# SAINSBURY'S VS. MORRISONS – AN INVESTMENT DECISION BASED ON FINANCIAL ANALYSIS

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**Abstract:** This paper deals with financial analysis of two large supermarket chains in the United Kingdom, namely Sainsbury's benchmarked against Morrisons. The purpose is to evaluate whether Sainsbury's is worth investing in at the market price. To measure the performance of the food retailers mainly Annual Financial Reports and key performance indicators will be used as a tool. Given the financial data, findings show that Sainsbury's is a company worth investing in at the current share price for both conservative investors and those looking for growth industries. There is a high probability that Sainsbury's will grow in the future.

**Keywords:** Sainsbury's, Morrisons, investment decision-making, financial analysis, performance indicators

#### JEL Classification: G30

### Introduction

J Sainsbury plc (Sainsbury's) is one of the nation's oldest retailers founded in London in 1869 (Sainsbury's & Boswell, 1969). This retailer with a long tradition is the third largest supermarket chain in the United Kingdom (UK) with its market share approximately 16% (Shannon, 2011). Sainsbury's primarily provides groceries and marginally it is interested in property and banking.

The aim of this article is to analyse whether Sainsbury's is worth investing in at the market price. Secondly, an evaluation of the market position will be provided along with future prospects.

A case study on Sainsbury's and Morrisons will be used as a research design in order to investigate the trends and future prospects for the companies. This research design was chosen in order to answer the question whether it is worth investing in Sainsbury's at the market price. Various ratios were taken into a consideration. All the used formulas and calculations are provided in the Appendix.

First part (financial analysis) will focus on profitability ratios, efficiency ratios, liquidity ratios, investment ratios as well as ratios based on share price. In the second part limitations of ratios will be explained in order to understand the differences and imperfections in the analysis.

The main source for the analysis will be companies Annual Reports. The company will be benchmarked against Morrisons due to the fact that Morrisons has a comparable market share. Morrisons is the fourth largest supermarket chain in the UK with a market share of approximately 12% (Morrison plc, 2011).

The added value of this article is that it provides a comparison of two similar companies. Moreover, it provides an analysis of Sainsbury's during the period 2006-2011 in order to have a deep understanding of why ratios have changed and what could be the cause. The investor then can evaluate all the important ratios during the last six years and compare them to the main competitor and decide whether to invest in Sainsbury's or not. In terms of similar analysis, usually only short term analyses are provided with focus on certain aspects.

### Financial analysis of Sainsbury's

As it was stated in the introduction, this section will focus on the financial analysis of Sainsbury's predominantly based on performance ratios and benchmarked against Morrisons. A few ratios are based on different kinds of company's profit. The concept of profitability is the base for a decision-making for investors. If the investors are satisfied then the business serves the purpose (Fraser, 1990).

The decision whether to invest in Sainsbury's or not will be based on ratio analysis. The source for the analysis will predominantly be the income statements, balance sheets and cash flow statements. There are many definitions which can be used for each ratio, therefore, the list of ratio and formulas used can be found in the Appendix A.

The key steps in financial ratio analysis have been followed. The selected ratios have been calculated based on the income statements, balance sheets and cash flow statements. These will be interpreted and finally the judgement will be formed on the produced information. Firstly, the focus will be on a brief evaluation on the market position. Secondly, profitability, efficiency and liquidity ratios will be analysed. Thirdly, investment ratios will be examined along with explaining Sainsbury's dividend policy. Finally, the gearing ratios will be discussed as well as ratios based on the share price.

In spite of the global recession at the end of 2008, sales (exc VAT) have been steadily growing, as it can be seen in Table 1. Consequently, one would expect a decline in 2009; however, food retailers have an advantage of an inelastic demand (McAleese, 2001:84). Food is a necessity; therefore customers will not reduce the amount of food consumption although they cut their costs generally (Mankiw, 2007). This means that in a recession food retailers have a relatively stable demand and do not suffer from losses.

