### **PAPER • OPEN ACCESS**

## The Influence of Social, Economic, and Demographic Characteristic on Working Hours of Micro, Small, and Medium Enterprises (MSMEs) in Makassar City

To cite this article: Chalid Imran Musa and Muhammad Hasan 2018 J. Phys.: Conf. Ser. 1028 012181

View the article online for updates and enhancements.

## You may also like

- <u>Digital Literation of Micro, Small and Medium Enterprises (MSMEs) in Jember District</u>

N N Islami, S Wahyuni and R P N Puji

 Analysis of fixed assets accounting implementation in Micro, Small and Medium Enterprises (MSMEs) units in Jember

S Kantun, S Djaja and T Kartini

 Development of an occupational safety and health online database of MSMEs in Pasir Mukti Village, Citeureup District, Bogor Regency, in the era of the industry 4 0

Varia N Afifah, Mila Tejamaya, Amelia A Putri et al.



# The Influence of Social, Economic, and Demographic Characteristic on Working Hours of Micro, Small, and **Medium Enterprises (MSMEs) in Makassar City**

## Chalid Imran Musa<sup>1\*</sup>, Muhammad Hasan<sup>2</sup>

<sup>a</sup>Department of Management, Universitas Negeri Makassar, Indonesia

Abstract. There are several aspects related to the strategy of developing MSMEs based on the strength of local economic resources. This research aims to determine to analyze the influence of characteristics (social, economic, demographic) of the MSMEs workers in Makassar on working hours and determine the strategy development. This research is quantitative with econometric analysis tool. The results show the influence of economy (income and work experience) and demographics (age and gender) are very significant to the working hours of the MSMEs workers, while the social characteristics (education) is not significantly affect. In addition, income and age have a negative effect, while education, work experience, and gender have a positive effect on working hours.

#### 1. Introduction

In many parts of the world, development and growth of the Micro, Small and Medium Enterprises (MSMEs) is one of the driving forces of economic growth.[1,2,3,4,5] East and Southeast Asian countries known as Newly Industrializing Countries (NICs) such as South Korea, Singapore and Taiwan. They have a good economic performance with high growth rate. Tambunan [6] mentioned that one of the dynamic characteristics and good economic performance with high growth rate is the performance of the SMEs. They are very efficient, productive and have a high level of competitiveness. The MSMEs in these countries are highly responsive to government policies in private sector development and increased export-oriented economic growth. Furthermore, the MSMEs also play a significant role in developing countries. In India, the MSMEs accounts for 32% of the total export value, and 40% of the output value of the manufacturing sector of the country. In some African countries, the growth of MSMEs recognize as crucial for increasing aggregate output and employment.

In Makassar City, Indonesia, the MSMEs have a relatively central role in the economic sector. However, they still can not develop optimally. Many the MSMEs are having problems and the strategy for undertaken so far is not able to overcome various problems faced. Haeruman [7] revealed, challenges for the business world, especially the development of MSMEs, cover a broad aspects, including improving the quality of human resources regarding management capabilities, organization and technology, entrepreneurial competence, wider access to capital, transparent market information, other input production factors, and a healthy business climate that supports innovation, entrepreneurship, and business practices and fair competition.

<sup>&</sup>lt;sup>b</sup>Department of Economics Education, Universitas Negeri Makassar, Indonesia

<sup>\*</sup>imranmusa1962@gmail.com

Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

This research will examine various aspects related to MSMEs development strategy based on the strength of local economic resources of Makassar City. As stated by Lasceviva [8], there are three factors that most determine the development and growth of MSMEs business. 1) Sectors, firms operating in different sectors of economic activity have different growths. At the aggregate level, firms in the manufacturing and service sectors grow higher than those operating in the trade sector. 2) Locations, MSMEs located in rural areas grow less rapidly than those located in urban areas. Likewise, those located within traditional markets, commercial districts, or along the road, grow faster than those located within the home. 3) Regional, MSMEs residing in regions with high per capita income levels are growing faster than regions with low per capita income.

This research will examine more specifically the characteristics (social, economic, demographic) of workers on MSMEs in Makassar City. This research focuses on that the approach of business empowerment, need to pay attention to social and economic aspects in each region, considering the MSMEs grow from the community directly. It can understand that the social and economic aspects of each region have differences so that this research remains interesting to do because it locates on different scope of areas and different problem-solving strategies as a result of different social and economic aspects.

As for the hypothesis in this writing is:

- 1. It assumes that the characteristics of workers in small industries in Makassar City are diverse, both regarding social, economic and demographic.
- 2. It alleges that social, economic, and demographic characteristics significantly affect the working hours of workers in small industries.

