Monitoring Operational and Financial Performance

20

Abstract

This chapter will consider the relationships between retail strategy and performance, review the balance between and tools for managing productivity and effectiveness, inventory and supply chain evaluation, profit and turnover evaluation and financial performance evaluation and consider new conceptual frameworks.

20.1 Retail Strategy and Performance

Retailers develop strategies to sustain a competitive advantage (see Part II of this book) in a market situation characterised by intense competition. In these circumstances, there is growing pressure on retailers to perform, so they must measure or evaluate their performance. Different kinds of performance measures can be identified:

- productivity/effectiveness evaluation,
- inventory/supply chain evaluation,
- profit/turnover evaluation,
- financial performance evaluation.

The study of productivity in retailing has a long history (McGoldrick 2002, p. 211). Many different measures have been developed as useful and practical indicators of retail performance. When discussing operational performance, not only retail performance, but the terms **productivity**, **efficiency** and **effectiveness** have to be defined and distinguished. According to Goodman (1985), the following distinct definitions can be used (McGoldrick 2002, p. 211):

J. Zentes et al., *Strategic Retail Management*, DOI 10.1007/978-3-658-10183-1_20

Table 20.1 Retail productivity measures of selected companies. (Lebensmittel Zeitung 2014; Annual Reports 2014/15)

Company	Sales per m^2 (EUR)	Sales per employee (EUR)
Auchan	4898	220,434
Best Buy	7371	266,736
Carrefour	4868	205,288
IKEA	2949	199,272
Kohl’s	2139	121,363
Macy’s	1750	141,463
REWE	4732	153,574
Sainsbury’s	13,487	218,458
Tesco	6877	175,394
TJX	3380	121,385
Walmart	2743	187,868

- Productivity relates a single input factor to an output measure, other inputs assumed constant.
- Efficiency measures the effects of all inputs in combination and thus recognises that all inputs and the proportions in which they are employed may vary.
- Effectiveness takes into account goal achievement as well.

These measures are distinct, but there is a hierarchical relationship between them (Goodman 1985, p. 78): “High productivity is a necessary but not sufficient condition for high efficiency, as individual productive factors may not be combined in an optimal manner. Similarly, high efficiency is a necessary but not sufficient condition for high effectiveness, as the efficient combination may be directed to less than optimal goals.”

Retailers’ inventories have an important influence on profits and financial performance. A wide variety of ratios and performance indicators has been developed to evaluate how efficiently and effectively retailers utilise their investments, for example, stock turnover or inventory turnover. To balance inventory levels and stock shortages with **customer satisfaction** and **customer loyalty**, new tools have been created such as supply chain **performance measurement** (Zentes 2004).

Profit and turnover evaluation are more specific in retailing than other industries because of the huge number of **stock-keeping units** (SKUs) and large number of organisational units, such as outlets in a retail chain. This complexity leads to specific turnover and profit paths in analysing retail performance.

Retailers’ financial performance can be examined based on their balance sheets, profit and loss accounts (P&L statements) and cash flow statements. In principle, there is no

Table 20.2 Retail productivity measures of German retail formats. (EHI 2014; HDE 2015, p. 175)

Format	Sales per m^2 (EUR)	Sales per employee (EUR)
Supermarkets	5048	226,800
Superstores (Big Supermarkets)	4737	238,300
Hypermarkets	4492	306,900
Furniture Shops	1400	210,000
Bookshops	3300	152,000
Electronics Stores	5200	148,000
Perfume Shops	6400	136,000

difference between measuring the financial performance of the retail industry compared with other industries using, e. g., liquidity ratios, return ratios, earnings coverage ratios and value metrics.

In addition to these tools, various other instruments have been developed to monitor operational and financial performance, such as activity-based costing and benchmarking (Zentes et al. 2012; Morschett 2004).

20.2 Productivity/Effectiveness Evaluation

Many retailers place great priority on improving productivity. Various ratios can be calculated to measure **retail productivity** or different aspects of retail productivity. The most common ratios are:

- sales per square metre (or square foot),
- sales per employee (i. e., per full-time equivalent, FTE).

Real-world examples of these two ratios are given in Table 20.1. This table shows the considerable differences within and between the sectors. It is important to note that the lower of these measures does not necessarily mean lower effectiveness. “A relatively high number and/or quality of staff **may** be a natural outcome of higher service positioning. Likewise, more space per unit of sales **could** reflect a more comfortable selling environment” (McGoldrick 2002, p. 211).

Nevertheless, these ratios provide **benchmarks** within sectors or **strategic clusters** of retail companies. Retail managers can detect and analyse deviations from the benchmarks or just from the averages. Productivity measures, such as sales per square metre or sales per employee, can help monitor store management performance within retail chains. Table 20.2 illustrates the different ratios used in German retailing in 2013/14.

20.3 Inventory/Supply Chain Evaluation

Retailers apply two main metrics for **financial inventory control**:

- stock turnover,
- gross margin return on investment.

Stock turnover represents the number of times during a specific period, usually one year, that the average inventory on hand is sold (Berman and Evans 2013, p. 446). This ratio can be calculated in units or currency (e. g., EUR, USD or GBP). When calculating stock turnover in currency, two dimensions can be distinguished: retail prices ("at retail") or purchasing prices ("at cost").