Sainsbury's	2006	2007	2008	2009	2010	2011	Morrisons 2011
Sales (exc VAT) m £	16,06	17,15	17,84	18,91	19,94	21,10	16,48
Sales Growth (%)	5.65	6.79	4.00	6.02	5.57	5.70	6.94
Market Share (%)	14.70	14.90	14.80	15.90	16.10	16.30	12.80
Gross Profit	1,067	1,172	1,002	1,036	1,082	1,160	1,148
Operating Profit	229	520	530	673	710	851	904

Tab. 1 Sales, sales growth and market share of Sainsbury's (2006-2011)and Morrisons (2011)

Source: Annual Financial Reports of Sainsbury's and Morrisons

One of the internal factors that could influence the sales growth is the fact that Sainsbury's opened 92 stores in 2011 as also the article from BBC (2011) pointed out. Selling space has grown by almost 16% since 2009. A stable market share indicates the loyalty of customers. Furthermore, Sainsbury's has been able to gain one million additional customers during 2011. All these factors have contributed to the good performance and have given Sainsbury's a competitive advantage to remain one of the biggest food retailers in the UK. This is consistent with findings of BBC (2011).

Gross and operating profits are driven by sales. Morrisons results in terms of these profits are comparable. Morrisons did not add as much selling space (just 15 new stores) as its competitor did, therefore the market share and sales are lower. Sainsbury's has higher gross profit, but lower operating profit than Morrisons, which means that Morrisons is able to operate at lower costs. In 2006 Sainsbury's had a poor operating profit compared to the year after. This was due to high administrative expenses before 2007 (Sainsbury's, 2007).

Sainsbury's	2006	2007	2008	2009	2010	2011	Morrisons 2011
Operating Profit Margin	1.43	3.03	2.97	3.56	3.56	4.03	5.49
Gross Profit Margin	6.64	6.80	5.62	5.48	5.41	5.50	6.97
<i>ROCE</i> * (%)	6.10	7.70	8.80	10.10	11.00	11.10	12.80
Return on equity (%)	1.46	7.45	6.66	6.60	11.80	11.78	11.66

Tab. 2 Profitability ratios of Sainsbury's (2006 - 2011) and Morrisons (2011)

\* ROCE is calculated on a pre-tax, adjusted basis

Source: Author's calculations and Annual Financial Reports of Sainsbury's and Morrisons

As previously stated, gross and operating profit margins are driven by sales. Generally, food retailers tend to operate on low prices thus it is typical that their profit margins are

relatively low (Attrill and McLaney, 2011). For every £1 of sales revenue an average of £0.297 was left as operating profit after paying the cost of goods sold and expenses of operating the business in 2008. The moderate decline in ratio can be explained by looking at the gross profit margin.

The gross profit margin ratio is a measure of profitability in producing and selling goods before any other expenses are taken into account. Cost of sales represents a major expense for food retailers (Atrill, 2000:58); a change in this ratio can have a considerable impact on the profit for the year. A moderate decline in the ratio between 2007 and 2010 explains the fact that the gross profit was lower in relation to sales revenue. This means that cost of sales was higher relative to sales revenue within the period. This may be explained by a slight increase in cost of sold goods. When benchmarking against Morrisons, Morrisons seems to be more profitable than Sainsbury's across all available profitability measures.

Return on capital employed (ROCE) measures the efficiency with which new cash is invested and through which existing capital delivers profit (Collier, 2009: 106-113). ROCE growth in 2011 was lower than last year partly due to the cumulative effect of Sainsbury's accelerated investment in space growth since 2009 (Sainsbury's, 2011). This initially shrank profits whilst increasing the value of capital employed. Considering the previous five years, ROCE has significantly improved since 2006 and continues to reach high values. This profitability ratio of Morrison is moderately higher, hence Morrisons is able to gain more profit on average capital employed.

