Resource Based View and competitiveness:An empirical study of the Algerian SME

HadjiraChigara
h.chigara@univ-boumerdes.com
University of Boumerdes

Submitted:27/04/2021 Accepted:10/06/2021 Published:30/06/2021

Abstract:

As an attempt to investigate the impact between resources and firm competitiveness, we operationalized a theoretical framework of the resource-based view theory along with its impact on competitiveness and empirically tested the three hypotheses derived from it. The framework links together resources which are physical capital resources (physical, technological, plant and equipment), human capital resources (training, experience, insights), and organizational capital resources (formal structure) and SME competitiveness. The results of the empirical study, involving a sample of 431 managers of SMEs, provided evidence for the direct contributions of the resources owed by the company and its contribution and impact in affecting competitiveness. This initial success, with the validated survey instrument of the importance of resources owed by the SME, may serve as the ground for further research in this area.

Key words: Resource-Based view, Competitiveness, Algerian SME.
JEL Classification Codes : D22, M19, M30.

Introduction:

The resource-based view (RBV) is a managerial framework used to determine the strategic resources a firm can exploit to achieve sustainable competitive advantage. It is a strategy for achieving competitive advantage that emerged during the 1980s and 1990s, following the works of academics and businessmen such as BirgerWernerfelt, Prahalad and Hamel, Spender and Grant. The core idea of the theory is that instead of looking at the competitive business environment to get a niche in the market or an edge over competition and threats, the organisation should instead look within at the resources and potential it already has available.

According to RBV, it is significantly easier to exploit new opportunities using resources and competencies that are already available, rather than having to acquire new skills, traits or functions for each different opportunity. These resources are the main focus of the RBV model, with its supporters arguing that these should be prioritised within organisational strategy development. And according to its proponents, it is much more feasible to exploit external opportunities using existing resources in a new way rather than trying to acquire new skills for each different opportunity. In RBV model, resources are given the major role in helping companies to achieve higher organizational performance.

So, many authors have discussed the importance of resources for firms' competitiveness, and for the socioeconomic development of regions and countries (Ireland and Webb, 2006; Makhija, 2003; Pisano et al., 2007; Zhou and Li, 2010). Among various conceptualisations, a resource as 'anything which could be thought of as a strength or weakness of a given firm' (Wernerfelt, 1984: 152), including technological skills, efficient procedures, brand names, or machinery. Firm resources are attributes, knowledge, organisational processes and capabilities, and information enabling firms to formulate and apply strategies that can improve their effectiveness and efficiency (Daft, 1983, in Barney, 1991). Thus, the context of the subject is about the state of resources in the small and medium sized enterprises in Algeria; so the principal question is as following: **Do resources influence competitiveness in the Algerian SME?**

The aim of the paper is to give an answer to the question of state of resources in the Algerian SME and the show the impact of them on competitiveness. And to answer this problem, one main hypothesis was put forward which are as follows: Resources getting in a firm influence its competitiveness.

This paper is structured as follows. Section one provides the literature review that leads to the conceptual model and research hypotheses. In Section two, the empirical research setting is presented, alongwithanalysed results. And, finally in Section three, the main conclusions are included.

Literature review:

Resources are defined as intangible and tangible assets firms use to choose, as well as implement strategies (Barney, 2001). Thus, the thoery of Resource Based View (RBV) analyzes and interprets resources of the organizations to understand how organizations achieve sustainable competitive advantage. The RBV focuses on the concept of difficult-to-imitate attributes of the firm as sources of superior performance and competitive advantage (Barney, 1986; Hamel and Prahalad, 1996). Resources that cannot be easily transferred or purchased, that require an extended learning curve or a major change in the organization climate and culture, are more likely to be unique to the organization and, therefore, more difficult to imitate by competitors. According to Conner, performance variance between firms depends on its possession of unique inputs and capabilities (1991). So, the RBV takes an 'inside-out' view or firm-specific perspective on why organizations succeed or fail in the market place (Dicksen, 1996). Resources that are valuable, rare, inimitable and non-substitutable (Barney, 1991) make it possible for businesses to develop and maintain competitive advantages, to utilize these resources and competitive advantages for superior performance (Collis and Montgomery, 1995; Grant, 1991; Wernerfelt, 1984).

According to RBV, an organization can be considered as a collection of physical resources, human resources and organizational resources (Barney, 1991; Amit and Shoemaker, 1993). Resources of organizations that are valuable, rare, imperfectly imitable and imperfectly substitutable are main source of sustainable competitive advantage for sustained superior performance (Barney, 1991).