Different formulas can be applied (Berman and Evans 2013, p. 446):

$$\text{annual rate of stock turnover (in units)} = \frac{\text{number of units sold during year}}{\text{average inventory on hand (in units)}}$$

$$\text{annual rate of stock turnover (in retail dollars)} = \frac{\text{net yearly sales}}{\text{average inventory on hand (at retail)}}$$

$$\text{annual rate of stock turnover (at cost)} = \frac{\text{cost of goods sold during the year}}{\text{average inventory on hand (at cost)}}$$

In order to increase stock turnover, retailers can reduce stock of slow-selling items ("stock reduced", see Chap. 18), buy in a timely manner ("stockless"), apply collaborative planning tools and supply chain techniques such as CRP or VMI (see Chap. 19) or use reliable suppliers. High stock turnover may forfeit volume discounts and result in higher transportation charges.

One way to monitor inventory investment and profit per unit is to compute **gross margin return on investment** (GMROI). This metric represents the relationship between gross margin and average inventory at cost, by combining profitability and sales-to-stock measures (Berman and Evans 2013, p. 447):

$$\text{GMROI} = \frac{\text{gross margin}}{\text{net sales}} \times \frac{\text{net sales}}{\text{average inventory at cost}} = \frac{\text{gross margin}}{\text{average inventory at cost}}$$

20.4 Profit/Turnover Evaluation

20.4.1 Profitability Ratios

Metrics from this group are designed to measure a retailer's ability to achieve, sustain and increase profits (Dragun 2004a). Profitability can be measured by different indicators. One important relationship is between profits and sales (**margin ratios**); another dimension of profitability relates profits to capital. These so-called return ratios are discussed below within the context of financial performance evaluation.

The "top level" indicators of profitability are (Dragun 2004a):

- gross margin in %,
- net profit margin in %.

Gross **margin**, also called gross profit, is defined as:

$$\text{gross margin} = \text{net sales} - \text{costs of goods sold}$$

"It is an important measure in retailing because it indicates how much profit the retailer is making on merchandise sold, without considering the expenses associated with operating the store and corporate overhead expenses" (Levy et al. 2014, p. 162). Like other performance measures, this indicator can be expressed as a percentage of net sales (**gross margin in %**):

$$\text{gross margin in \%} = \frac{\text{gross margin}}{\text{net sales}} \times 100$$

The term **net sales** represents the total volume of money (e. g., EUR, USD or GBP) after all refunds have been paid and payments have been collected from vendors for promotions (Levy et al. 2014, p. 161) (and after sales tax):

$$\text{net sales} = \text{gross amount of sales} + \text{promotion allowances} - \text{customer returns}$$

The net profit margin in % relates net profits (see Fig. 20.1) to sales:

$$\text{net profit margin in \%} = \frac{\text{net profit}}{\text{net sales}} \times 100$$

This **"bottom-line" profitability** is useful for comparisons across companies.

20.4.2 Profit Path

Different profit margin models or formulas can be illustrated by a firm's profit path (see Fig. 20.1).

Expenses are the costs incurred by a retail company in the normal course of business. There are three types of **retail operating expenses** (Levy et al. 2014, p. 162):

- Selling expenses,
- general expenses,
- administrative expenses.

Selling expenses comprise sales staff salaries, commission and benefits. **General expenses** include rent and utilities. **Administrative expenses** include salaries of all em-

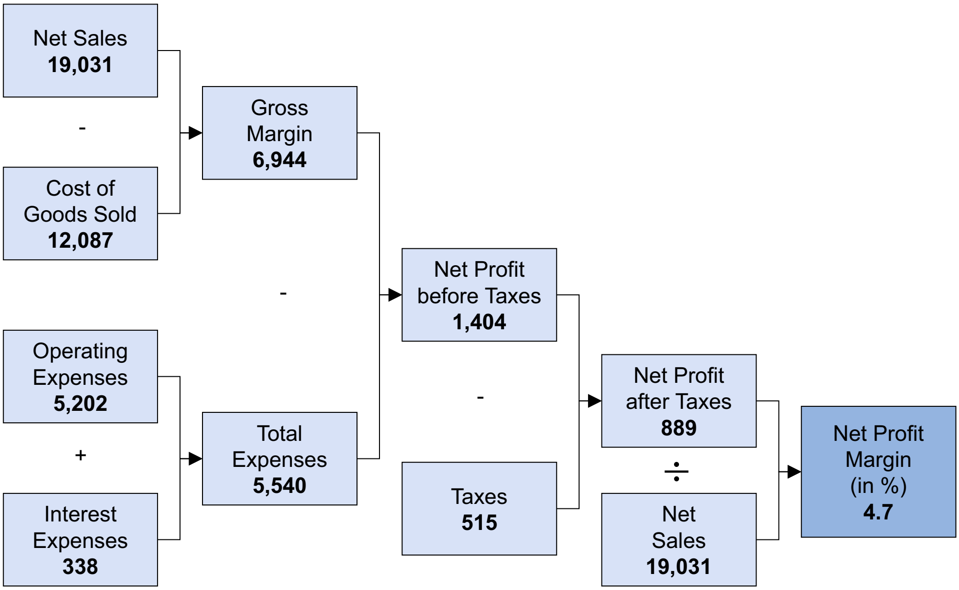

Fig. 20.1 Profit path example – Kohl's (in million USD). (Kohl's 2014, p. 16)

ployees other than sales personnel, operational costs incurred by buying offices and other administrative expenses.

