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## ASSESSING THE PROFITABILITY OF SMALL AND MEDIUM-SIZED WOOD FURNITURE BUSINESSES IN ETHIOPIA

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**Abstract.** This study focuses on the issue of profitability within the small and medium wood industries in Ethiopia. Profitability stands as a cornerstone for the advancement of contemporary industries and is a pressing concern for policymakers. The primary aim of this study is to determine the level of profitability and the factors influencing it in small and medium-scale wood enterprises. To conduct the study, four key cities - Addis Ababa, Bahir Dar, Hawassa, and Jima - were purposively selected. Data were gathered from 170 industries across these cities and subjected to analysis, yielding pertinent results. As expected, the wood industries in Ethiopia lacking profitability and among the 170 surveyed, 59.4% industries were not profitable. This is because majority of workers in Ethiopia's wood industry lack formal or on-the-job training both prior to and during employment. Moreover, the machinery and equipment they operate are outdated, and they lack the necessary skills for their proper utilization. Additionally, challenges such as insufficient raw materials, limited capital, and poor market connections were identified as significant obstacles to profitability. To tackle these challenges and bolster profitability, continuous technical and managerial training for workers, financial assistance for acquiring modern machinery, enhancements in production processes, sales strategies, and market linkage facilitation are recommended.

**Keywords:** *profitability, furniture, Ethiopia, small and medium scale, wood industries.*

**Rezumat.** Acest studiu se concentrează pe problema rentabilității în industriile mici și mijlocii ale lemnului din Etiopia. Rentabilitatea reprezintă o piatră de temelie pentru progresul industriilor contemporane și este o preocupare presantă pentru factorii de decizie. Scopul principal al acestui studiu este de a determina nivelul de profitabilitate și factorii care îl influențează în întreprinderile mici și mijlocii. Pentru a efectua studiul, patru orașe cheie - Addis Abeba, Bahir Dar, Hawassa și Jima - au fost selectate în mod intenționat. Datele au fost colectate de la 170 de industrii din aceste orașe și supuse analizei, obținând rezultate pertinente. După cum era de așteptat, industriile lemnului din Etiopia nu au fost profitabile. Dintre 170 IMM chestionate, 59,4% nu au fost profitabile. Acest lucru se datorează faptului că majoritatea lucrătorilor din industria lemnului din Etiopia nu au pregătire formală sau la locul de muncă atât înainte, cât și în timpul angajării. În plus, utilajele și echipamentele pe care le operează sunt depășite și le lipsesc abilitățile necesare

pentru utilizarea lor corectă. În plus, provocări precum materiile prime insuficiente, capitalul limitat și conexiunile slabe cu piața au fost identificate ca obstacole semnificative în calea profitabilității. Pentru a face față acestor provocări și a spori profitabilitatea, se recomandă pregătirea tehnică și managerială continuă pentru lucrători, asistență financiară pentru achiziționarea de mașini moderne, îmbunătățiri ale proceselor de producție, strategii de vânzare și facilitarea legăturilor cu piața.

**Cuvinte cheie:** *rentabilitate, mobilier, Etiopia, scară mică și medie, industria lemnului.*

## 1. Introduction

Small and medium-sized enterprises (SMEs) are acknowledged globally as crucial drivers of economic advancement [1]. Particularly in developing countries like Ethiopia, SMEs play a pivotal role in propelling national development by contributing to economic expansion and alleviating poverty [2]. Among these enterprises, furniture production stands out as a thriving sector within the wood industry [3]. In Ethiopia, small-scale furniture workshops predominantly dominate the wood industry [4]. SMEs are characterized as autonomous businesses with limited market share, typically managed by their owners or co-owners [3]. There is no universally accepted definition of SMEs since each country has its own classification based on industry regulations within its own economic system [5]. Criteria for classification typically include factors such as employee count, business size, job creation capability, and capital investment [6]. In Ethiopia, SMEs are categorized into three main groups: micro-enterprises with up to 5 enterprises with capital between Ethiopian Birr (ETB) 500,000 and 250 employees [3, 7, 8]

Ethiopia has had more than a hundred years of experience in production of wood and wood products. On the other hand, this industry sector is not as developed as it should be, and it will eventually die as a result of both internal and external problems [9]. The furniture industry is currently confronting its biggest challenge in history as a result of the quickly evolving business environment in terms of global competition, market performance, and evolving technologies [10]. Although the production of wood furniture has relatively vast potential to boost the Ethiopia's Gross domestic product (GDP) by utilizing a large quantity of local resources, it is now less profitable and competitive [11].

