability and price risk of corn, a major raw material input. Part 6.a. described a proposal to increase the size of corn silos in order to stock up when prices are low and/or future availability uncertain . . . issue: capex and working capital implications versus, eg derivatives. Part 6b described a customer proposal to hedge the price risk on their take-off of corn-based ingredients provided the derivative trades can be booked to NVS . . . issue: NVS assuming collateral call funding. Part 6c described a bank proposal to pick up the collateral call risk on corn price hedging in return for a fixed rate fee related to volume . . . issue: cost versus benefit of removing spikeyness of collateral calls.

Students adopted variously two types of response. One was to set out the process of analysis required to arrive at a decision; the other was to cut straight to the outcomes: the latter approach probably yielded better answers. Student responses and pass rates were not as good as might have been expected for relatively straightforward scenarios. The three scenarios are classic examples of the need for treasury to stay close to the business in order to flag the financial implications of commercial decisions . . . and also of the need for treasury to understand the detail of business operations.

Question 7 (20 marks), average mark 48.0%, passes 9/17

This question was about aspects of the treasury policies for Counterparty Credit Risk (CCR) and Liquidity Risk. Both of these are discussed at some length in the NVS case narrative. The three parts of the question focussed on how the risks arise in the business (7a), the appropriate policies for managing the risks (7b) and the overarching goal which the policy is intended to achieve. Marks for this question exhibited a very wide spread, with a small but significant number showing virtually no understanding of either risk. This unexpected outcome dragged down the average mark and pass rate for the question.

Question 8 (9 marks), average mark 57.2%, passes 11/17

Question 8a required students to profile the current (2011) treasury organisation in terms of Role, Authority, Response to Risk and Organisation Structure and then to speculate on the most appropriate profile looking forward (8b.) Given the emphasis on corporate efficiency and organisational de-layering one would expect a shift towards the right-hand side of the Treasury Organisation Profile Matrix and generally that is how students responded. This question has been something of an evergreen and responses were good.

Part 8c asked students to indicate how they would plan to institutionalise closer engagement between treasury and the business. This organisational shift is critical in order to support the broader business-wide initiatives in train. This part was more demanding but students who did well on 8.a. and 8.b. generally responded well on 8c.