20.4.3 Operating Profit Analysis in Retail Chains

As a simplified example of an **operating profit analysis** in retail chains, Table 20.3 provides a calculation of gross margin and operating profit for a fictitious retail store and the aggregation from store level to company level.

20.5 Financial Performance Evaluation

20.5.1 Financial Ratios

To evaluate the financial performances of retailers, **financial ratios** can be applied. In retail companies, four groups of financial ratios are utilised (Dragun 2004a):

- Internal liquidity ratios,
- return ratios,
- financial leverage ratios,
- earnings coverage ratios.

Table 20.3 Operating profit: department, store and company level (in thousand EUR) (hypothetical example)

Step	Position	Store A			Store B			Company
		Dep. 1	Dep. 2	Total	Dep. 1	Dep. 2	Total	
0	Net sales	278,000	424,000	702,000	723,500	381,500	1,105,000	
	./. costs of goods sold	159,400	242,200	401,600	435,900	234,600	670,500	
1	Gross margin	118,600	181,800	300,400	261,300	174,200	435,500	
	./. salaries	57,500	96,300	153,800	150,500	93,500	244,000	
	./. rent	24,000	16,000	40,000	33,000	22,000	55,000	
2	Operating profit (department level)	37,100	69,500	106,600	77,800	58,700	136,500	
	./. other store level costs			55,000			68,800	
3	Operating profit (store level)			51,600			67,700	119,300
	./. expenses of headquarters							33,200
4	Operating profit (company level)							86,100

In this Chapter, only internal liquidity ratios and return ratios are discussed.

The limitations of ratio analysis have led to the development of a new class of measures called **value metrics**. "The idea behind a value metric is simple and powerful: value is only created if the company generates return on capital exceeding the cost of that capital" (Dragun 2004a, p. 161). This approach will be discussed briefly and illustrated in the following case study.

Table 20.4 Return Ratios of Selected Retailers. (Adapted from Annual Reports 2013/14)

Company	Return on Assets (after-tax basis)
Auchan	2.8
Carrefour	2.9
Kohl’s	6.2
Kroger	6.1
Macy’s	6.9
REWE	3.2
Sainsbury’s	4.9
Tesco	2.7
Walmart	8.1

20.5.2 Liquidity Ratios

Metrics from this group “measure the ability of the firm to sustain current and meet future obligations. Internal liquidity ratios usually compare the short-term assets such as cash and marketable securities with the near-term financial obligations such as accounts payable” (Dragun 2004a, p. 149).

The **current ratio** is one of the best-known liquidity metrics:

$$\text{current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$

Other metrics from this group are:

$$\text{quick ratio} = \frac{\text{cash and equivalents} + \text{accounts receivables}}{\text{current liabilities}}$$

$$\text{cash ratio} = \frac{\text{cash equivalents}}{\text{current liabilities}}$$

$$\text{cash flow from operations ratio} = \frac{\text{cash flow from operations}}{\text{current liabilities}}$$

The **quick ratio** and **cash ratio** are more conservative ratios, because inventories and other assets included in current assets may not be liquid enough. Formula 12 integrates a cash flow perspective.

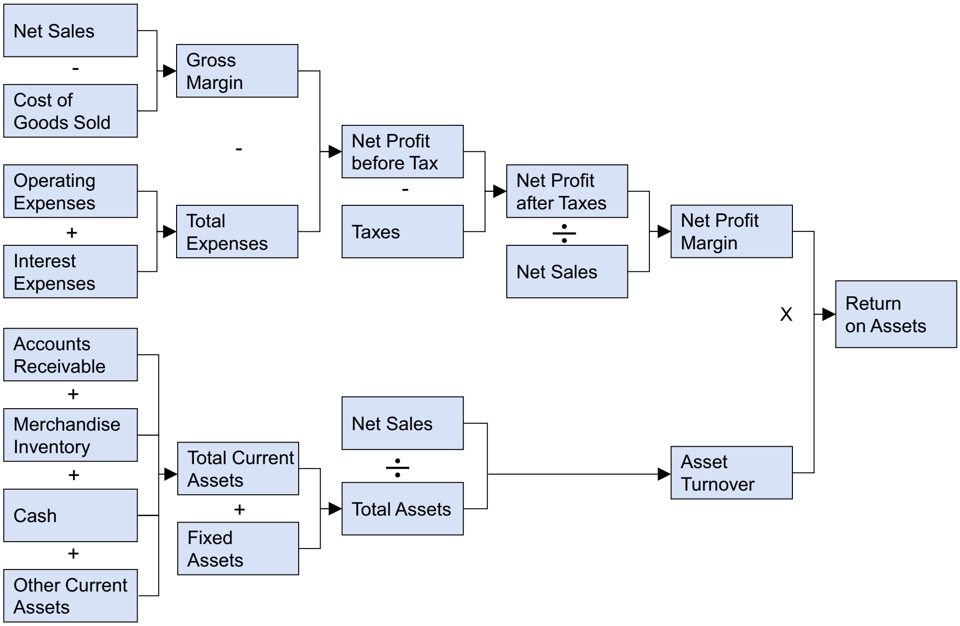

Fig. 20.2 ROA Path

20.5.3 Return Ratios and Return Path

These metrics relate profits to capital in contrast to profitability ratios, which relate profits to sales. A "top-level" indicator measures the efficiency of a company in utilising assets for profit generation: **return on assets** (ROA). This indicator is usually calculated on an *EBIT* basis (earnings before (b) interest and taxes):

$$ROA^{(b)} = \frac{\text{EBIT}}{\text{average total assets}}$$

On an after-tax and after-interest basis (a), a second metric return on assets can be computed:

$$ROA^{(a)} = \frac{\text{net profit after tax}}{\text{average total assets}}$$

Other return metrics are **return on invested capital** (ROIC) and **return on equity** (ROE) (see Dragun 2004a; 2004b). Table 20.4 shows returns on assets (ROA) of selected retail companies operating worldwide.