Sainsbury's	2006	2007	2008	2009	2010	2011	Morrisons 2011
Asset Turnover	1.26	1.79	1.76	1.88	1.84	1.85	1.80
Return per employee (£)	166,95	179,59	184,65	194,36	205,18	212,51	173,13
Sales per sq ft (£ per week)*	18.40	19.30	19.69	20.01	20.42	20.04	20.80

Tab. 3 Efficiency ratios of Sainbury's (2006 - 2011) and Morrisons (2011)

\*Sales per week (including VAT, excluding fuel) divided by sales area

Source: Author's calculations and Annual Financial Reports of Sainsbury's and Morrisons

Asset turnover ratio determines the amount of sales that are generated from each pound of assets. Companies with high profit margins have low asset turnover (Collier, 2009). Sainsbury's asset turnover is relatively low, meaning that it makes a high profit on its products, but low profit margin. Asset turnover has not dramatically changed since 2007, but between the years 2006 and 2007 there was a significant change. This was

due to the notable drop in the assets, especially in '*amounts due from Sainsbury's Bank customers and other banks*' totalled £3,361m (J Sainsbury, 2007). Morrisons has a very similar ratio, this is understandable as it operates in the same kind of business.

Companies seek to have the highest possible revenue per employee. This ratio measures productivity of the company (Mc Laney & Atrill, 2009). The overall trend indicates that Sainsbury's is becoming more efficient. When considering return per employee, the fact that Sainsbury's expands and continues to hire people makes its performance even stronger. When benchmarking against Morrisons, it can be seen that return per employee is noticeably lower, Morrisons still has the potential and capacity to perform better.

Trading intensity during the period 2006-2010 continued to grow. However, in 2011 this progression reverted due to a large number of new stores with their sales still in the growth stage. Secondly, it was also created by a higher proportion of space dedicated to non-food products, which trade less intensively. As a consequence, average trading intensity decreased this year.

Sainsbury's	2006	2007	2008	2009	2010	2011	Morrisons 2011
Current Ratio	0.79	0.70	0.61	0.54	0.64	0.58	0.55
Quick Ratio	0.67	0.49	0.35	0.36	0.39	0.30	0.24

Tab. 4 Liquidity ratios of Sainsbury's (2006 - 2011) and Morrisons (2011)

Source: Author's calculations and Annual Financial Reports of Sainsbury's and Morrisons

Current ratio compares liquid assets with current liabilities. Supermarket chains have a relatively low ratio, as they hold only fast-moving inventories of finished goods and all of these sales are made for cash immediately (no credit sales). The higher the ratio, the more liquid the business is, which is vital for business. On the other hand, too high current ratio is not demanded because the resources could be used more efficiently (Collier, 2009). The liquidity is relatively stable although it has slightly decreased during the last year due to an increase in the liabilities. Trade and other payables rose during the last year by £131m. Morrisons has approximately two thirds of assets as well as current liabilities, but the figures are comparable, therefore the ratio closely resembles the Sainsbury's ratio.

Quick ratio is very similar to current ratio, but it represents a stricter test. It can be argued that inventories cannot be converted into cash quickly, so it may be better to exclude them when measuring the liquidity. The minimum level is often claimed to be 1.0 times, however it is not unusual for food retailers to be below 1.0 (Atrill & McLaney, 2011). The overall trend during the last six years in quick ratio is similar to a trend in the current

ratio, except the years 2008 and 2009. This means that if inventories are excluded, the company is more liquid.

Sainsbury's	2006	2007	2008	2009	2010	2011	Morrisons 2011
Earnings per Share	3.8	18.9	18.6	16.4	31.6	33.8	23.43
Dividend per Share	8.0	9.75	12.00	13.20	14.20	15.10	9.60
Dividend cover	1.30	1.50	1.63	1.67	1.68	1.75	2.40

Tab. 5 Investment ratios of Sainsbury's (2006 – 2011) and Morrisons (2011)

Source: Author's calculations and Annual Financial Reports of Sainsbury's and Morrisons

In the year 2007 Sainsbury's experienced a sharp increase in earnings per share going up by 497%. This was caused by the change in profit for the financial year attributable to equity holders from 64 to £325m. Another positive shock occurred in 2010 when diluted earnings went up from 289 to £591m, primarily due to the revaluation of properties. It is important that assets are revaluated in order to keep the real value of assets on balance sheet. Earnings per share in 2011 increased by 7% to 33.8 p, reflecting the improvement in the operating profit and the effect of the additional shares issued in 2009, more importantly due to the property profits. Morrisons earnings per share compared to Sainsbury's are one third lower. This is driven by smaller profit and the fact that Morrisons is a smaller sized supermarket chain.