## 2. Experimental Details

The research has conducted in Makassar City, South Sulawesi, Indonesia. This city is consisting of 14 sub-Districts, namely Mariso, Mamajang, Tamalate, Rappocini, Makassar, Ujung Pandang, Wajo, Bontoala, Ujung Tanah, Tallo, Panakkukang, Manggala, Biringkanayya and Tamalanrea.

The population of this research is the overall MSMEs located in Makassar City (4,841 people) that spread over 14 Sub-Districts, while number of sample (110 people) was determined by using formula of Yamane [9] and selected by using Random sampling method. Furthermore, to analyze the data obtained, we used quantitative and qualitative analysis to prove the hypothesis proposed by using multiple linear regression analysis models (equation 1) and examine the verification of quantitative analysis, respectively.

### 3. Results and Discussion

The results of statistical tests (Table 1) show that the coefficient of multiple correlations of 0.528. It meant that the relationship between working hours at MSMEs in Makassar City with income, age, education, work experience and gender is very close. R square coefficient (R2) was 0,278. This meant that 27,8% work hour variation in MSMEs in Makassar City determined by income variable, age, education, work experience and gender, while 72.2% determined by other variables outside the model, such as the number of orders, side jobs, etc.

IOP Conf. Series: Journal of Physics: Conf. Series 1028 (2018) 012181

doi:10.1088/1742-6596/1028/1/012181

Based on the ANOVA table, the value of F-count was 7,248 with significance level 0.000. Because the significance level of 0,000 is much smaller than the probability of 0.05. Thus, the regression model can be used to predict the factors that affect the working hours of workers on MSMEs in Makassar City. In other words, overall independent variables have a significant effect on working hours of MSMEs in Makassar City, where the value of F-count (7,248) is bigger than the F-table value (2,29). With a significance level of 0.05 then the significant variables were income, age, education, work experience and gender. The means is the independent variables significantly affect the working hours of workers on MSMEs in Makassar City.

**Table 1**. Summary of The Results of The Data

Coefficient		T	Sig.	
Constant	7,703	6,706	0,000	
Income (Ln X <sub>1</sub> )	-0,221	-2,747	0,007	
Age (Ln X <sub>2</sub> )	-0,335	-1,996	0,049	
Education (Ln X <sub>3</sub> )	0,147	0,972	0,334	
Work Experience (Ln X <sub>4</sub> )	0,281	3,985	0,000	
Gender (D <sub>1</sub> )	0,517	4, 660	0,000	
Adjusted $R^2 = 0,240$ $R^2 = 0,278$	n = 100	F-count = <b>7,2</b> 4	F-count = <b>7,248</b>	

The research findings show that income, age, work experience, and gender have a significant influence on working hours. According to Gronau [10], there is a close relationship between working hours and income because the increase in income levels will result in time prices. Therefore, some people tend to increase work hours to earn a higher wage. The result research accordance with the results of research that has done by Bakotić and Babić [11] in Croatian Shipbuilding Company says there is a tendency of a negative relationship between working hours and age. The higher the level of education, the more work hours.

Anker and Hein [12] stated that workers with a high level of education allow workers to work in the modern sector with the work hours allocation particular and is relatively smaller than the working hours of low-educated workers. The result research accordance with the opinion expressed by Elliot and Jacobson [13] that with increased work experience, skills, knowledge, and training that a person will increase acceptance in the future.

The resulting research accordance with Troger and Verwiebe [14] in Switzerland for some family structure situations (marrying, unmarried, and having children) found that in all these family structures men seem to tend to work more hours than female. Filer [15] and Van Dyke [16] argue that female prefer investments in human capital which will result in high non-market activities, while male tend to invest in human capital with high income and not in nonmarket activities.

The development of MSMEs based on the strength of local economic resources, particularly those related to the characteristics of workers working in the MSMEs sector is a critical aspect because the development of MSMEs is also largely determined by the socioeconomic aspects of a region [17].

Internal resources and capabilities affect the determination of strategic choices made by companies when competing in their external business environments. The ability of the company also allows adding value in the customer value chain, product diversification or new market development. Several aspects of the theory have been formulated long before companies adapt existing resources within the framework of the academic theory. This concept became known as a resource-based view (RBV). Social, economic, and demographic aspects are aspects that can be part of RBV be part of RBV.

Rumelt [18], Barney [19] and Dierick & Cool [20] contributed to the development of subsequent strategic management RBV. Their concept focuses on the company's resources that can contribute to the sustained competitive advantage (SCA). Barney provides a formal overview of the resource level resource perspective. Organizational resources of value (worth), scarce, difficult to imitate, and can not be replaced can result in SCA. Follow Penrose's theory (1959) which emphasizes how resources contribute to diversification and how diversification must conform to the company's core competition to optimize performance. Penrose's theory provides insight into the expansion of the company into new products and markets. Resource-based views have been a mutual interest among management researchers and researchers in related fields.