The net profit margin model (Fig. 20.1) can be combined with the **asset turnover model**, which yields asset turnover by dividing net sales by total assets. As a result, the *ROA path* can be derived (see Fig. 20.2).

Table 20.5 Calculation of EVA. (Adapted from Dragun 2004a, p. 163)

	Component	Calculation
1.	Operating profit before taxes	
2.	Income tax expense	
3.	NOPAT (Net operating profit after taxes)	Item 1 – Item 2
4.	Capital	a = interest-bearing debt b = equity capital c = a + b
5.	Debt-to-equity ratio	
6.	Cost of debt (before taxes)	α (%)
7.	Cost of equity	β (%)
8.	WACC	$\frac{a}{c} \times \alpha\,(\%) + \frac{b}{c} \times \beta\,(\%)$
9.	Capital charge	Item 4 x Item 8
10.	EVA	Item 3 – Item 9

20.6 Value Metrics

20.6.1 Economic Value Added

These metrics measure the financial performances of firms by their ability to generate or add **economic value**. Measures of economic value include **market value added** (MVA), which is a purely stock market-based measure, and *economic value added (EVA)*. Economic value added is computed according to formula (15) (see Dragun 2004a, p. 162):

$$\text{EVA} = \text{net operating profit (after taxes)} - \text{WACC} \times \text{capital}$$

The **weighted average cost of capital** (WACC) is calculated as a weighted average of the costs of debt and the costs of equity capital. The costs of debt are the interest expenses required to serve the debt. "For equity, the cost is the rate of return on common stock expected by the shareholders" (Dragun 2004a, p. 161). These costs are more difficult to calculate because they depend "on the uncertain factors such as overall stock market risk, return expectations and the risk-free rate of return available to investors" (Dragun 2004a, p. 161). Table 20.5 shows a calculation scheme for EVA.

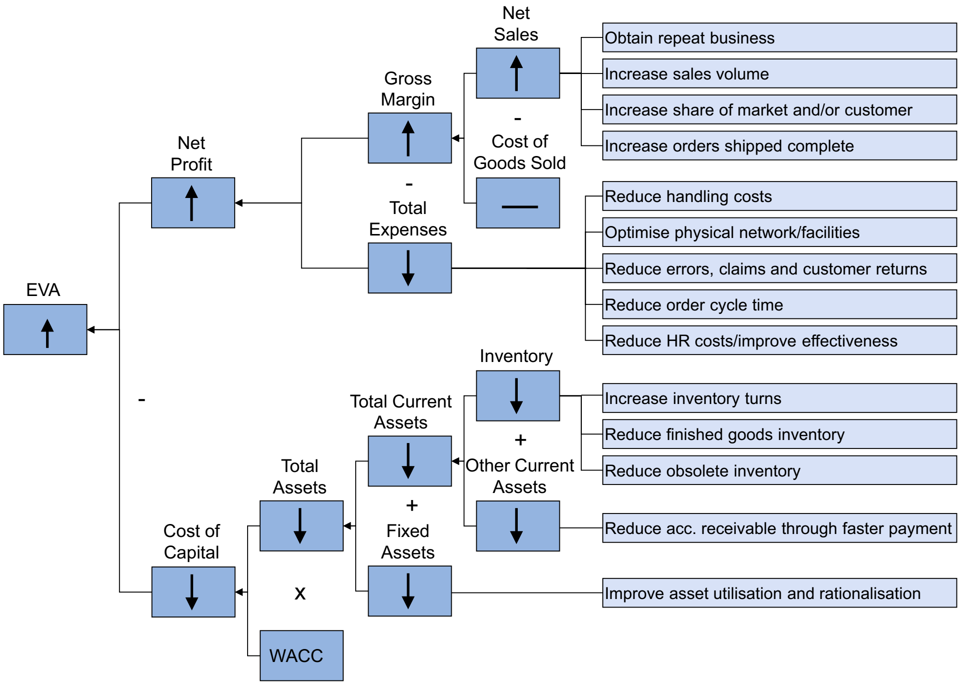

Fig. 20.3 EVA and Order Fulfilment. (Adapted from Lambert and Pohlen 2001, p. 13; Neher 2003, p. 38)

20.6.2 EVA and Supply Chain Performance

Supply chain performance evaluation can be combined with financial performance evaluation. Fig. 20.3 illustrates the means by which supply chain management can improve value metrics such as EVA (Morschett 2004).

20.7 Retail Balanced Scorecard

Apart from the concepts of monitoring operational and financial performance discussed here, new approaches have been developed in which the measurement of **consumer satisfaction** and other aspects comes to the fore. One of the most important concepts in this context is the **balanced scorecard** (BSC), proposed by Kaplan and Norton (1992; see also Morschett et al. 2015, pp. 543–545).