A resource must fulfill 'VRIN' criteria in order to provide competitive advantage and sustainable performance. A 'VRIN' criterion is explained as following:

1) Valuable (V): Resources are valuable if it provides strategic value to the firm. Resources provide value if it helps firms in exploiting market opportunities or helps in reducing market threats. There is no advantage of possessing a resource if it does not add or enhance value of the firm; Rare (R): Resources must be difficult to find among the existing and potential competitors of the firm. Hence resources must be rare or unique to offer competitive advantages. Resources that are possessed by a several firms

in the market place cannot provide competitive advantage, as they cannot design and execute a unique business strategy in comparison with other competitors;

2) Imperfect Imitability (I): Imperfect imitability means making copy or imitate the resources will not be feasible. Bottlenecks for imperfect imitability can be many viz., difficulties in acquiring resource, ambiguous relationship between capability and competitive advantage or complexity of resources. Resources can be basis of sustained competitive advantage only if firms that do not hold these resources cannot acquire them;

3) Non-Substitutability (N): Non-substitutability of resources implies that resources can't be substituted by another alternative resource. Here, competitor can't achieve same performance by replacing resources with other alternative resources.

Barney (1991) categorises three types of resources:

1) Physical capital resources (physical, technological, plant and equipment),

2) Human capital resources (training, experience, insights),

3) Organizational capital resources (formal structure).

Many authors have discussed the importance of resources for firms' competitiveness, and for the socioeconomic development of regions and countries (Ireland and Webb, 2007; Pisano and Gary, 2006; Zhou and Li, 2010). Among various conceptualisations, a resource as 'anything which could be thought of as a strength or weakness of a given firm' (Wernerfelt, 1984: 152), including technological skills, efficient procedures, brand names, or machinery. Firm resources are attributes, knowledge, organisational processes and capabilities, and information enabling firms to formulate and apply strategies that can improve their effectiveness and efficiency (Daft, 1983, in Barney, 1991). Resources are also referred to as firm-specific assets that are difficult to transfer, or almost impossible to imitate, such as specialised production facilities, or trade secrets (Teece et al., 1997).

The following section presents the empirical study of our research.

Methodology:

The following section presents the methodological scheme which was followed in building the current research study, the way the raw data was collected and how the researcher will deal with the raw data in order to change it into acceptable and understandable set of results in accordance with the previously presented hypotheses and objectives.

Method:

In order to achieve the objectives of the study, the researcher has chosen to employ the quantitative approach in realizing the hypotheses of the study and answering its questions. (Bryman, 2001, p20) argues that quantitative research approach is the research that places emphasis on numbers and figures in the collection and analysis of data. Imperatively, quantitative research approach can be seen as being scientific in nature. The use of statistical data for the research descriptions and analysis reduces the time and effort which the researcher would have invested in describing his result.Data (numbers, percentages and measurable figures) can be calculated and conducted by a computer through the use of a statistical package for social science (SPSS) (Gorard, 2001, p3; Connolly, 2007, pp2-34) which save lot of energy and resources.

Secondly, the use of scientific methods for data collection and analysis make generalization possible with this type of approach. Interaction made with one group can be generalized. Similarity, the interpretation of research findings need not be seen as a mere coincidence (May and Williams 1998, p1-21). Thus, we have chosen the questionnaire to be the tool of the study. The questionnaire constituted to two main parts, the first part was the demographic variable which takes into account the demographic information of the sample of the study, and the second paragraph which was questions regarding the variables of Resources. The used scale in the current research study was Liker 5 scale on which the answers of the sample of the study were based on (strongly agree 5 – agree 4 – neutral 3 – disagree 2 – strongly disagree). The population of the study consisted of managers of Algerian SME's.

A convenient sample of study was set to be initially (480) managers of firms in different sectors in Algeria. The total sample which responded to the questionnaire reached in its final version to (431) respondents which means that the response rate was 89,79 % which is a statistically acceptable response rate. Mainly, the current study is a try to answer the following questions:

1. Do Physical capital resources (physical, technological, plant and equipment)impact the competitiveness in the Algerian SME?
2. Do the Human capital resources (training, experience, insights) impact the competitiveness in the Algerian SME?
3. Do the Organizational capital resources (formal structure) impact the competitiveness in the Algerian SME?

Main Hypothesis:

There is a statistically significant influence of getting Resources on competitiveness.

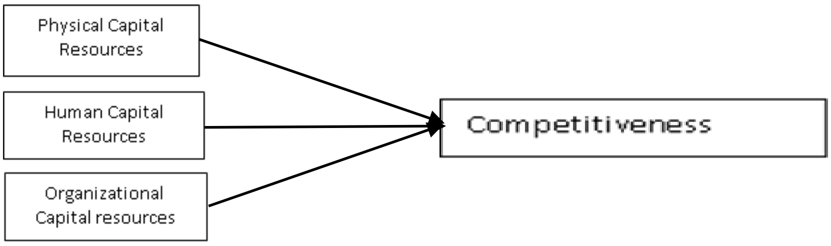
In order to test this hypothesis, we have formulated these three sub-hypothesis:

H01: There is no statistically significant influence of Physical capital resources on competitiveness;

H02: There is no statistically significant influence of Human capital resources on competitiveness;

H03: There is no statistically significant influence of organizational capital resources on competitiveness.