Dividend cover needs to be sustainable in the future. The reason behind it is that if the dividend cover is too low, there is a possibility that the company will not be able to pay out the investors. If the investors are not satisfied, they may invest their money in another company. Dividend cover of Sainsbury's says that earnings available for dividend cover the actual dividend by 1.58 times on average during the last six years. Table 5 demonstrates that Sainsbury's uses a different strategy than the competitors in this sector. According to Atrill (2009), food retailers have slightly higher dividend cover 2.6 on average. This is not 'a bad' sign as long as Sainsbury's justifies its dividend policy.

This year is the sixth year of growth and it has enabled Sainsbury's to maintain a good level of shareholder returns as the previous dividends show. The recommended dividend for this year was 15.1p, which is 1.5 times more than Morrisons. In terms of dividend cover, Sainsbury's has its policy based on their calculations to maintain the dividend cover between 1.50 - 1.75 times. They were able to provide this cover since 2007 when they introduced the policy. For the year 2011 Morrisons dividend cover is 2.4 times. They

claim that it is in line with the European food retail sector average (Morrisons, 2011). This has resulted in dividend growth of 17% compared to the previous year.

According to Modigliani & Miller (1958; 1963) share valuation is independent of the level of dividend paid by the company. However, this conclusion has been made on several strict assumptions such as perfect information, no transaction costs, no individual can influence the market price, no corporate or personal taxes and no costs associated with issuing securities.

Since we do not live in a perfect world, the dividend relevance theory is more applicable in this case (Gordon, 1963 & Walter, 1967). Hence, dividend policy matters to shareholders. When taking into account a signalling theory, Sainsbury's will try to maintain the dividend constant or steadily increasing. Dividend increases are kept in line with long term sustainable earnings to avoid reducing dividends (Arnold, 2008).

In terms of dividend per share, it can be seen that Sainsbury's policy is to slightly increase dividend every year. As you can see in Table 5, Sainsbury's did not decrease the dividend during the last six years. It actually rose every year and has doubled during the year 2011 when compared to 2006. This is consistent with dividend relevance theory as well as 'steadily increasing' dividend policy.

Tab. 6 Gearing and investment ratios of Sainsbury's (2006 – 2011) and Morrisons (2011)

Sainsbury's	2006	2007	2008	2009	2010	2011	Morrisons 2011
Gearing Ratio (%)	36.0	32.0	30.0	38.0	32.1	33.4	15.0
Interest Cover	45.8	_	5.9	5.6	8.7	7.9	30.0

Source: Author's calculations and Annual Financial Reports of Sainsbury's and Morrisons

Gearing is a comparison of the amount borrowed by the company (external resources) and the funds that shareholders possess (capital available within the company). Lower figures are more acceptable, demonstrating that the company is predominantly financed by equity whilst high gearing shows that the majority of the capital company needs is financed by borrowings (Fraser, 1990).

Morrisons gearing ratio was 15%. A decrease by 4% between 2010 and 2011 is notable due to a strong balance sheet. Sainsbury's net debt steadily decreased during the years 2006-2008. However in 2009 the net debt increased (core capital expenditure), then it went down because of the reduction in net debt and the increase in net assets. In 2011 net debt went up again by £265m, primarily as a result of property disposals and gearing increased to 33.4%.

