The Influence of Corporate Strategy on the Performance of Professional Service Firms under Covid-19 Pandemic

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Abstract: Professional service firms has been regarded as prototypes of knowledge economy and “future enterprise” (Boussebaa & Faulconbridge, 2019). With the development of digital technology and rapidly changing external environment, companies face great challenges. Especially when the Covid-19 pandemic stoke the world. Previous researches indicated valid relation between corporate strategy and firm performance. (Porter, 1991; Park, Shin and Jurn, 2009). This article adopted quantitative analysis, taking three professional service firms as case studies. Secondary data is collected through financial reports, and official websites of the three companies. It is revealed that the largest professional service firms, though striving with the VUCA environment, managed to maintain a profit. Based on acquired information, the author first made a descriptive analysis of the data, then conducted correlation test and linear regression test. The relationship between both independence variables and company performance was identified to be valid.

Keywords: Professional Service Firm; Corporate Strategy; Performance; Pandemic

1. Introduction

1.1. Background

Professional service firms (PSFs) has been prevailing in the past few decades with the process of globalization goes deeper and influence every aspect of people’s life. Even in 1993, Fladmoe-Lindquist and Aharoni stated that “employment in professional business service had grown faster than in other sectors of the economy; a staggering 53.8% growth in the United States.” Revenues of the largest transnational PSFs continued to grow. According to Greenwood et al (2010), “In 2000, for example, Deloitte’s fee income was 11.2 Billion Dollar; and in 2008, 27.4 Billion Dollar. Other Big Four firms have recorded similar growth rates. Professional service industry has become an important driver of the knowledge economy (Okhuysen et al, 2015). According to the Greenwood, Hinings and Brown (1990), professional partnership, as the most common structure for professionals, is positioned as a distinctive organizational form. In traditional theory, professional services are highly complex, tailored, and creative, leveraging the employees’ strong expertise, interpersonal skills, and close client interaction (Singh et al, 2017).

But the professional service industry is increasingly challenged by the external environment and rapid technological innovations. As a method of defense, when firms grow and internationalize, they develop services beyond the firm’s core service, such as tax advice, financial service, and advisory services (Greenwood et al, 2010). All the offices and stuff abroad requires greater ability for global integration. The performance figures has indicated that companies have evolved an organizational form that enables them to overcome the challenges of geographical complexity and size (Greenwood et al, 2010). Simultaneously, clients of professional service firms became international and demand more knowledge specialization. The company then have to converge and coordinate their know-how around different markets and clients.

Researches on professional service firms emerge in massively. Most of them focus on the operation and corporate structures. Corporate Strategy is also heavy discussed among scholars, most research stress on the business-level strategy, but rarely are there any researches focusing corporate strategy and professional service firms’ performance. What’s more, ever since 2020, with the Covid-19 Pandemic stroke the world. How companies react, to profit or even survive is a topic worth exploring academically and practically.
1.2. Research Objectives

Based on the experience of previous research, this paper will be focusing on three questions:

1). How did professional service firms perform before and after the outbreak Covid-19 Pandemic?
2). Is there relationship between corporate strategy and firm performance?
3). Is the relationship valid during the Covid-19 pandemic?

1.3. The Significance of this Research

In terms of theoretical significance, this paper is expected to serve as a modest spur to other studies. The methods and theories used in this paper can be adopted for other industries. The result could also be tested on other aspects of corporate strategy. From other perspective, research on the influence of corporate strategy on professional service industry would also be an original exploration in strategic management. Practically, the research is expected to raise constructive advice in perspective of strategic planning, thus improve the ability for the firms to weather difficult situations.

2. Literature Review

2.1. Global Professional Service Firms

According to Greenwood et al (2010)[5], professional service firms sell expertise and provide highly customized solutions for demanding clients. Most of them offer accounting, law, and business consulting services. It includes all services, i.e. products, ‘which require direct contact of provider and consumer and which appear mainly intangible prior to, during and after the contact’ (Hentschel, 1992)[9].”