Wernerfelt [21] explains that RBV is the basis of competitive advantage that primarily lies in a set of tangible or intangible assets of a company. RBV describes a company's ability to provide a sustainable competitive advantage when resources manage in such a way that what produce was difficult to imitate or create by competitors, which ultimately creates barriers to competition (Mahoney and Pandian) [22]. This view support by Peteraf [23]. She states, to transform advantage short-term competitive into a sustainable advantage, corporate resources must be heterogeneous and not easily displaced. The Peteraf statement support by many authors, among them Barney who supports the conclusion that a company achieves sustainable competitive advantage, through its unique resources, and this resource can not be purchased easily, transferred or replicated, and at the same time indirectly its scarcity provides benefits for the company.

RBV theory views the company as a collection of resources and strengths owned by the company. RBV focus on the company's ability to maintain a combination of resources that can not be owned or built in the same way by competitors. The different resources and capabilities of a company with a competitor will provide a competitive advantage for the company. The RBV assumption is how the company can compete with other companies to gain a competitive advantage in managing its resources, by the company's capabilities. The RBV theory states that sustainable competitive advantage rests on valuable, rare, inimitable and non-substitutable (VRIN) organizational resources in organizational settings that have policies and procedures to exploit resources (Barney & Clark [24]; Schroeder [25]; Kraaijenbrink, Spender, & Groen [26]). The RBV platform sharing frameworks and theories include core competencies (Hamel & Prahalad) [27], dynamic capabilities (Helfat & Peteraf [28]; Teece, Pisano, & Shuen [29]) and a knowledge-based outlook (Grant) [30].

The perspective of this research is that workers are one of the most important economic resources for MSMEs. Related to workers, Hoselizt [31], revealed that in a development process in a region, reflected in the rate of GDP growth or an increase in income per capita, the contribution of MSMEs in a country is changing. The contribution of MSMEs in the analysis is in the form of the share of its workers as a percentage of the total workers in the manufacturing sector, and the share of output or value added value in the formation of aggregate output or national income of the country. This Hoselizt research indicates that structural changes in the manufacturing sector occur in some stages following the change in real income level per capita is still very low, whereas MSMEs is the smallest scale of industrial enterprises, which is very dominant in the manufacturing sector. While at the level of development that has been very advanced large-scale industry is more dominant.

The flow of economic circulation shows that the household is a party that plays a role in generating economic resources. Becker [32] argues that households in producing units of produce combine capital goods and raw materials along with workers and time to produce final goods. Recall that gender differences influence the participation of household members. Women play a dual role: domestic role (taking care of the household and performing reproduction function) and public role (role in a production that is work in workers market sector.

Furthermore, Becker [32] proposed a new approach to the theory of time allocation with different activities. Becker's response to Gronau's theory is that total time differentiates from productive working hours and productive time used for leisure such as watching tv, and other activities. Becker distinguishes the usefulness of time based on how much the hourly cost per activity performed. Therefore the current time is more cautious than the past time.

#### 4. Conclusions

Characteristics of social (education), economy (income and work experience), demographic (age and gender) of workers at MSMEs in Makassar City very variety. The influence of income, age, and work experience is very significant to the working hours of MSMEs workers. However, education has no significant effect on working hours of workers on MSMEs. Income and age have a negative effect while education, work experience, gender have a positive effect on working hours.

Influence of factors that affect a long time to work in the formal sector in Makassar City consist of:

- 1. Income is increasing; the hours are decreasing.
- 2. The older the worker, the working hours' decreases.
- 3. The level of education is not very influential on MSMEs.
- 4. The more work experience, the more work hours.
- 5. There is a significant influence between gender and working hours.

The results of this research may still be developed, either by researchers themselves or other researchers because the problems faced by MSMEs sectors is very complex. In addition, the policies pursued by the government that concerns the sector, there is still much more to obtain a deeper scientific research.

## Acknowledgments

We would like to thank the Directorate of Higher Education, Ministry of Research, Technology and Higher Education, Republic of Indonesia for their financial support of this research. We thank the Research Institution of Universitas Negeri Makassar (UNM), and to anonymous reviewers for excellent comments and suggestions for this paper.