The interest cover ratio demonstrates the relationship between the amount of operating profit available to cover interest payable. The lower the level of operating profit coverage, the greater the risk to shareholders that lenders will take action (Atrill, 2008). Sainsbury's levels of operating profit are higher than the interest payable. This means that if the operating profit shrank 7.9 times, the interest payable would be still covered. The interest payable was considerably reduced in the years 2006/2007, which also high rates of interest cover show.

	Sainsbury's	Morrison	Food and Drug	FTSE 100
P/E	10.60	12.50	12.64	9.84
Dividend yield	5.0	3.6	3.73	3.65
Price	304	322	-	-
12 High	395.7	324.4	-	-
12 Low	258.0	178.6	-	-

Tab. 7 Ratios based on share price (01/12/2011)

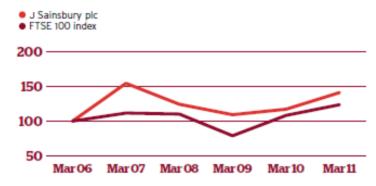
Source: Financial Times (2011)

Dividend yield defines what percentage return a company pays out to shareholders in the form of dividends (Collier, 2009). Older companies tend to pay out a higher percentage than younger companies and their dividend history can be more consistent. When looking at Sainsbury's ratios based on share price, it can be seen that P/E ratio is somewhere between the Food and Drug and FTSE 100's P/E. Food and Drug's P/E is considerably higher than FTSE 100.This could be due to the anticipated recession, where as noted above, the food retailers share prices are not likely to fall whereas FTSE 100 is more likely to be influenced by the recession. Sainsbury's dividend yield is high when benchmarking to Morrisons, Food and Drug and FTSE 100, which is good news for shareholders of Sainsbury's.

Lastly, when evaluating price it seems that Sainsbury's price is in the lower half of the price range during the last 12 months, whereas Morrisons share price almost reached the top level of price. This implies that Sainsbury's seems more profitable in the future, whereas Morrisons could experience a downturn. The question is whether Morrison's P/E indicates strong growth in the future or the overpriced shares. From the given data and ratios, the second case is more probable. Sainsbury's business seems to be neither extremely risky, nor too conservative.

Figure 1 illustrates the total shareholders return (TSR) performance of an investment of  $\pounds$  100 in Sainsbury's shares over the last five years compared with an equivalent investment in the FTSE 100 index. The fact is that Sainsbury's outperformed the FTSE

100 during the whole period. This is remarkable as it also includes years before crisis, when presumably FTSE 100 (not only food retailers, but also other companies) performed well.



#### Fig. 1 Performance graph for Sainsbury's (2011)

Source: Annual Financial Report of Sainsbury's (2011).

#### **Limitations of ratios**

During the financial analysis of Sainsbury's certain limitation of ratios emerged. Firstly, it is necessary to say that all ratios depend on the sector which the company operates in. Thus, for food retailers gross and operating profit margin will be lower. Secondly, one of the crucial factors is the size of the company; this has an impact on the gross and operating profit as well as sales. Thirdly, every company has an individual accounting adjustments and policies. For example, companies use different depreciation methods which can have an impact on the operating profit and the profit for the year.

Companies have also different financial year ends, which plays a crucial role when evaluating some ratios. For example, Sainsbury's financial year ends in March, whereas Morrisons year ends in January. When calculating TSR (comparing the performance of the companies), market price of the companies extremely varies during the year and tomorrow share price can be completely different. Seasonal fluctuations also play the role in terms of cash flow.

#### Conclusion

According to financial analysis Sainsbury's is a company worth investing in at the current share price. Sainsbury's sales (exc VAT) have been steadily growing; they are going to expand their market share. Moreover, growth in sales is notable, which drives gross and operating profits, therefore shareholders dividends. Also interest payable is covered and managed according to their policy. They improved the return per employee and outperformed Morrisons. They have high dividend yield and combined with the relatively

low price during the last 12 months this implies that buying shares would be a wise choice.