In the recent few decades, the professionals has become an important sector of world economy, accelerating the transformation from manufacturing to knowledge-based economies (Boussebaa & Faulconbridge, 2019)[1]. As an organization, the professionals are perfect interpretation of the term “future enterprise” (Boussebaa & Faulconbridge, 2019)[1]. Because they tend to have a flat organizational structure, often more decentralized and less hierarchical. Employees work as small teams in the form of different projects to find a solution for the customer’s problem (Aharoni, 1996)[10]. At the same time, they act as the catalyst for globalization by mitigating the trade barriers, promoting “free trade”, and building institutional infrastructure that supports globalization (Boussebaa & Faulconbridge, 2019)[1].

2.2. Corporate Strategy

Scholars have been performing a variety of researches on the concept of corporate strategy. Mintzberg (1989)[11] has concluded and described five types of strategy, which are strategy as plan, strategy as pattern, strategy as position, strategy as perspective and strategy as ploy. Johnson et al (2011)[12] stated that “strategy is the long-term direction of an organization”. In another book, they wrote that strategic purpose is encapsulated in an organization’s vision, mission, and values (Johnson et al, 2017)[13]. Another leading theorist Porter (1997)[14] defined strategy as “being different” and “deliberately choosing a different set of activities to deliver a unique mix of value”.

There are certain dispute about whether corporate strategy does make a difference on firm performance, which is mainly on corporate level strategy. As Grant (1995)[15] mentioned, corporate strategy deals with the macro level problem of a company and integrate a set of businesses organically. That’s why academics such as Rumelt (1991)[16], indicate that business level strategy played a decisive role in the variance of corporate profitability, while corporate level isn’t significant for the diversification of firm performance.

Other scholars, on the contrary, stress on the importance of corporate strategy. Porter (1991)[2] stated that “The causes of firm success or failure encompass all the other questions that have been raised in this collection of essays. It is inextricably bound up in questions such as why firms differ, how they behave, how they choose strategies, and how they are managed.” In summary, the success or failure of a company is bounded with every aspects and levels of strategy.

Other scholar, such as Park, Shin and Jurn (2009)[3], on the contrary, stress on the importance of corporate strategy, state that certain aspects of strategic, such as the economy of scale, firm size, debt/equity ratio, and product range, can lead to profound influence on corporate performance. Hill and
Snell (1988)[17], identified that R&D expenditure is positively related to profitability, while excessive diversification will bring passive influence on profitability. Though strategy has an abstract form at the executive level, the success of implementation is measurable in the change of the company itself (Savall& Zardet, 2015)[18].

What’s more, corporate strategy is essential for firm’s growth or even survival when confronted with VUCA environment as it can mitigate entrepreneurial risks (Lorange, 2001)[19]. That is why when Covid-19 pandemic challenges the entire industry, successful corporate strategies are required.

2.3. Corporate Performance

A criteria of measuring the performance is essential for this research. Drawing conclusion from previous research of other scholars, financial profitability is the crucial criteria for measuring the perform of a firm. De Loecker& Goldberg (2014)[20] proposed that “performance at the firm level is measured in many different ways, including accounting measures of profitability.” Common accounting-based ratios are frequently utilized in firm performance research such as return on assets (ROA), return on equity (ROE), debt-to-assets ratio (D:A), and debt-to-equity ratio (D:E). (Smith et al, 2019)[21]

There are other indicators of corporate performance and increasing amount of scholars are paying attention to aspects such as environmental and social factors. In practice, these factors are difficult to be transferred as variables and quantified. For example, Smith et al (2019)[21], in his research, did not propose a method to quantify