Model of the study:



Study's Results:

The current section presents the demographic analysis of the sample of the study according to the analysis. The demographic variables consisted of (Gender, Occupation and Education).

Demographic:

The current section presents the demographic analysis of the sample of the study according to the analysis. The demographic variables consisted of (Genderand Education), and SME's sector.

Title of table: Sample characteristics according to gender of the Algerian managers

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	274	63.6	63.6	63.6
Femele	157	36.4	36.4	100
Total	431	100	100	----

Source: Based on Spss output

It can be seen according to table 1 above that most of the sample of the study was male managers with a frequency of 247 and a percentage of 63.6% compared to the percentage of females 36.4% which gives an indication that more than half of the sample who responded to the questionnaire were males.

Title of table: Sample characteristics according to educational level of the Algerian managers

Educational level	Frequency	Percent	Valid Percent	Cumulative Percent
High school or less	66	15.3	15.3	15.3
Diploma	140	32.5	32.5	47.8
Bachelor	189	43.9	43.9	91.6
Post graduate study	36	8.4	8.4	100
Total	431	100	100	–

Source: Based on Spss output

Table 2 shows that 43.9% of managers who answered the questionnaire had a bachelor degree with a frequency of 189 followed by managers who had a diploma with a percentage of 32.5%. The least percentage came for managers who had postgraduate studies with a percentage of 8.4%. in general, the results indicated that managers who responded to the questionnaire were educated and had the needed awareness in regard to the core idea of the study.

Title of table: Sample characteristics according to SME's sector

Sectors	Frequency	Percent	Valid Percent	Cumulative Percent
Agriculture & fish	139	32.3	32.3	32.3
BTPH	206	47.8	47.8	80.0
Manufacturing	46	10.7	10.7	90.7
Services	40	9.3	9.3	100
Total	431	100	100	—

Source: Based on Spss output

Table 3 shows that 47.8% of managers who answered the questionnaire were activated in the BTPH followed by managers working in the Agriculture with a percentage of 32.3%. However, the least percentage came for managers who were working in Services with a percentage of 9.3%. The results indicated that almost half of the sample was acting in the BTHP.

Reliability Test

A reliability test was carried out using Cronbachs' alpha, the result showed a value of (0.963) for the all items as well as alpha for each variable is greater than accepted percent 0.60, which is a reasonable value indicating the tool consistency that enhanced its use for the study.

Hypotheses Testing:

Main Hypothesis: There is a statistically significant influence of Resources on Competitiveness.

Model	R	R Squares	Adjusted Square	Std Error of the Estimate
1	.962[a]	.926	.924	.26265

a. Predictory: (constant), applying Resources

Source: Based on Spss output

Title of table: ANOVA [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	362.343	8	45.293	656.541	.000[b]
	Residual	29.113	423	.069		
	Total	391.455	431			

Source: Based on Spss output

Multiple regression was used to test this hypothesis, It was found that R (0.962) is the correlation of the independent variables and the dependent variable. Also it was found that the F value of (656.541) is significant at (0.05) level. Thus, there is a statistically significant influence of applying Resources on Competitiveness within the Algerian SME's.The following presented the testing of the sub-hypotheses:

H01: There is no statistically significant influence of Physical capital resources on competitiveness:

Title of table: Model summary of Physical Capital Resources on Competitiveness

Model	R	R Squares	Adjusted Square	Std Error of the Estimate
1	.766[a]	.586	.585	.61451

a. Predictory: (constant), Physical Capital Resources

Source: Based on Spss output

Title of table: Coefficients [a]

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1(Constant)	.722	.119		6.089	.000
Physical Capital Resources	.805	.333	.766	24.650	.000

Source: Based on Spss output

Linear regression was used to test this hypothesis; it was found that R (0.766) is the correlation of the independent variable and the dependent variable. Also we notice that the sig values of the model is zero, which means that we can reject H01 and accept H1 , which means also that there is a statistically significant influence of Physical Capital Resources on Competitiveness.

H02: There is no statistically significant influence of Human capital resources on competitiveness:

Title of table: Model summary of Human Capital Resourceson Competitiveness

Model	R	R Squares	Adjusted Square	Std Error of the Estimate
1	.777[a]	.603	.602	.60175

a. Predictory: (constant), Human Capital Resources

Source: Based on Spss output

Title of table: Coefficients [a]

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1(Constant)	.667	.117		5.719	.000
Human Capital Resources	.837	.033	.777	24.536	.000

Source: Based on Spss output

Linear regression was used to test this hypothesis it was found that R (0.777) is the correlation of the independent variable and the dependent variable. Also we notice that the sig values of the model is zero, which means that we can reject H02 and accept H2 , which means alsothere is a statistically significant influence of Human Capital Resources on Competitiveness.