This is a specific, four-dimensional performance measurement system that comprises **financial objectives** as well as **non-financial measures** (see Fig. 20.4). “The balanced scorecard translates an organization’s mission and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and man-

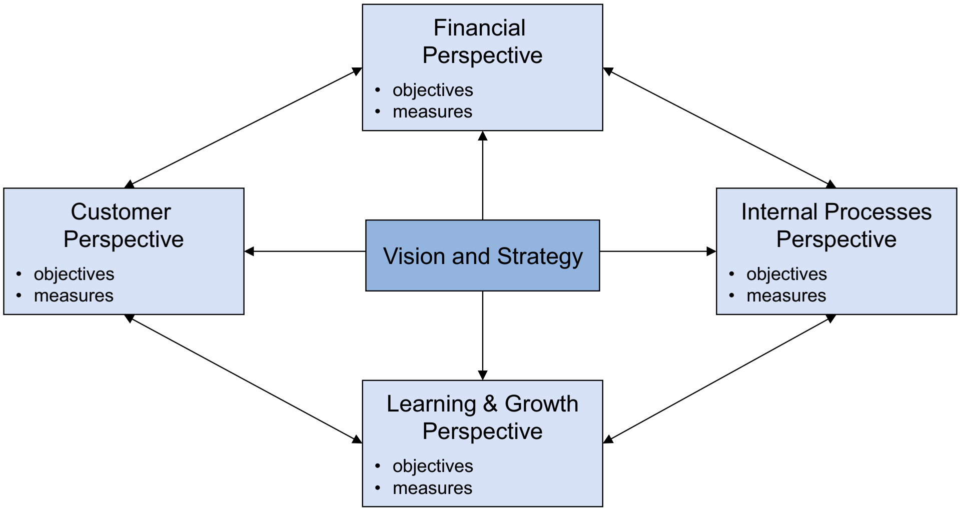

Fig. 20.4 The Balanced Scorecard. (Kaplan and Norton 1996, p. 9; Gowthorpe 2011, p. 425)

agement system. […] The BSC enables companies to track financial results while simultaneously monitoring progress in building the capabilities and acquiring the intangible assets they need for future growth" (Kaplan and Norton 1996, p. 2).

This concept can be adapted to retail companies. Fig. 20.5 illustrates the application of the balanced scorecard by the German department store chain *Breuninger*. They distinguish for performance dimensions: business finance, customer/market, goods/suppliers and internal processes & resources.

20.8 Conclusion and Outlook

A new challenge for performance measurement is emerging from the increasing importance of **corporate social responsibility** (CSR) and **sustainability** (Zentes et al. 2009a, 2009b; Scholz and Zentes 2014). The extension of the corporate goal system into ecological and social dimensions also requires advanced concepts of monitoring social performance (**corporate social performance**).

Following the **triple bottom line concept** (see Chap. 10), retail companies have to report not only economic activities and their results but also environmental and social issues. This finally leads to a three-dimensional balance reflecting the stakeholder view.

Further Reading

- Ayers and Odegaard (2008). *Retail Supply Chain Management.* New York et al.: Auerbach.

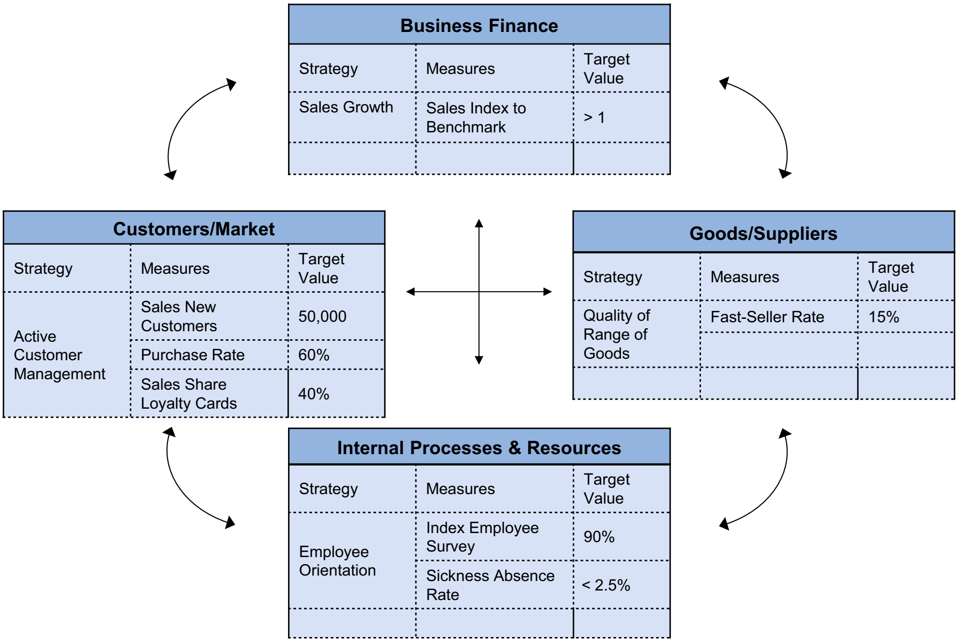

Fig. 20.5 Implementation of the Balanced Scorecard at Breuninger. (Adapted from Guldin 2000, pp. 103–121)

- Brealey et al. (2014). *Principles of Corporate Finance* (11th ed.). New York: McGraw-Hill.
- Meyer (2009). *Rethinking Performance Measurement: Beyond the Balanced Scorecard.* New York: Cambridge University Press.