2.4. The Impact of Corporate Strategy on Firm Performance

When researching on the factors that influence firm profitability, most academics conduct studies from elements related to industrial level that involves multiple enterprise, such as scope of the firm, core competence, organizational structure, organizational climate, and planning and control (Bowman& Helfat, 2001)[22]. Other scholars pointed out that the relevance between corporate-level strategy and profitability is valid. Grant (1995)[15] identified five element of corporate strategic management: composition of businesses; resource allocation between businesses; formulation of business unit strategies; control of business unit performance; coordination of business units and creation of company cohesiveness and direction. We can conclude that factors that scholars consider profoundly influence the profitability of companies, to a large degree, cope with the elements of strategic management. Bowman and Helfat (2001)[22], in their researches, adopted three dependent variables: individual business profitability using accounting measures, firm-level return, and individual business market share. They concluded from a series of previous studies, drawing conclusion from samples of data, that the corporate effect on firm performance is evident.

2.5. Research Gap

The subject of corporate strategy on firm performance is widely researched. Chathoth and Olsen (2007)[23] conducted an investigation upon the effect of environment risk, corporate strategy and capital structure. Other scholars such as Hill and Snell (1988)[17] studied external control, corporate strategy and firm performance in research intensive industry. Quantitative method was adopted as well. The hypothesis that “research and development expenditure will be positively related to profitability” is tested to be true. While according to the result, extensive diversification is negatively related to profitability. Though previous studies are convincing and referable, there are rather limited amount of researches conducted about professional service firms. As professional service firms are increasingly essential in the entire world economy. There is a scant of studies on the influence of corporate strategy on firm performance during the Covid-19 pandemic. Research on this topic could be referable when dealing with other challenging situations and crisis. In order to bridge this gap, this article attempt to investigate the impact of corporate strategy on profitability with three case studies of professional service firms operating in the consulting industry.

2.6. Model and Hypothesis

2.6.1. Construction of Model

In the process of building the research model for this article, it is vital to select the most representative conducts of corporate strategy to be the variables. In previous researches (Chathoth and Olsen, 2007[23];
Hill and Snell, 1988[17]), scholars focus on the growth related and liquidity related strategy such as R&D and diversification.

For corporate performance, different approaches were adopted to study corporate performance. Profitability and total factor productivity are most commonly used indicators for measurement of firm performance (Cucculelli and Bettinelli, 2015)[24]. Other academics (He et al, 2020)[25] used sales growth as the indicator of firm performance. For public listed companies, scholars focus on stock market performance to determine whether the performance of a company’s is a success or failure during the fiscal period (Apergis and Sorros, 2010)[26].

To summarize the model tested, corporate strategy are represented by two independent variables: R&D expenditure and product range. To study both growth and liquidity of the chosen firm, corporate performance is indicated by both ROA and debt to equity ratio.

2.6.2. Hypothesis

Many author focus on the amount of R&D expenditure as it is an important strategic tool for knowledge intensive enterprise. In the essay by Hill and Snell (1988)[17], R&D expenditure per employee is examined to be positively related to ROA ratio. Thus, the first hypothesis is proposed.

H1: There is a positive relationship between R&D expenditure and performance of professional service firms

Null hypotheses

H01: There is no positive relationship between R&D expenditure and performance of professional service firms

Diversification Strategy is another important aspect of corporate strategy that is extensively studied. Many studied the composition of their products and service on corporate profitability (Bowman and Helfat, 2001) [22]. Researches (Grant, 1995) [15] acquired empirical evidence that diversification strategy and a feasible method to extend its business and activities will boost the ability of enterprises to make profit. We can make a hypothesis that the previous theory is valid for a highly knowledge-intense industry like professional service firms.

H2: There is a positive relationship between product range and profitability of professional service firms

Null hypothesis

H20: There is no positive relationship between product range and performance of professional service firms

3. Methodology

3.1. Research Approach

This research follows the methodology proposed by Saunders and other scholars (2009)[27]. For the two types of research approaches, inductive theory and deductive theory. This article is going to take the deductive approach. The reason for adapting the deductive approach is that there are abundant literature resources regarding this field, and the data indicating firm performance is relatively accessible. As this article tend to analyse the relation with financial figures through quantitative method, the deductive method is a more sensible choice. With this method, extensive research will be carried out with the goal of proposing hypothesis according to the existing theory and test if the hypothesis is true and whether the theory applies to the research objective.