Profitability is important for the improvement and development of modern industries and contributing to the country's economy and are the focus of policy issue in many countries [12]. It indicates an enterprise's ability to generate earnings using its own funds or capital, showcasing its operational performance over a specific timeframe and the efficacy of its management [13,14]. Profitability has a major influence on the growth of SMEs, and that the absence of enterprise profit appears to be a barrier to their expansion [15]. The three primary factors that contribute to low profitability of Micro, Small, and Medium-Sized Enterprises' (MSMEs): insufficient use of resources, insufficient cash management practices, and difficulties in producing equity returns [16]. It was claimed that MSEs' incapacity to use financial statement analysis, funding shortfall, unplanned withdrawals of money for personal use, and poor working capital management are all contributing factors to their decreasing profitability [17].

The profitability of Ethiopia's furniture industry has not been sufficiently studied, lacking empirical evidence and documented information. The absence of this information hinders the ability of small and medium-sized furniture workshops to measure their performance within the industry, which is crucial for assessing financial stability [3].

Industries in Ethiopia, including wood-based sectors, do not exhibit a steady trend of profitability, and some industries particularly the wood-based industries are not even profitable due to various factors [18]. Thus, the aim of this investigation was to evaluate the level of profitability, identify factors influencing profitability, and reveal the challenges encountered by small and medium-scale wood industries.

## 2. Materials and Methods

The study was conducted in four (4) major cities of Ethiopia: Addis Ababa, Hawassa, Jima and Bahir Dar. These cities were purposively selected for this study because of their higher level of business activities, level of wood demand and large number of furniture manufacturers which makes them a good focal point for this study. A cross-sectional survey design was employed to meet the study's objectives, documenting monthly and yearly expenditures, annual revenues, and challenges encountered by furniture workshops in these cities. Fifty small and medium-sized furniture workshops were purposively selected from each city, totaling 200 workshops for the entire study. Among these the data collected from 30 workshops were incomplete and then rejected. Accordingly, from Addis Ababa 47, Jima 43, Bahir Dar 39, and Hawassa 41 a total of 170 furniture industries are determined and included in the study, Table 1.

Table 1

**Number furniture workshops in four major cities**

<b>Name of town or city</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Addis Ababa	47	27.65	27.65
Bahir Dar	39	22.94	50.59
Hawassa	41	24.11	74.70
Jimma	43	25.30	100
<b>Total</b>	<b>170</b>	<b>100.0</b>	

*Source: developed by the authors based on the survey data, 2023.*

Quantitative and qualitative data were gathered from various primary and secondary sources. Primary data were acquired directly from enterprises through a combination of questionnaires and interviews. Face-to-face interviews were conducted with owners or managers of selected furniture workshops, covering topics such as monthly and annual costs, revenue from product sales, types of machinery used, resource procurement sources, market connections, and production challenges. Secondary data was collected from Central Statics Agency (CSA), Custom and Revenue Authority and different wood enterprises in Addis Ababa. In addition, different related literatures such as textbooks, manuals, journals and reports were reviewed.

In this research, both descriptive and inferential, or econometric, techniques were employed for data analysis. The quantitative and qualitative data gathered were encoded and input into a computer for analysis utilizing Statistical Packages for Social Sciences (SPSS) software. Subsequently, the data underwent editing and cleansing processes. Descriptive statistics were applied to analyze the data using Excel software. The expenses of resources and the revenues generated from products were aggregated and depicted in frequency distributions, then illustrated through graphs. The primary variables of interest in the study encompass the output produced by firms, labor costs (in terms of wages and salaries), capital investments (reflected in the value of fixed assets), as well as consumption of wood and other materials.

