DE GRUYTER OPEN

DOI 10.1515/sbe-2017-0006

DRIVERS OF FIRM PERFORMANCE: EXPLORING QUANTITATIVE AND QUALITATIVE APPROACHES

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Abstract:
The main purpose of this paper is to identify the drivers of firm performance by exploring both quantitative indicators - based on accounting profitability, shareholder value and economic value – and qualitative approach – based on balanced scorecard and triple bottom line. A literature review will be provided in order to obtain an optimum mix of quantitative and qualitative drivers for firm performance, on one hand, and a case study will be conducted for emphasizing the importance of both approaches, on the other hand.

Key words: *Firm performance, profitability, shareholder value, economic value, balanced scorecard, triple bottom line*

1. Introduction

Performance is a very used and dynamic concept that express the accomplishment of a given task with efficiency and effectiveness beyond present known standards. Accordingly, the firm performance has multiple facets and dimensions being analyzed from resources-based theory perspective (Bharadwaj, 2000; Cho and Pucik, 2005), shareholder theory perspective (Hillman and Dalziel, 2003; Tse, 2011) or stakeholder theory perspective (Donaldson and Preston, 1995; Jensen, 2001; Friedman and Miles, 2002; Freeman, Wicks and Parmar, 2004; Harrison and Wicks, 2013). Nowadays, the theories are revisited (Freeman, 2004; Crilly, 2013) and combined towards a dual-investor theory (Schlossberger, 1994) or stakeholder-shareholder theory (Jackson, 2011). But, both the shareholder and stakeholder theories are, according to Smith (2003) "normative theories of corporate social responsibility, dictating what a corporation's role ought to be… Shareholder theory asserts that shareholders advance capital to a company's managers, who are supposed to spend corporate funds only in ways that have been authorized by the shareholders".

2. Literature review

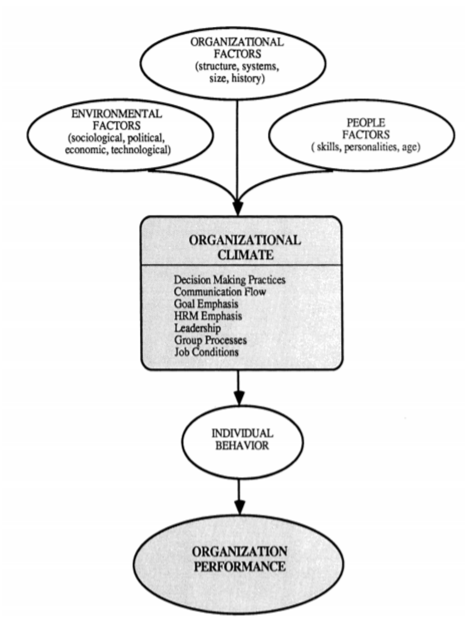
Firm performance can be defined and measured in terms of: profitability, growth, market value, total return on shareholder, economic value added, customer satisfaction, based on the stakeholders expectations (Carroll, 2004).

Measuring firm performance using financial analysis has been a traditional tool for investors, decision-makers, creditors, and other stakeholders (Delen, Kuzey and Uyar, 2013) because many specialists consider that firm performance is quite the same with financial performance. But, for stakeholders not only the financial performance matter (Harrison and Wicks, 2013). They are seeking for more. That is way Freeman (1984) defined firm performance as "the total value created by the firm through its activities, which is the sum of the utility created for each of a firm's legitimate stakeholders".

Since 1989 Hansen and Wernerfelt have identified the determinants of firm performance by combining organizational, environmental and people factors that lead to the development of the organizational climate. Organizational climate that impact individual behavior will drive to organization performance (See Figure 1).