20.9 Case Study: Metro

20.9.1 History, Profile and Status Quo

With net sales of 63 billion EUR in 2013/14, the *Metro Group*[1] currently ranks seventh among worldwide retail companies (Deloitte 2015, p. 11). The company was created in 1964, when the first German *Metro Cash & Carry* market for commercial customers was opened. The *Metro Group* emerged in its current form in 1996 after mergers with other companies and several portfolio adjustments. Following a broad programme focusing on

[1] As well as the explicitly cited sources, sources used for this case study include the website http://www.metrogroup.de, various annual reports and press releases.

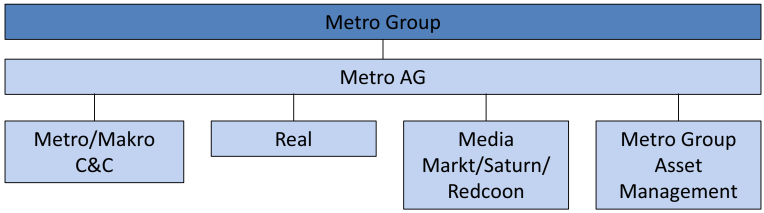

Fig. 20.6 *Metro Group's* structure. (Adapted from Metro 2014, p. 72)

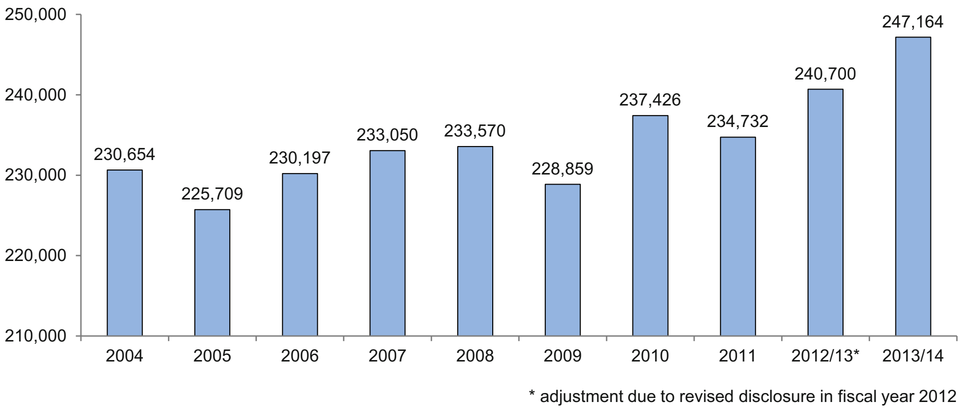

Fig. 20.7 Retail productivity measures: sales per employee at Metro Group (in EUR). (Adapted from Metro 2014, p. 330)

improving value and efficiency called "Shape 2012", the publicly listed DAX company unveiled a new company structure in 2009. The guiding theme of this change was: "as decentrally as possible, as centrally as necessary". The *Metro Group* concentrates on the three key business segments of wholesale, food retail (hypermarkets/superstores) and non-food specialist markets. These are organised into the three sales divisions *Makro Cash & Carry/Metro Cash & Carry*, *Real*, *Media Markt/Saturn* and the purely online player *redcoon.de* (see Fig. 20.6). In 2015, *Metro Group* sold *Galeria Kaufhof* to the *Hudson's Bay Company.*

Metro AG leads the group as a strategic management holding, responsible, among others, for group-wide finance, controlling and compliance functions. *Metro Group's* real estate portfolio is managed by *Metro Group Asset Management*, acting as an independent profit centre. The sales divisions are independently responsible for their respective operative businesses and in some cases operate in the market with several retail brands. They are supported by cross-divisional service companies, which provide procurement and logistics, among others.

The company currently employs about 255,000 employees in 31 countries in Europe and Asia. In recent years, sales per employee (annual average by headcount) have been volatile but comparatively high (see Fig. 20.7).

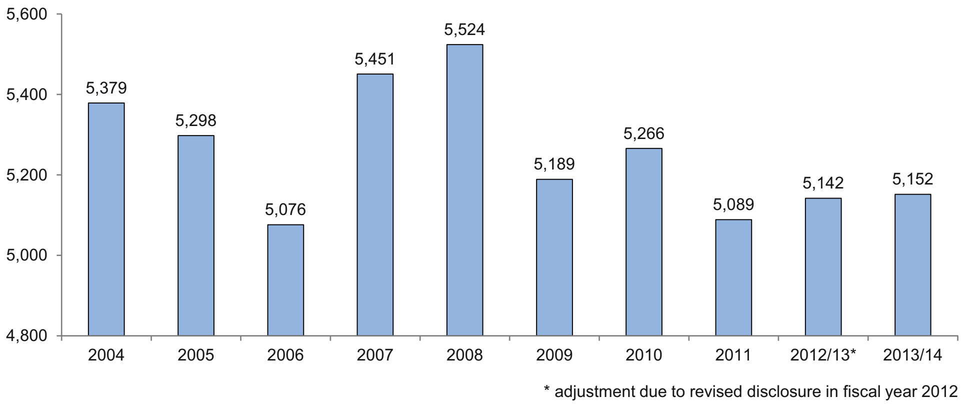

Fig. 20.8 Retail productivity measures: sales per square metre at *Metro Group* (in EUR). (Adapted from Metro 2014, p. 330)

Metro Group's sales per square metre have also been relatively high in recent years (see Fig. 20.8). The strong fluctuation in productivity is strongly influenced by the heterogeneous formats within the group's portfolio.