The profitability of the firms was assessed using various ratios as follows:

$$\text{Gross profit margin ratio} = (\text{Gross profit}/\text{Sales}) \times 100\%, \quad (1)$$

$$\text{Operating profit margin ratio} = (\text{Operating profit}/\text{Sales}) \times 100\%, \quad (2)$$

$$\text{Net profit margin ratio} = (\text{Net profit}/\text{Sales}) \times 100\%, \quad (3)$$

where:

Gross profit = Sales – Cost of goods.

Operating profit = Gross profit – Selling and Administrative expenses.

Net profit = Operating profit – Income tax.

Cost of goods encompasses expenses directly associated with the manufacturing of products, such as timber costs, electricity, equipment, and labor. Administrative expenses include salaries, wages, rent, utilities (e.g. electrical payments), office supplies, insurance, and transportation costs.

### 3. Results of the study

The main aim of this study is to examine the financial viability of furniture workshops located in specific cities across Ethiopia. As expected, the profitability of Ethiopia's wood industries is lower than expected. Most of respondents stated that as their industry is not profitable well and the analyzed data indicated the profitability of major industries are low 101 (59.4%), Table 2.

Table 2

**Profitability of furniture industries**

Description	Frequency	Percent	Cumulative Percent
Low	101	59.4	59.4
Medium	60	35.3	94.7
High	6	3.5	98.2
Total	167	98.2	
System	3	1.8	
<b>Total</b>	<b>170</b>	<b>100.0</b>	

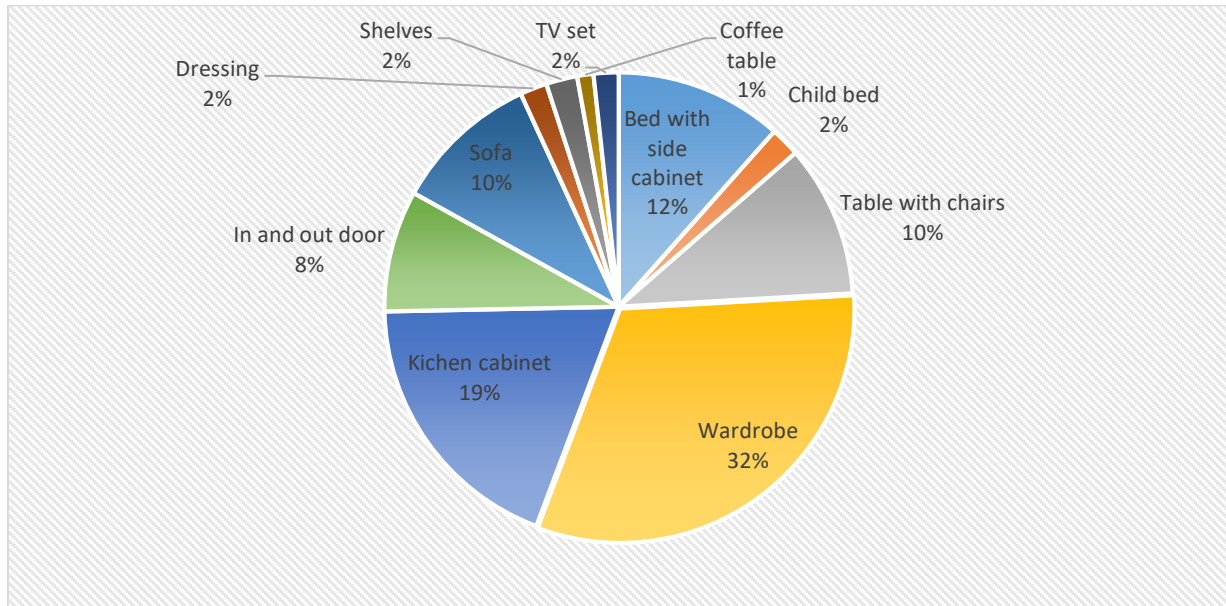
Source: Developed by the authors on the bases of [3,12].

Majority of respondents in wood industries agreed that their profitability is low because they are not qualified and efficient to use the resources, they get to produce the products they want at the required level and quantity for various reasons. As mentioned from respondents the workers engaged in the work are not professionally trained, the machines and equipment they work on are not modern, the production and sales area are not convenient, the lack and quality of raw materials, insufficient capital and credit, limited market connections, and overarching inflationary pressures are the main reasons.