### References

- [1] Schreyer P 1996 SMEs and Employment Creation: Overview of Selected Quantitative Studies in OECD Member Countries, *OECD Science, Technology and Industry Working Papers*, 1996/04, OECD Publishing.
- [2] Romijn H 2001 Technology Support for Small Industry in Developing Countries-A Review of Concepts and Project Practices, *Oxford Development Studies*, **29** (1): 57-76.
- [3] Almeida P 2004 Small Firms and Innovation, Business Dynamics, Entrepreneurship, and the Macro-economy in the 21st Century. *Conference Proceedings* March 26, 2004. U.S. Small Business Administration Office of Advocacy and The Ewing Marion Kauffman Foundation.
- [4] Harvie Charles 2008 Regional Integration in Asia and the Contribution of SMEs a Review of the Key Issues and Policy Imperatives. *International Economics Studies* **34** No. 1 (New Issue) 19-44.
- [5] Hu M W 2010 SMEs and Economic Growth: Entrepreneurship or Employment. *ICIC Express Letters ICIC International* **4** Number 6(A).
- [6] Tambunan T 2012 *Usaha Mikro Kecil dan Menengah di Indonesia: Isu-isu penting* (Jakarta: LP3ES).
- [7] Haeruman H 2000 Peningkatan Daya Saing UMKM untuk Mendukung Program PEL. *Makalah Seminar Peningkatan Daya Saing* (Jakarta: Graha Sucofindo).
- [8] Lesceviva M 2004 Rural Entrepreneurship Success Determinant, *Unpublished Working Papers*, Faculty of Economics, Latvian University of Agriculture, Eksjo, Latvian.
- [9] Yamane T 1967 Statistics: An Introductory Analysis, 2nd Edition (New York: Harper and Row).
- [10] Gronau R 1997 The Theory of Home Production: The Past Ten Years *Journal of Labor Economics.*, **15**(2):197–205.
- [11] Bakotić D and Babić T 2013 Relationship between Working Conditions and Job Satisfaction: The Case of Croatian Shipbuilding Company. *International Journal of Business and Social Science*, **4** No. 2.
- [12] Anker R and Hein C 1985 Why Third World Urban Employers Usually Prefer Men, *International Labour Review* **124** No. 1.

- [13] Elliott R K and Jacobson P D 2002 The Evolution of the Knowledge Professional. *Accounting Horizons*, **16** N1.
- [14] Troger T and Verwiebe R 2015 The Role of Education for Poverty Risks Revisited: Couples, Employment and Profits from Work–family Policies, *Journal of European Social Policy* **25(3)** 286–302.
- [15] Filer R K 1985 Male-Female Wage Differences: The Importance of Compensating Differentials. *Industrial & Labor Relations Review.* **38** #3 426-437.
- [16] Van Dyke J 1999 Does it Pay to be a Man? A Study of Pay Differentials Between College Graduates. *Research Honors Project* Illinois Wesleyan University.
- [17] Barney J 1986 Organizational Culture: Can It Be a Source of Sustained Competitive Advantage?. *Academy of Manajement Review* 11: 656-665.
- [18] Rumelt R P, Schendel D. and Teece D J 1991 Strategic Management and Economics, *Strategic Management Journal* **12** 5-29
- [19] Barney J 1991 Firm Resource and Sustained Competitive Advantage, *Journal of Manajement* 17: 99-120.
- [20] Dierickx I and Cool K 1989 Asset Stock Accumulation and Sustainability of Competitive Advantage, *The Institute Management Sciences*, **35** No. 12 1504-1510.
- [21] Wernerfelt B 1984 A Resource-based View of The Firm. *Strategic Management Journal* **5** 171–180.
- [22] Mahoney J T and Pandian J R 1992 The Resource-Based View Within the Conversation of Strategic Management. *Strategic Management Journal* **13** No.5 363 380.
- [23] Peteraf M A 1993 The Cornerstones of Competitive Advantage: A Resource-Based View. Strategic Management Journal 14 (3) 179–191.
- [24] Barney J B and Clark D N 2007 Resource-Based View Theory: Creating and Sustaining Competitive Advantage (New York: Oxford University Press Inc.).
- [25] Schroeder R G et al 2002 A Resource-Based View of Manufacturing Strategy and the Relationship to Manufacturing Performance *Stratetic Manajement Journal* **23** 105-117.
- [26] Kraaijenbrink J, Spender J C and Groen A J 2010 The ResourceBased View: A Review and Assessment of Its Critiques. *Journal of Management* **36** 349.
- [27] Hamel G and Prahalad C K 1994 *Competing for the Future* (USA: Harvard Bussiness School Press).
- [28] Helfat C E and Peteraf M A 2003 The Dynamic Resource-Based View: Capability Lifecycles. Strategic Management Journal 997-1010.
- [29] Teece D J, Pisano G and Shuen A 1997 Dynamic Capabilities and Strategic Management. Strategic Management Journal 187:3 509-533.
- [30] Grant R 1991 The Resource-based Theory of Competitive Advantage: Implications for Strategy Formulation, *California Management Review* **33** 3 114-135.
- [31] Hoselitz B F 1959 Small Industry in Underdeveloped Countries. *Journal of Economic History* 19 (4)
- [32] Becker G S 1965 A Theory of The Allocation Time *The Economic Journal* **75** 299: 493-517.