Roughly 60 % of the turnover of 63 billion EUR in 2013/14 came from abroad. The internationalisation of the cash and carry concept contributed considerably to this success, generating more than 84 % of its turnover outside the domestic market, despite various divestments, e. g., in Eastern Europe. The turnover of electronic specialty stores saw foreign sales of over 50 %.

20.9.2 Shareholder Value Concept

With the internationalisation and liberalisation of capital markets, shareholder value for publicly listed corporations is increasingly important. The basic principle is that the company's strategy is aligned with its owners' interests and decisions are made in the context of their effects on the company's value. This approach is, amongst other factors, designed to counteract opportunistic actions on the part of managers. Rational investors select the investment which they expect will accrue the highest returns on their investment relative to risk (Stern et al. 2001, p. 3). A distinction is generally drawn between investments in a company and capital market investments. As owners of a stock corporation, shareholders expect returns on their invested capital, in the form of dividends or rising stock prices. Especially since the 1990 s, the problem of adequately measuring company value has been complicated by the high number of mergers and acquisitions.

Generally, the shareholder value concept results in implementing value-based management within a company. The value metrics are intended to counteract the deficiencies of still popular conventional performance benchmarks, such as return on investment (Freeman 2004, p. 60), and measure a company's actual value or value creation.

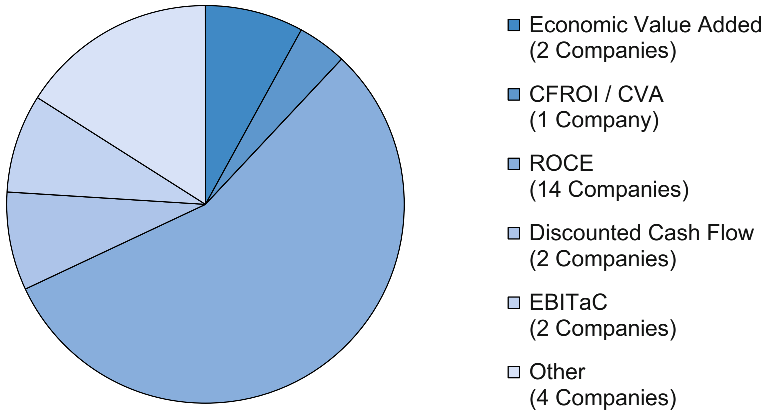

Fig. 20.9 Shareholder value metrics in German DAX-25 corporations 2014 (without banking, finance and insurance). (Own calculation, based on companies' annual Reports 2014)

$$\boxed{\text{EBITaC}} = \boxed{\text{EBIT}} - \boxed{\text{Cost of Capital}}$$

$$= \boxed{\text{EBIT}} - \boxed{\text{Capital Employed x WACC}}$$

Fig. 20.10 EBITaC formula used by *Metro Group*. (Metro 2014, p. 90)

Fig. 20.9 gives an overview of the shareholder value key data most commonly used by the German DAX-25 companies in 2014. Companies most frequently revert to return on capital employed (ROCE).

20.9.3 Value Oriented Performance Metrics at Metro Group: EBIT after Cost of Capital (EBITaC)

To ensure sustained value creation, *Metro Group* has been using value-oriented performance metrics since 2000. At that time, economic value added (EVA) was implemented across the entire group as the standardised steering instrument and was actively and externally communicated, especially to the capital markets and shareholders.

However, in 2009 *Metro Group* changed from using EVA to EBIT after cost of capital (EBITaC), a similar but different value-based management concept. When earnings before interest and taxes (EBIT) rise above the costs of capital needed to finance the average capital employed, positive value contribution is reached. This should ensure a more focused orientation towards *Metro Group's* value drivers. In 2013, the end of the company's financial year was moved from December 31 to September 30 to avoid overlap with the Christmas period.

The following formula is used to calculate the key performance indicator EBITaC to ensure value contribution (see Fig. 20.10).

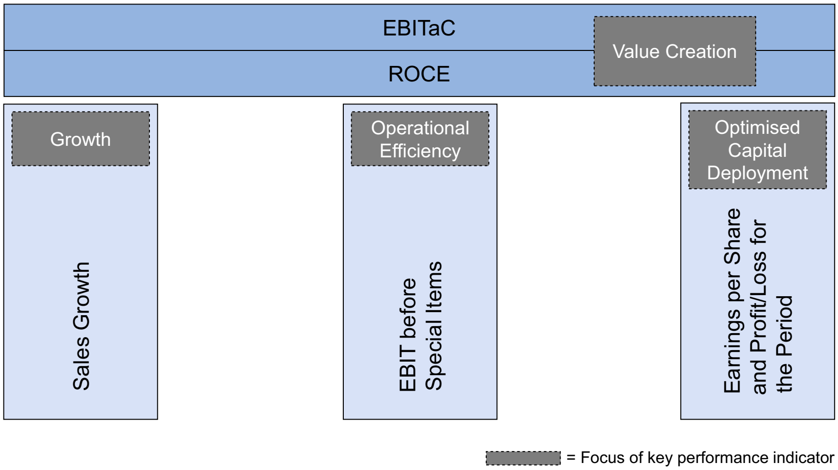

Fig. 20.11 Operational and value-oriented key performance indicators for *Metro Group*. (Adapted from Metro 2014, pp. 75–76)

Determining value creation via EBITaC concentrates on key drivers that can be influenced actively by management: increasing operational efficiency, value-creating growth and optimising employed capital (see Fig. 20.11).