#### 3.1 Yearly Incomes Generated by Small to Medium-Sized Furniture Workshops

The yearly earnings from small and medium furniture workshops in Ethiopia showed fluctuations, as shown in Figure 1. Wardrobes generated the most revenue, accounting for 32% of the total annual income, followed by kitchen cabinets at 19%, and then beds with side cabinets at 12%, Figure 1. Dining table with chairs (10%) and sofa (10%) and indoor (8%) were the other product in generating revenue in furniture workshops, Figure 1. Child beds, dressing table shelves TV sets and coffee table furniture were the products

contributing to generate revenue particularly in small scall furniture workshops, Figure 1. Small-sized furniture workshops achieve their highest revenue from the sale of items such as beds and smaller furniture sets like cup sets. On the other hand, medium-sized furniture workshops generate their highest revenue through the sale of larger furniture pieces like wardrobes and kitchen cabinets. Additionally, medium-sized furniture workshops exhibit greater profitability in comparison to their smaller counterparts.

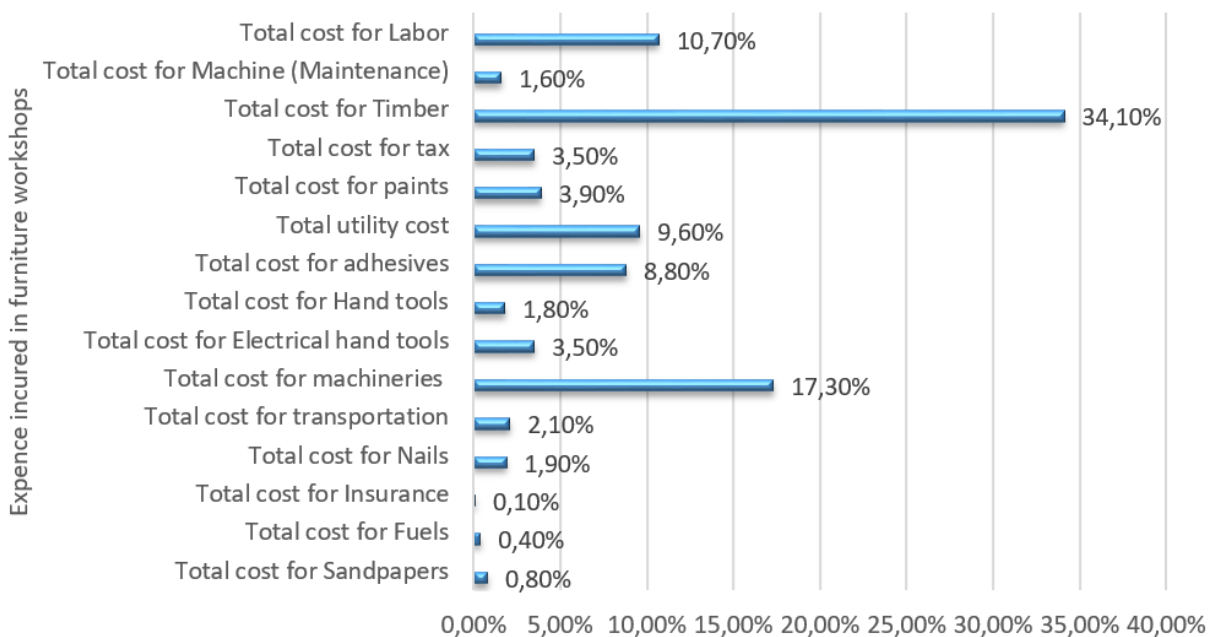


**Figure 1.** The mean income generated from various items produced by furniture workshops.

Source: Developed by the authors based on the survey data, 2023.

### 3.2. Expenses incurred for the resources utilized in furniture workshops

The yearly expenses for the materials utilized in small and medium-sized furniture workshops fluctuated, as illustrated in Figure 2.



**Figure 2.** The proportional expenses associated with materials utilized in a small and medium size furniture workshop.

Source: Developed by the authors based on the survey data, 2023.