3.2. Research Strategy

The author adopt case analysis as the strategy for this thesis. Case analysis enables the author to select prototypical firms with accessible data. What’s more, empirical experiment is the most commonly used strategy for studying the influence of corporate strategy on firm performance, most researches adopted quantitative method. Case analysis, in this case, is an innovation on research strategy. Cases from three consulting firms can provide us with not only an insight of how corporate strategy influence firm performance, but reveal the strategy adopted by the firm. What makes case study in perfectly conformation with this thesis is that the unique context of Covid-19 Pandemic would be identified and
took into consideration with this strategy. Each case will be described, before being analyzed together. So that the companies could be analyzed individual.

3.3. Research Design

This article focuses on quantitative data. The quantitative method entails a deductive approach to the relationship between theory and research, in which the accent is placed on the testing of theories.[Bryman, 2012][28]. Quantitative method is the most applicable for this paper as it is in accordance with the research approach. With this paper looking at the effect of corporate strategy on firm performance, the financial performance is the most convincing and common measure. The data could be quantified and measured easily.

3.4. Data Collection and Analysis

This article mainly adopted secondary data. Purposeful sampling was used in the selection of three case studies, making sure the data is all prototypical. The sample size will be three: Accenture, Booz Allen Hamilton and Marsh McLennan.

4. Data and data analysis

4.1. Accenture, Booz Allen Hamilton and Marsh McLennan

All the three companies are public listed company specialize in consulting services. The reason for choosing them is that it is easier to access the financial figures and information about the strategy and structure of the company. The data used for quantitative analysis is primarily the financial statement of the firms, and the information extracted from their official websites.

Accenture is a consulting firm with global impact. “The company has 537,000 employees worldwide. Operation of Accenture locate in across 50 countries and 200 cites. 6,000 clients are served throughout its operations (Accenture, 2021)[29].” Booz Allen Hamilton is another company famous for management consulting. The founder Ed Booz is the one who “gave birth to the modern management consulting profession (Booz Allen Hamilton, 2021)[30].” Booz Allen Hamilton has “27,700 engineers, scientists, software developers, technologists.” Marsh McLennan is “the world’s leading professional services firm in the areas of risk, strategy and people (Marsh McLennan, 2021).[31]” The workforce of the company is also highly professional.

4.2. Descriptive Analysis of Data

As the article looks into three prototypes of professional service firms. Table 1 below provides a detailed descriptive analysis against variables used in the analysis.

| Table 1: Descriptive Data from Three PSFs[32][33][34][35][36][37] |
|---------------------------------|-----------------|-----------------|
| R&D Expenditure per Employee    | 1651.186        | 13104.593       | Not Available |
| Product Range                   | 4               | 5               | 10             |
| ROA of 2019                     | 0.211           | 0.140           | 0.085          |
| ROA of 2020                     | 0.176           | 0.138           | 0.093          |
| D/E ratio of 2019               | 1.119           | 4.598           | 3.031          |
| D/E ratio of 2020               | 1.009           | 4.134           | 2.788          |

4.3. Correlation Test

A Pearson correlation test will be conducted to assume the relationship between the dependent and independent variables. The linear correlation is represented by the letter r. The test is conducted with the data of the three firms among the four variables. The data of both fiscal year 2019 and 2020 will be tested. The correlation test results are presented in the table below.
Table 2: Correlation Test Result