Metro Group's cost of capital before taxes came to 9 % in 2013/14, corresponding to the minimum return on capital demanded by capital providers. This is the result of the aggregation of segment-specific cost of capital and reflects the return investors could generate investing in an alternative portfolio of shares and bonds with a comparable level of risk. The cost of capital should be interpreted as the sum of both equity and debt capital costs and therefore reflects the entire cost of employed capital.

Capital employed represents interest-carrying assets and is calculated as shown in the following formula (see Fig. 20.12). In contrast to EVA, one-time effects are not capitalised within capital employed, for example in the course of restructuring expenses. Using balance sheet items to determine EBITaC enhances traceability compared to system-related adjustments in calculating EVA.

The weighted average cost of capital (WACC) is the average weighted cost a company has to pay for its capital, combining both debt capital costs and equity capital costs. It reflects the risk inherent in an investment and is determined based on the capital asset pricing model (CAPM), which states that investors only invest in a company if they receive at least the return of a risk-free alternative plus a premium for their market risk, weighted with a company-specific risk factor (Bühner and Tuschke 1999, p. 17).

When calculating EBITaC, special items are generally distributed over four years on a linear basis and are considered in earnings before interests and taxes (EBIT). Periodised one-time special items from 2013/14 totalling 454 million EUR include portfolio changes (19 million EUR), restructuring and efficiency improvement measures (264 million EUR), impairment losses at goodwill (88 million EUR) and other special items

Fig. 20.12 Capital employed formula used by Metro Group. (Metro 2014, p. 90)

Capital Employed = Segment Assets + Cash + Cash Equivalents - Trade Liabilities - Other Operational Liabilities - Deferred Income

Table 20.6 Key financial ratios for Metro Group for the financial years 2012/13 and 2013/14 (in million EUR). (Metro 2014, p. 90)

	2012/13	2013/14*	Delta
EBIT before Special Items	2000	1727	−273
EBIT after Periodisation of Special Items**	1680	1376	−304
Ø Capital Employed	15,076	13,579	−1497
WACC before Taxes	9.0 %	9.0 %	0
Cost of Capital	1357	1222	−135
EBITaC	323	153	−170

* previous year adjusted for comparability reasons
** the effect of special items is spread over 4 years

(83 million EUR). The respective positive effects on EBIT largely occur after a time lag. Distributing the special items over several years therefore provides an accurate representation of operational performance, and consequently, short-term special effects do not fully impact earnings in the period they occur. This ensures that measures which create value in the long term are not abandoned because of negative short-term earnings effects. In the 2013/14 financial year, *Metro Group* achieved a positive EBITaC of 153 million EUR (see Table 20.6).

Another value-based management metric used by *Metro Group* is the return of capital employed (ROCE). This indicates whether the company made profitable use of its available capital, less liquid funds and short-term debt capital. This metric is used to better compare individual segments, since it measures the return from business assets deployed during the review period. ROCE is calculated based on EBIT before special items, because this adequately reflects the units' operational earnings strength, independent of special effects. *Metro Group* uses the following formula to calculate ROCE (see Fig. 20.13).

$$\boxed{\text{ROCE}} = \frac{\boxed{\text{EBIT (before Special Items)}}}{\boxed{\text{Business Assets (Including Cash Rental Values)}}}$$

Fig. 20.13 ROCE formula used by *Metro Group*. (Metro 2014, p. 91)

Besides the net profit for the period (net earnings), ROCE is also a performance-based pillar for calculating the *Metro AG* management board's remuneration.

The results of the EBITaC and ROCE analyses are used, among other things, to manage *Metro Group's* portfolio and allocate investment funds. Consequently, the present value of future value added is the key criterion for all investments within the company.

20.9.4 Conclusion and Outlook

The geopolitical situation in 2013/2014 was very challenging, with unexpected political developments in Russia and Ukraine, which posed major challenges for *Metro Group* and led to poor development of business in this region. Furthermore, measures were implemented to streamline the company's portfolio, including divestments in Eastern Europe, Turkey and Egypt. In addition, *Metro Cash & Carry* Vietnam was sold in the 2014/2015 financial year due to an expected one-time positive effect on EBIT. However, despite the tense economic situation, the company achieved a positive EBITaC of 153 million EUR. Because of the company's strategic transformation via new structures and processes, a slight rise in EBIT before special items adjusted for currency effects is projected for the future, which will also have an impact on value-based metrics.

Questions

1. *Metro Group* changed its steering system from EVA to the similar EBITaC; however, several other companies such as *Henkel* use the more common EVA as a group steering system. Discuss the possible limits and risks of EVA as a group steering system.
2. Compare EVA with the two steering tools EBITaC and discounted cash flow (DCF) and make a comparative analysis.
3. Financial metrics help steer a company as they provide a quantitative outlook on its performance capability. However, a company's true strength lies in its resources, capabilities and competences, which are qualitative factors that underpin financial performance. What value potentials are strategic to *Metro Group* in this context?

- ► See Holler 2009 and Merchant and Stede 2012.
- ► See www.metrogroup.de and press coverage for details on strategic value drivers of *Metro Group*.

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