Timber expenses stood out as the highest at 34.1%, trailed by machinery at 17.3%, and labor at 10.7%, Figure 2. Others significant costs in furniture workshops of Ethiopia are, utility cost, adhesives, paints including varnish costs, electrical hand tools (such as hand drills, jig saws, routers and nail shooters), tax payments and transportation cost; 9.6%, 8.8%, 3.9%, 3.5%, 3.5%, 2.1% respectively, Figure 2.

### 3.3. The Profitability of Furniture Workshops in different cities

The results indicated that, overall, the most profitable furniture workshops were located in Addis Ababa, with the exception of Jimma town where the gross profit margin ratio was the highest. Specifically, when considering profitability ratios, the operating profit margin ratio and net profit margin ratio were notably higher in Bahir Dar at 12% and 7.9% respectively, compared to Hawassa where they stood at 11.5% and 7.8%. In summary, Addis Ababa boasted the highest profitability at 8.5%, followed by Jimma town at 8.2%, and Bahir Dar slightly surpassing Hawassa at 7.9% and 7.8% respectively, since the net profit margin ratio offers a comprehensive assessment of profitability, Table 3.

Table 3

Profitability ratios (%) in different cities			
City	Profitability ratios in %		
	Gross profit margin ratio	Operating profitability ratio	Net profit margin ratio
Addis Ababa	20.1	13.4	8.5
Hawassa	19.3	11.5	7.8
Bahir Dar	17.8	12.0	7.9
Jimma	22.3	12.9	8.2

Source: Developed by the authors based on [3].

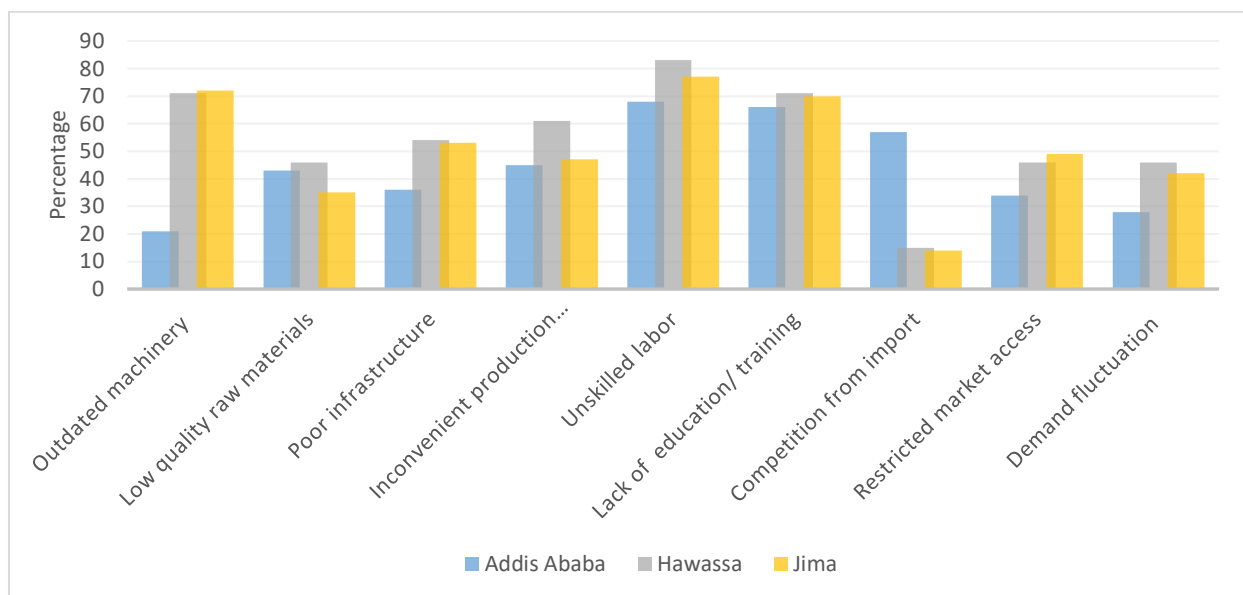
Based on insights gathered from various industries in selected Ethiopian cities, small and medium-sized wood furniture enterprises encounter numerous obstacles, ranging from operational issues to market-related limitations. These challenges significantly impact profitability and impede the potential for expansion and growth within the wood furniture sector. Many SMEs in these cities face struggles in securing sufficient funding for their operations, which hampers their ability to invest in modern machinery and equipment. The rising costs, scarcity, and quality issues of raw materials, such as lumber and other essential inputs like glue, paints, and nails, are notably affecting the profitability of wood furniture businesses.