The TSR graph indicates that Sainsbury's is a good choice for both conservative investors and those looking for growth industries. There is a high probability that Sainsbury's will grow in the future, according to the key performance indicators, therefore it is highly recommended to buy the shares. It is necessary to bear in mind that if Sainsbury's continues to grow, the price will increase since it is now in the lower half. It would probably be wise to invest now rather than later.

## References

Arnold, G. (2008) Corporate Financial Management, 4th ed. Harlow: Pearson Prentice Hall.

Atrill, P. (2009) Financial Management for Decision Makers, 5<sup>th</sup> ed. Harlow: Financial Times Prentice Hall.

Atrill, P. (2000) Financial Management for Non-specialists, 2<sup>nd</sup> ed. Harlow: Pearson Education Limited.

Atrill, P. & McLaney, E. J. (2011) Accounting and finance for non-specialists, 7<sup>th</sup> ed. Harlow: Financial Times Prentice Hall.

BBC. (2011) Sainsbury's submits plans for store at Malmesbury garden centre site. [Internet] BBC News. Available from http://www.bbc.co.uk/news/uk-england-wiltshire-16290376 (accessed 22<sup>nd</sup> December, 2011).

BBC (2011) Sainsbury's annual profits rise by 12.8% to £827m. [Internet] BBC News. Available from http://www.bbc.co.uk/news/business-13359041 (accessed 24<sup>th</sup> November, 2011).

Collier, P.M. (2009) Accounting for Managers, 3rd ed. London: John Wiley & Sons Ltd.

Fraser, G. (1990) Decision Accounting, Oxford: Basil Blackwell Ltd.

Gordon, M.J. (1963) Optimal Investment and Financing Policy, *Journal of Financ*, Vol. 18, Num. 2: 264-172

J Sainsbury plc (2011) *Annual Report and Financial Statements 2011*. [Internet] J Sainsbury plc. Available from http://www.j-sainsbury.co.uk/investor-centre/reports/?&page=0 #for m\_filter\_media (accessed 21<sup>st</sup> November 2011).

J Sainsbury plc (2010) Annual Report and Financial Statements 2010. [Internet] J Sainsbury plc. Available from http://www.j-sainsbury.co.uk/investor-entre/reports/?&page=0#for m\_filter\_media (accessed 21<sup>st</sup> November 2011).

J Sainsbury plc (2009) *Annual Report and Financial Statements 2009*. [Internet] J Sainsbury plc. Available from http://www.j-sainsbury.co.uk/investor-entre/reports/?&page=0#for m\_filter\_media (accessed 23<sup>rd</sup> November 2011).

J Sainsbury plc (2008) *Annual Report and Financial Statements 2008*. [Internet] J Sainsbury plc. Available from http://www.j-sainsbury.co.uk/investor-entre/reports/?&page=0#for m\_filter\_media (accessed 23<sup>rd</sup> November 2011).

J Sainsbury plc (2007) Annual Report and Financial Statements 2007. [Internet] J Sainsbury plc. Available from http://www.j-sainsbury.co.uk/investor-entre/reports/?&page=0#for m\_filter\_media (accessed 24<sup>th</sup> November 2011).

J Sainsbury plc (2006) *Annual Report and Financial Statements 2006*. [Internet] J Sainsbury plc. Available from http://www.j-sainsbury.co.uk/investor-centre/reports/?&page= 1#form\_filter\_media (accessed 25<sup>th</sup> November 2011).

Mankiw, N.G. (2007) Principles of Economics, 4th ed. Mason: Thomson Higher Education.

McAleese, D. (2001) *Economics for business: competition, macro-stability and globalisation*, 2<sup>nd</sup> ed. Harlow: Financial Times-Prentice Hall.

McLaney, E., and Atrill, P. (2008) Financial Accounting for Decision Makers, 5<sup>th</sup> ed. Harlow: Prentice Hall Europe.

Modigliani, F., and Miller, M. (1958) The Cost of Capital, Corporation Finance and the Theory of Investment. *American Economic Review*, Vol. 48 Num. 3: 261–297.