<table>
<thead>
<tr>
<th>Correlations</th>
<th></th>
<th>ROA 2019</th>
<th>ROA 2020</th>
<th>D/E Ratio 2019</th>
<th>D/E Ratio 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D Expenditure Per Employee</td>
<td>Pearson Correlation</td>
<td>-1.000</td>
<td>-1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Product Range</td>
<td>Pearson Correlation</td>
<td>-.904</td>
<td>-.950</td>
<td>.212</td>
<td>.234</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.280</td>
<td>.203</td>
<td>.864</td>
<td>.850</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 revealed the results of the correlation test between dependent and independent variables. The value of the test determines the collinearity between the variables. For the first variable, it can be seen that due to small sample size, the significance of the result is devalued. Under such case, we can conclude with the two valid sample, that R&D expenditure has strong negative effect on ROA, as the dependent variable and independent variable provides a very low r values of -1.000. While it has a positive effect on D/E ratio, with a high r value of 1.000. It could be also summarized that product range has a very strong negative collinear relationship with the dependent variable ROA with the r value being -0.904 and -0.950. For the dependent variable D/E ratio, it has a weak collinear relationship with product range, as the r value is merely 0.212 and 0.234. Thus, all the collinear relationships are valid in the tested.

4.4. Linear Regression Analysis

Two linear regression tests are conducted separately to provide different result of two independent variables. Table 3 shows the relationship between R&D expenditure and the dependent variables indicating firm performance. Table 4 reveals the first the relationship between product range and the dependent variables.

Table 3: R&D Expenditure per Employee and ROA and D/E Ratio

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>1</td>
<td>ROA 2019</td>
<td>-161315.549</td>
<td>.000</td>
<td>-1.000</td>
</tr>
<tr>
<td></td>
<td>ROA 2020</td>
<td>-301405.37</td>
<td>.000</td>
<td>-1.000</td>
</tr>
<tr>
<td></td>
<td>D/E Ratio 2019</td>
<td>3292.154</td>
<td>.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>D/E Ratio 2020</td>
<td>3665.089</td>
<td>.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Dependent Variable: R&D Expenditure per Employee

Table 4: Product range and ROA and D/E ratio

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>1</td>
<td>ROA 2019</td>
<td>-46.028</td>
<td>21.703</td>
<td>-.904</td>
</tr>
<tr>
<td>2</td>
<td>ROA 2020</td>
<td>-73.470</td>
<td>24.247</td>
<td>-.950</td>
</tr>
<tr>
<td>4</td>
<td>D/E Ratio 2020</td>
<td>.480</td>
<td>1.994</td>
<td>.234</td>
</tr>
</tbody>
</table>

Dependent Variable: Product Range
5. Findings and Discussions

5.1. Hypothesis 1

H1: There is a positive relationship between R&D expenditure and profitability of professional service firms.

The result of the linear regression analysis has rejected this hypothesis. Though the coefficients indicates strong positive between R&D expenditure and ROA and strong negative relationship between R&D expenditure and D/E ratio, the significance value is not available. The results is due to a small sample size. With only two valid sample, there foundation the linear relationship is not solidly built.

We can regard the result from the perspective of individual cases. In the cases of Accenture and Booz Allen Hamilton, the positive linear relationship between R&D expenditure and ROA and the could be accepted. The same case could be applied to the negative relationship between R&D expenditure and D/E ratio.

5.2. R&D Expenditure and Firm Performance

As mentioned in the finding of the research conducted by Hill and Snell (1988)[17], research and development expenditure is be positively related to profitability. The study measured innovation by R&D expenditure per employee and collected data from the COMPUSTAT database and the profitability is also measured by ROA. It is also revealed that strong R&D spending capability not only directly generate the internal knowledge needed for product innovation and increase of productivity, but also enables the company to evaluate potential outcomes of the knowledge created (Rosenberg, 1990)[38]. In another research by Sharma (2012) [39], it is discovered that “in-house R&D activities of firms are crucial determinations of productivity and output.” And R&D intensity has a significant and positive effect on TFP growth.

Though researches indicated a positive relationship between R&D expenditure and profitability. There are different opinion saying the relationship could be more complicated, and firms could experience decreased return due to R&D spending (Acs and Audretsch, 1987) [40].

5.3. Hypothesis 2

H2: There is a positive relationship between product range and profitability of professional service firms.