H03: There is no statistically significant influence of organizational capital resources on competitiveness.

Title of table: Model summary of Organizational Capital Resources on Competitiveness

Model	R	R Squares	Adjusted Square	Std Error of the Estimate
1	.798[a]	.636	.637	.57512

a. Predictory: (constant), Organizational Capital Resources

Source: Based on Spss output

Title of table: Coefficients [a]

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1(Constant)	.575	.112		5.141	.000
Organizational Capital Resources	.842	.031	.798	24.468	.000

Source: Based on Spss output

Linear regression is used to test this hypothesis; it was found that R (0.798) is the correlation of the independent variable and the dependent variable. Also we notice that the sig values of the model is zero, which means that we can reject H03 and accept H3 , which means alsothere is a statistically significant influence of Organizational Capital Resources on Competitiveness.

Conclusion:

The current study aimed at examining the influence of Resources on competitiveness. The sample of the study consisted of (431) managers of SME's in Algeria. A self-administered questionnaire was sent and distributed to the study sample.

The results of the study indicated that there is an influence of Resources on the competitiveness of the Algerian SME's (Physical Capital Resources, Human Capital Resources and Organizational Capital Resources). Generally speaking, there appeared a positive influence of competitiveness regarding the Resources owed by the firm.

As for the beneficiaries of the firms; through the study and the application of the questionnaire have shown a good degree and understanding of the idea of obtaining Physical Capital Resources, Human Capital Resources and Organizational Capital

Resources) at the same time for businesses could develop and maintain competitive advantages and for superior performance.

It is recommended through the study that the resources have a positive impact in increasing competitiveness. The Algerian SME should focus on these strategic resources to increase their competitiveness.Also it's recommended that the model could be used in future researches.

Referrals and references:

1) Amit, R., &Schoemaker, P. J. H. (1993) Strategic assets and organizational rent, Strategic Management Journal, 14, pp 33-46.
2) Barney, J. B. (1991), Firm resources and sustained competitive advantage. Journal of Management 17, pp 99–120.
3) Barney, J. B. (1986), "Strategic factor markets: Expectations, luck, and business strategy", Management Science, 32(10), pp. 1231-1242.
4) Barney, J. B., Wright, M., &Ketchen Jr., D. J. (2001), The resource-based view of the firm: Ten years after 1991, Journal of Management, 27, pp. 625-641.
5) Bryman, A. (2001). Social Research Methods, Oxford University Press, New York.
6) Collis, D. J. and Montgomery, C. A. (1995), "Competing on resources: Strategy in the 1990s", Harvard Business Review, July-August, pp. 118-128.
7) Connolly, P. (2007). Qualitative Data Analysis in Education: A critical introduction using SPSS. London:Routledge.
8) Conner, K. R. (1991), A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? Journal of Management 17, pp. 121-154.
9) Daft, 1983, in Barney, J. B. (1991), Firm resources and sustained competitive advantage, Journal of Management, 17(1), pp. 99-121.
10) Dicksen, P. R. (1996), "The static and dynamic mechanics of competitive theory", Journal of Marketing, 60 (October), pp. 102-106.

11) Grant, R. B. (1991), A resource based theory of competitive advantage: implications for strategy formulation. California Management Review 33, pp.114–135.
12) Gorard, S. (2001). Quantitative Methods in Educational Research: The role of numbers made easy, The Tower Building, London.
13) Hamel , G and Prahalad, C.K. (1996), Corporate imagination and expeditionary marketing, Harvard Business Review, 69 July-August, pp .81-92.
14) Ireland and Webb. (2007) Strategic Entrepreneurship: Creating Competitive Advantage Through Streams of Innovation, February 2007, Business Horizons 50(1), pp 49-59.
15) Makhija. (2003) Comparing the resource-based and market-based views of the firm: Empirical evidence from Czech privatization, May 2003 Strategic Management Journal 24(5), pp433 – 451.
16) May, T. & Williams, M. (1998) Knowing The Social World, Open University Press, Buckingham.
17) Pisano, Gary P. (2006) Science Business: The Promise, the Reality, and the Future of Biotech. Boston: Harvard Business School Press.
18) Teece, D. J., Pisano, G. and Shuen, A. (1997), Dynamic capabilities and strategic management. Strategic Management Journal 18, pp 509–533.
19) Wernerfelt, B. (1984) A resource based view of the firm. Strategic Management Journal 5, pp. 171–180.
20) Zhou, K.Z. and Li, C.B. (2010) How Strategic Orientations Influence the Building of Dynamic Capability in Emerging Economies. Journal of Business Research, 63, pp. 224-231.