Modigliani, F.; Miller, M. (1963). Corporate income taxes and the cost of capital: a correction. *American Economic Review*, Vol. 53, Num. 3: 433–443.

Morrisons (2011) Annual Report and Financial Statements 2011. [Internet] J Sainsbury plc. Available from http://www.morrisons.co.uk/Corporate/Investor-centre/Financial-reports/# (accessed 21<sup>st</sup> November 2011).

Morrisons (2010) Annual Report and Financial Statements 2010. [Internet] J Sainsbury plc. Available from http://www.morrisons.co.uk/Corporate/Investor-centre/Financial-reports/# (accessed 21<sup>st</sup> November 2011).

Sainsbury's (firm) & Boswell, J. (1969) J.S. 100: Tthe story of Sainsbury's, London: J. Sainsbury Ltd.

Shannon, S. (2011) *Sainsbury Sales Slow More Than Anticipated on Fuel* [Internet] Bloomberg, L.p. Available from http://www.bloomberg.com/news/2011-03-23/sainsbury-sales-slow-more-than-anticipated-amid-fuel-cost-rise.html (accessed 30<sup>th</sup> November 2011).

Thomson Reuters. (2011) Financial Times Share Service. Financial Times, 1st December. Pp. 32.

Yahoo! Finance (2011) *Historical Prices: J Sainsbury PLC (SBRY.L)*. [Internet] Yahoo! Inc. Available from http://uk.finance.yahoo.com/q/hp?s=SBRY.L (accessed 1<sup>st</sup> December 2011).

Walter, J. E. (1967) Dividend Policy and Enterprise Valuation. Belmont, Calif: Wansworth.

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# Appendix A - Formulas

Tab. 1 Sales, sales growth and market share of Sainsbury's (2006 – 2011) Morrisons (2011)	) and
Sales Growth = Sales (exc VAT) in the year Y1 – Sales (exc VAT) in the year Y0 / Sales (exc VAT) in the year Y0	(1)
Tab. 2 Profitability ratios of Sainsbury's (2006 – 2011) and Morrisons (2011)	
Gross Profit Margin = Gross Profit / Sales (exc VAT)	(2)
Operating Profit Margin = Operating Profit / Sales (exc VAT)	(3)
ROCE = Operating Profit / Average Capital Employed Return on Equity = Net Income/Shareholder's Equity	(4) (5)
Tab. 3 Efficiency ratios of Sainsbury's (2006 – 2011) and Morrisons (2011)	
Asset Turnover = Sales (exc VAT) / Totral Assets	(6)
Return per Employee = Sales (exc VAT) / Number of Employees	
(Full Time Equivalent)	(7)
Sales per Square Foot = Total Net Sales / Square Feet of Selling Space	(8)
Tab. 4 Liquidity ratios of Sainsbury's (2006 – 2011) and Morrisons (2011)	
Current Ratio = Current Assets / Current Liabilities	(9)
Quick Ratio = (Current Assets – Inventories) / Current Liabilities	(10)
Tab. 5 Investment ratios of Sainsbury's (2006 – 2011) and Morrisons (2011)	
Earnings per Share = Diluted Earnings for Calculating Diluted Earnings per Share / Total	
Number of Shares for Calculating Diluted Earnings per Share	(11)
Dividend Cover = Underlying profit after tax from continuing operations attributable to equity shareholders / Total value of dividends declared during	
the year	(12)
Tab. 6 Gearing and investment ratios of Sainsbury's (2006 – 2011) and Morr (2011)	risons
Interest Cover = Operating Profit / Interest Payable	(13)
Gearing Ratio = Net Debt / Total Equity	(14)
Tab. 7 Ratios based on share price (01/12/2011)	
P/E = Market Value per Share / Earnings per Share	(15)
Dividend Yield = Dividend Yield per Share / Market Value per Share	(16)
TSR = dividend paid during the period + (minimal value of shares	
at the end of the period – nominal value of shares at the beginning	
of the period) / nominal value of shares at the beginning of the period	(17)