The result of the linear regression test has also rejected this hypothesis. Though with coefficient values of -0.904 and -0.950, the liners relationship between product range and ROA is invalid according to the test due to the significance being 0.280. For the linear relationship between product range and D/E ratio, the coefficient value are 0.212 and 0.234, the results are also invalid with a significance level of 0.846. This finding is also caused by small sample size. With the sample from only three case studies, the foundation the linear relationship is as well, not solidly built.

Taking a look into each case, it could be extracted that negative linear relationship between product range and ROA could be accepted. For product range and D/E ratio, the coefficient value only indicated a weak linear relationship. The significance level is too high, which represent a major possibility that even the weak connection could be proven false should there be more sample.

5.4. Product Range and Firm Performance

In the study of Hill and Snell (1988)[17]. Specialization ratio and related ratio is used to represent product range and diversification, the finding are that extensive diversification will be negatively related to profitability.

Rumelt (1982)[41] classified companies into single and dominant business, related constrained business, related linked business and unrelated business. He stated that that companies of dominant vertical and unrelated business category show lower level profitability than those of other categories. According to Rumelt (1982)[41], “economies of scope will occur if (1) there are increasing returns to scale in the use of one or more essential factors of production, (2) transaction costs prevent an efficient market in the relevant factors, forcing integration, and (3) there are limits on obtaining increased factor utilization by expanding the output of any single-end product”. All three factors must be satisfied. In this
case, the professional services firms have to not satisfy the three factors for a wide product range to become profitable.

6. Conclusion and recommendations

6.1. Implications

On the ground of Rumelt (1982) [41] and Chathoth and Olsen’s (2007)[23] research. This study further verified their theory by looking at three different prototypes professional service firms in the consulting industry. Here are several main conclusion.

Research and development expenditure, as an important part of corporate developing strategy, has an impact on firm performance. The R&D expenditure has a negative effect on return on asset and a positive effect on debt equity ratio. The result has indicated that R&D expenditure is negatively related to firm performance in both profitability and liquidity terms in the two fiscal year, when both Accenture and Booz Allen Hamilton committed investment in R&D. As the pandemic has made the external environment even more volatile and uncertain, R&D expenditure will somehow sacrifice profitability. What’s more, in such a short time of two fiscal years, the revenue could be brought by application of innovation and new technology of R&D is yet to reveal. Thus, the short term profitability is negatively affected.

Product range is connected with the profitability of professional service firms. As can be inferred from the result, product range influence the profitability of professional service firms negatively. With too many services to focus, to maintain the quality of the service provided, the company has to commit more investment, human resources, and accumulated experience in different markets. Especially in the Covid-19 pandemic, the cost of maintaining a wide product range could be a liability for the profitability.

This article has a few implications in the practical management process of today. Previous literature has stated that if the innovation could be transferred into productivity, the R&D expenditure invested could benefit firm performance. In a short term, the bold act of increasing R&D expenditure and product range could damage the profitability of professional service firms. Under challenge and crisis like the Covid-19 pandemic, companies could be more cautious with it when drafting the strategic plan.

6.2. Limitation and recommendations

Several limitations in this article should be acknowledged. First, the scant of data sample. This article has adopted three consulting companies as prototypes. The sample size was too small for linear regression test. What’s more, the data was primarily acquired from financial reports and official websites of the three companies. Due to the unavailability of R&D expenditure of Marsh McLennan, the enterprise was excluded for the first linear regression test. Secondly, the author only selected two elements from the corporate strategy and performed the test with two independent variables. Corporate strategy is constituted with multiple levels. The independent variables used in the study are only two aspects interpreted to represent corporate strategy.

Future researches can be conducted form other perspectives. For example, researches can be performed with a larger sample size. Once the linear regression is based on a more solid foundation, the result will be more convincing. What’s more, other aspects of corporate strategy could be considered, especially from corporate level as it’s less studied. Additionally, companies from different industry could also be interrogate of future researches.

References