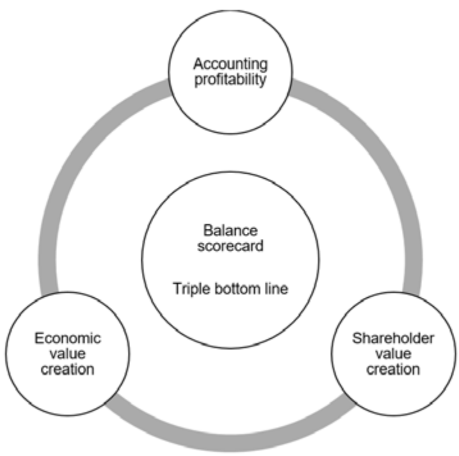
After 25 years Rothaermel (2017) have developed a similar model of firm performance considering three standard performance dimensions – accounting profitability, shareholder value and economic value, but integrating also the balanced sorecard and triple bottom line frameworks (See Figure 2).

Figure 1. Organizational climate and organization performance



Source: Hansen and Wernerfelt (1989)

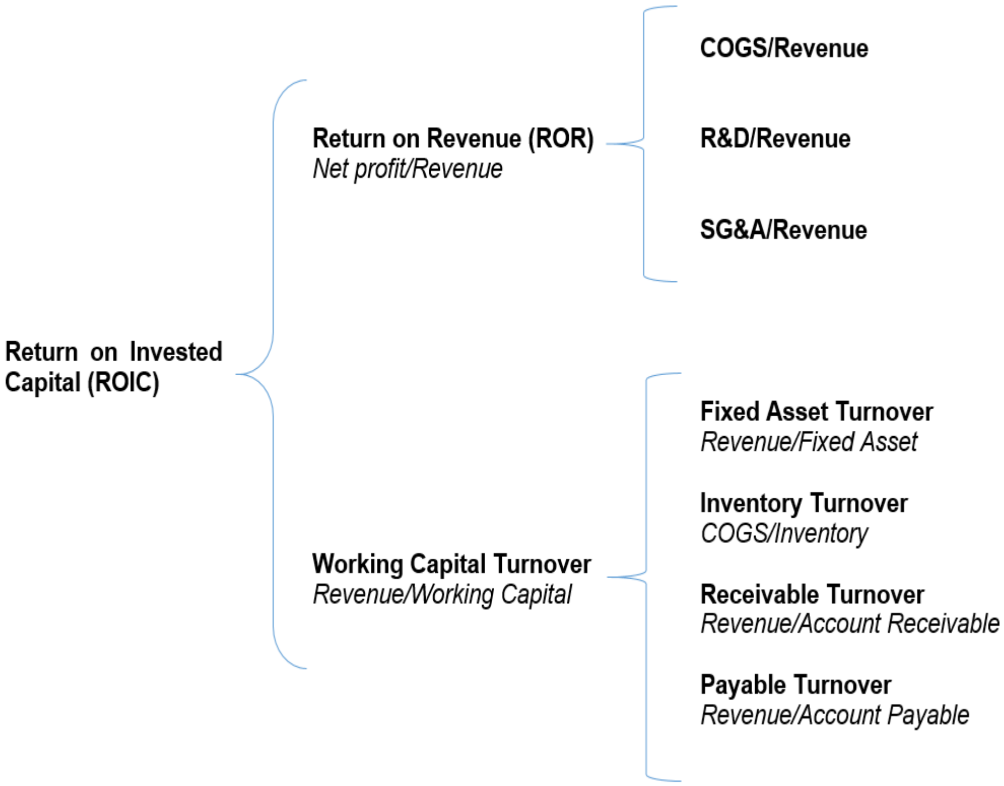
Figure 2. Firm performance drivers



Source: Adapted after Rothaermel (2017)

As regarding *accounting profitability*, Rothaermel (2017) proposes a set of seven financial indicators, grouped in 2 categories, in order to identify the retun on invested capital, a return that express more than return on equity and that intersts most of the stakeholders, not only the shareholders (See Figure 3).

Figure 3. Drivers of firm performance



Source: Rothaermel (2017: 144)
Note: COGS – cost of goods sold, R&D – research and development expense, SG&A – selling, general and administrative expense

For reaching a higher level of **return on invested capital** (ROIC) manager have to considered both maximizing the return on revenue (ROR) (Bierly and Chakrabarti, 1996) and optimizing working capital turnover (Banos-Caballero, Garcia-Teruel and Martinez-Solano, 2014).