Inadequate infrastructure, including unreliable power supply, poor transportation networks, inconvenient production and sales areas, and limited access to utilities like water, disrupt production schedules and escalate costs for wood furniture manufacturers. Owners of furniture firms highlight the impact of inefficient, unreliable, unsafe, and costly infrastructure on their business performance. This is in line with findings of different scholars. For instance, scholars have highlighted the critical role of location in determining the sales and revenue of small-scale enterprises, indicating that entrepreneurs benefit from operating in well-established residential areas [19]. Additionally, it has been emphasized by other researchers that robust infrastructure facilities have a positive impact on reducing operational costs [20].

Furthermore, skilled labor, especially in specialized fields such as furniture making and design, is often scarce across all selected cities. Many workers have not received formal

training either before or after being employed in these industries. The lack in formal education and the absence of on-the-job training are prominently evident across all cities, with approximately 78% and 72% respectively (as indicated in Figures 4). 60%, 55%, and 54% of respondents from industries in four cities indicated the lack of modern machinery, inconvenient production and sales areas, and inadequate infrastructure as their primary challenges (as shown in Figure 4). Survey results from all selected cities highlight the prevalence of outdated machinery and equipment in the industry. This issue is most pronounced in Bahir Dar, followed by Jima city, while it is least in Addis Ababa. The absence of automation and reliance on obsolete machinery led to inefficiencies and decreased productivity as well as profitability within Ethiopia's furniture firms. Despite having experienced personnel in certain sectors, many lack the requisite skills to operate outdated machinery proficiently. Consequently, employers face difficulties in attracting and retaining skilled workers, potentially affecting product quality and innovation.

Ethiopian wood furniture industries face stiff competition from imported products, often cheaper due to economies of scale and lower production costs in other countries. According to the survey result stiff competition was the highest in Addis Ababa and the least in Jima town, Figure 4. Limited market access and distribution channels further challenge SMEs in reaching domestic and international customers effectively. Failure to adhere to international quality standards restricts market access and limits export opportunities. Additionally, Furniture industries in all cities were indicated that they experience seasonal fluctuations in demand, leading to production surpluses or shortages. Managing production schedules to meet fluctuating demand levels were a significant challenge for SMEs.



**Figure 4.** Key challenges in different wood industries.

*Source: Developed by the authors on the bases of [13,14,16].*

#### 4. Conclusion

The survey findings revealed that Ethiopia's wood industry's profitability falls short of expectations. This disparity can be attributed to several factors, including the lack of professional training among workers, outdated equipment, inadequate production and sales facilities, a shortage of high-quality raw materials, limited access to capital and credit,

a lack of market connections, and the overarching issue of inflation. Interestingly, medium-sized [19] furniture workshops showed higher profitability compared to smaller ones. Medium-sized workshops generated more revenue primarily through the sale of larger furniture items like wardrobes and kitchen cabinets, whereas small-scale workshops earned the most from smaller items such as cup sets. Notably, Addis Ababa exhibited the highest profitability among furniture workshops, followed by Jimma town.

Small and medium-sized furniture workshops experience considerable fluctuations in their yearly spending. The majority of their budget is dedicated to purchasing raw materials, primarily timber. Insights gleaned from industry sources across selected cities indicate that Ethiopian small and medium-scale wood furniture enterprises encounter several challenges, ranging from operational issues to market-related constraints. Mitigating these obstacles necessitates a concerted effort involving policymakers, industry stakeholders, and SMEs themselves to enhance access to financing, develop infrastructure, provide skills training, facilitate market entry, and promote the adoption of sustainable practices.

