



IMPLEMENTATION OF ACCOUNTING INFORMATION SYSTEMS BY SMALL AND MEDIUM ENTERPRISES IN BANYUMAS

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ABSTRACT

The purpose of this study is to identify a map of the SME sector in the region and the understanding/appreciation of the owner or manager of SMEs towards accounting information systems. Then identify the needs of the SMEs sector in the regions related to the financial information system. Furthermore, identify all activities related to SME financing in each regional sector. This study is a survey research data collection via questionnaires. The sample study was 25 SMEs sector in the regions that are already exporting or potentially exporting in the region of Indonesia. The data were analyzed using the descriptive analysis method. The results of this study indicate that the SME sector in the regions does not yet utilize the accounting information system well; even some SMEs have not done the appropriate financial reporting standards requiring comprehensive financial information system development. With comprehensive financial information systems, SME management can generate financial statements following applicable regulations and standards and disseminate such statements more easily.

Keywords: accounting information systems, SMEs, sector regional featured, Indonesia.

INTRODUCTIONS

Accounting information systems (AIS) guide the best action in allocating scarce resources in business and economic activity. AIS can help businesses, especially SMEs, overcome short-term problems in financing, expenditures, and cash flows by applying the monitoring and control mechanism (Deaconu and Buiga 2015; Kunttu and Torkkeli 2018; Berk 2017). Applying the accounting information can help SMEs in a very dynamic and competitive environment integrate the operational elements into long-term strategic planning (Gimede 2004; Burch 2018; Whah and Shiang 2018; Kunttu and Torkkeli 2018).

Initiative to standardize financial reporting has been characterized by the launch of standard for small and medium entities in the International Financial Accounting Standards. To ensure that the standard could be adopted in Indonesia, the Indonesian Institute of Accountants has issued Financial Accounting standards for Entities Without Public Accountability (SAK-ETAP). These standards are expected to guide small and medium-sized companies in making financial reports



transparent and accountable. However, the limited ability of human resources owned SMEs in financial reporting is a national problem that needs the attention of all parties. This limitation is one of the significant obstacles faced by the SME sector in financial reporting, which weakens their health insurance at financial institutions.

Banyumas is one area in Indonesia with some of the leading sectors of SME export potential. One of the obstacles to access to finance for SMEs is the absence of standardized financial statements. To increase the export opportunity, it is necessary to reform the internal and external factors of a business. One internal factor that needs special attention is the accounting information system. With this background, it is necessary to do an in-depth and ongoing study analyzing the roots of the problems in preparing accounting information systems following SAK-ETAP.

Research on accounting information systems in SMEs has been studied by (Azizah 2017; Hosain 2019; Assrfa, Rao, and Yohannes 2020; Ermawati and Arumsari 2021). This research focuses on the factors that influence accounting information systems in SMEs with various indicators and results. However, in contrast to this research, it focuses on mapping, understanding the system, system requirements, and SME financing descriptively. In addition, what distinguishes this research is the time, place, and sample. Therefore, these study objectives are to identify a map of the SME sector in the region and the understanding/appreciation of the owner or manager of SMEs towards accounting information systems. Then identify the needs of the SMEs sector in the regions related to the financial information system. Furthermore, identify all activities related to SME financing in each regional sector.

LITERATURE REVIEW

The financial report is one form of management accountability to stakeholders. Financial statements should give an accurate picture of the financial condition of an organization. The importance of the quality of the financial statements is also supported by some research which states that the quality of information plays an essential role in achieving an organization's success in this competition era (Dasewicz, Simon, and Ramanujam 2020; Bernhardt, Dickenson-Jones, and De 2017; Burch 2018; Gimede 2004).

An accounting information system is a system to record, usually based on computers, which combines the principles and concepts of accounting to gain information systems and will be used to analyze and record business transactions. The outputs of the accounting information systems are the user's financial statements and accounting data. An accounting information system is essential for all organizations, even for-profit; they certainly need a system of accounting information. An accounting information system is designed to perform the organization's activities and operations and provide information to the user regarding the organization or stakeholder information (Batubara 2019; Dasewicz, Simon, and Ramanujam 2020). Combination or interaction between man, technology, and engineering allows organizations to overcome the problems that arise in the organization (Gou and Huang 2019; Xu, Zhao, and Yang 2019; Dasewicz, Simon, and Ramanujam 2020).