Still, the common goal of the company is to **maximize shareholder value** (from Friedman, 1970 to Koller, Goedhart and Wessels, 2010). To create value and to maximize the shareholder wealth companies must considered the power of stakeholder synergy (Tantalo and Priem, 2016) because the "stockowners provide the specific capital for business ventures, while society provides the "opportunity capital" (Schlossberger, 1994).

Another important driver of firm performance is **value added**. By implementing the synergy between shareholder and stakeholder theories companies have to consider two indicators for value added: economic value added (EVA) that is important for shareholder and value added intellectual coefficient (VAIC) that is important for stakeholders (Iazzolino, Laise and Migliano, 2014).

In order to evaluate the firm overall performance have to integrate all dimensions into **the balanced scorecard**, more deeply to found the balance between both financial and strategic goals, tangible and intangible assets. Kaplan and Norton (1996) assert that "a balanced scorecard augments traditional financial measures with benchmarks for performance in three key nonfinancial areas: a company`s relationship with its customers; its key internal processes; its learning and growth". The balanced scorecard taken together with the **triple bottom line**, express by corporate social responsibility actions, will promote firm performance (Saeidi et al, 2015).

3. Case study

The case study is focused on three companies: Google, Apple and Microsoft, companies that are ranked in **Fortune Top 5 companies with the best CSR reputation** in the world. By this case study we analyze the companies through accounting profitability and intangibles as they are stated in balance sheet and income statement for the fiscal year 2016.

Fiscal year 2016	Microsoft	Google	Apple
ROIC (%)	13,37	13,62	21,22
ROR (%)	19,69	21,58	21,19
COGS/Revenue (%)	38,42	38,92	60,92
R&D/Revenue (%)	14,05	15,45	4,66
SG&A/Revenue (%)	22,57	19,35	6,58
Working capital Turnover	1,06	1,02	7,74
Fixed Assets Turnover	1,59	1,45	1,00
Inventory Turnover	14,56	131,11	61,62
Receivables Turnover	4,67	6,34	7,36
Payable Turnover	12,37	44,23	5,78
Intangible Turnover	22,86	27,30	67,26
DuPont			
ROA (%)	8,68	11,63	14,20
ROE (%)	23,33	14,01	35,62
TAT	0,44	0,54	0,67
EM	2,69	1,20	2,51
Debt as % of Total Asset	27,73	2,35	27,05
Equity as % of Total Asset	37,21	83,01	39,87
Market capitalization (B $)	537,47	683,5	801,83

Apple's return on invested capital (ROIC) was 21.22%, which was more than 7 percentage points higher than Microsoft's (13.37 %) and Google (13.62%). By breaking down the ROIC in return on revenue (ROR – that indicates how much of the revenues are transformed into profit) and Working capital turnover (that shows how effectively capital is being used to generate revenue) it can be observed that for all three companies the return on revenues have likely the same value, around 20%. As regarding working capital turnover Apple is again the leader by generating 7.74 dollars for every dollar puts to work against Microsoft or Google at parity. If we look at intangible turnover Apple leverage 7 times better than Microsoft and Google the intangible assets. Apple continues to strike also in terms of market capitalization and total return on shareholders with over 800 billion dollars and a very good balance between shareholders equity and debt.

However, all three companies are some of the best companies in the world in terms of: corporate social responsibility, profitability ratios, reputation, brand awerness, customers satisfaction, and to work for.

4. Conclusions

Exploring the quantitative and qualitative approaches of the firm performance drivers is like removing the water from the ocean with the glass. Performance is a subjective concept, with multiple meanings, facets and dimensions. Even if it will be considered both financial and non-financial indicators/variables in order to measure firm performance at the end, when comparison are made, all the company` objectives and strategic goals can be translated and putted into the financial statement. The financial performance is both cause and effect. As it was shown in the case study, one company perform better than other and has a clear competitive advantage, mainly based on business core competencies: Apple has a business to consumer model while Microsoft and Google are business to business oriented.

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