**Conflicts of Interest:** The authors declare no conflict of interest.

#### References

1. Karadağ, H. The role of SMEs and entrepreneurship on economic growth in emerging economies within the post-crisis era: An analysis from Turkey. *Journal of Small Business and Entrepreneurship Development* 2016, 4, pp. 22-31.
2. Hailu, A.Y.; Venkateswarlu, P. Financial Management Practices of Micro and Small Enterprises in Addis Ababa, Ethiopia. *Financ Manage* 2016, 2(3), pp. 50-64
3. Asiket, J. Profitability of small and medium scale furniture workshops in Uganda (Doctoral dissertation, Makerere University), 2019.
4. Kaba, G.; Bekele, T.; Limenih, M. Actual and Potential Industrial Uses of Eucalyptus Wood in Addis Ababa, Ethiopia. *Int J Eng Sci (Ghaziabad)* 2018, 7, pp. 74-79.
5. Banwo, A.O.; D.J., Onokala, U. The determinants of location specific choice: small and medium-sized enterprises in developing countries. *Journal of Global Entrepreneurship Research* 2017, 7, pp.1-17.
6. Hagos, Y. H. Small and Medium Enterprise in Ethiopia: The Challenges and Prospects. Addis Ababa (MSc thesis, Addis Ababa university), 2012.
7. Zhang, Y.; Ayele, E.Y. Factors affecting small and micro enterprise performance with the mediating effect of government support: Evidence from the Amhara Region Ethiopia. *Sustainability* 2022, 14(11), 6846.
8. Abate, T.W.; Sheferaw, H.E. Micro, small and medium enterprises and their linkage with key actors in Ethiopia: developing entrepreneurial ecosystem mapping. *Journal of Innovation and Entrepreneurship* 2023, 12(1), 71.
9. Birhan, G. Competitiveness Analysis of Ethiopian Furniture Industry. Unpublished MA Thesis, Addis Ababa University School of Mechanical and Industrial Engineering, 2014.
10. Atkinson, R.D. Competitiveness, innovation and productivity. *The Information Technology & Innovation Foundation*, 2013, pp. 2-7.
11. Tafesse, A.; Worku, A.; Mekonnen, E.; SNNPR, E. Wood Furniture Value Chain Analysis: The Case of Small and Medium Scale Wood Manufacturing Industries in Wolaita Sodo, Ethiopia. *Journal of Marketing and Consumer Research* 2016, 25, pp. 29-41.
12. Kumburu, N. P; Kessy, J.; Mbwambo, S. Profitability of SIDO supported small scale furniture industries against imported furniture in Dar Es Salaam and Arusha regions, Tanzania. *East African Journal of Social and Applied Sciences* 2019, 1(2), pp. 34-48.
13. Nishanthini, A.; Nimalathasan, B. Determinants of profitability: A case study of listed manufacturing companies in Sri Lanka. *Journal of Management* 2013, 8(1), pp. 42-50.
14. Raharja, S. U. J; Kostini, N. Impact of profitability on the growth of small and medium enterprises in the culinary sub-sector of the creative industry in Bandung City, Indonesia. *Review of Integrative Business and Economics Research* 2019, 8, pp. 75-81.



15. Pandey, D. L. Impact of cash management on profitability in small manufacturing organization. *Pravaha* 2019, 25, pp. 53-58.
16. Margaretha, F.; Supartika, N. Factors affecting profitability of small medium enterprises (SMEs) firm listed in Indonesia Stock Exchange. *Journal of Economics, Business and Management* 2016, 4(2), pp. 132–137.
17. Alade, T.A. Poor Working Capital Management Remain Major Cause of Business Failure. *International Journal of Research and Innovation in Social Science* 2024, 8(1), pp. 1120-1124.
18. Tewabe, K. Tax Audit Effectiveness in Addis Ababa, Ethiopia: Tax Auditors' perceptions in Ethiopian Revenues and Customs Authority (ERCA) Eastern Addis Ababa Branch Office (Doctoral dissertation, St. Mary's University), 2016.
19. Mulugeta, H. Assessing the Factors Affecting the Performance of Micro and Small-Scale Enterprises the Case of Yeka Sub-City, Addis Ababa (Doctoral dissertation, St. Mary's University), 2014.
20. Muchie, M.; Bekele, E. *Promoting micro, small and medium Enterprises (MSMEs) for sustainable rural Livelihood*. Institut for Historie, Internationale Studier og Samfundsforhold, Aalborg Universitet, 2009.

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**Submission of manuscripts:**

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