Financial accounting is the primary source of information for the management of SMEs. Research results showed that SMEs have limited management information and low control ability and the decision was basically made on an ad hoc basis (Ali, Gongbing, and Mehreen 2018; Okello Candiya Bongomin et al. 2017; Rasheed and Siddiqui 2019). Managers' awareness of the importance of the financial aspect is very diverse, and the use of computers to prepare accounting information for management is not performed optimally. Instead, some research stated that the manager would acquire effective control and information in a way that is not very formal so that decision-making will be more sophisticated and can be anticipated from the beginning. There is a need for further research to examine the perception of SMEs on the importance of accounting information, especially information beyond the scope of the financial accounting system (Hong and Sullivan 2009; Gimede 2004; Bernhardt, Dickenson-Jones, and De 2017; Berk 2017).

Several studies have investigated the impact of contextual factors such as environmental conditions, strategic options, and organizational structure of the accounting information system design (Choi 2003; Lee, Narjoko, and Oum 2017; Adam and Lestari 2017; Charoenrat and Harvie 2017). Several other researchers have been studying the relationship between contextual factors and the design of accounting information systems for organizational performance. These studies have examined the impact of accounting information system design against external factors, but it is unfortunate because the study was not extended to the harmonization of accounting information system design relationship with the internal factors, namely the harmonization between the requirements of accounting information processing capabilities and information systems to generate information.

Financial statements must comply with specific characteristics. The qualitative characteristics of a financial report include (1) Understandability; to be understood, and the financial statements must be prepared and written in the appropriate form and language comprehension level users. (2) Relevance, relevant financial information is information that could affect its decision. (3) Reliable, reliable financial information is information that is free from misleading understanding and material errors and presented more honestly than it should be presented or which may reasonably be presented. (4) Comparability; financial statements with comparable quality must mean that the information in the financial statements can be compared with the previous period or comparable to a similar work organization or unit within the same period. To meet these quality criteria, consistency in applying accounting principles from year to year is needed.

In order to produce quality financial statements, the SMEs should always incorporate the four qualitative characteristics to be considered in preparing financial statements (Rasiah and Thangiah 2017; Salimzadeh and Courvisanos 2015; Kunttu and Torkkeli 2018). In order to be comparable, of course, all SMEs should apply the principle of accounting for their activities equally and consistently. Interpretation of accounting principles and application of accounting methods can lead to a lack of comparability of financial statements.



METHODS

The study is a survey research sector to SMEs in the regions that exist in Banyumas region, Indonesia, by using questionnaires as the main instrument. The survey was conducted to identify SMEs' need for a financial information system. The sample study was 25 SMEs sector in the regions that are already exporting or potentially exporting in the region of Indonesia. This identification is intended to obtain information about the type and form of the required financial information system to be adjusted to the applicable regulations and standards. Then the survey continued to identify all activities related to finance SMEs and the compatibility between systems existing financial information with the applicable regulations and standards. This identification is made to prepare the appropriate chart of accounts to be used in the financial statements of SMEs. Data were analyzed descriptively to get a clear picture of the needs of accounting information systems by SMEs.

RESULTS AND DISCUSSION

Characteristics of Respondents

Banyumas region is one of the leading sector districts with potential export areas. Based on Banyumas Cooperative Trade and Industry Department data, there are 25 local SMEs leading sectors of export potential and can be grouped in Table 1.

Table 1 Group of SMEs by Type of Business

Nu.	Type of Business	Number of Business	Percentage (%)
1.	Food	7	28
2.	Craft	6	24
3.	Essential oil	5	20
4.	Palm sugar	3	12
5.	Batik	2	8
6.	Others	2	8
Total		25	100

Source: primary data (processed)

Based on Table 1, it can be seen that the majority of local SMEs are the leading sectors in the food sector. Typical until now, these new products are to enter the national market, while craft and essential oils are other sectors of considerable potential that have entered the export market. Meanwhile, other businesses with export potential are high enough palm sugar processing business, which is now a commodity Banyumas. Data from Bank Indonesia showed that this sector substantially contributes to employment because SMEs involves more than 60,000 workers. The number of families which rely on the coconut sugar business as a livelihood remains in Banyumas reached more than 28,094 families or about 128,358 people. In addition to supplying the domestic market, palm sugar production Banyumas district today has entered the export market to several countries, including Japan, the Netherlands, Canada, Korea, Singapore,

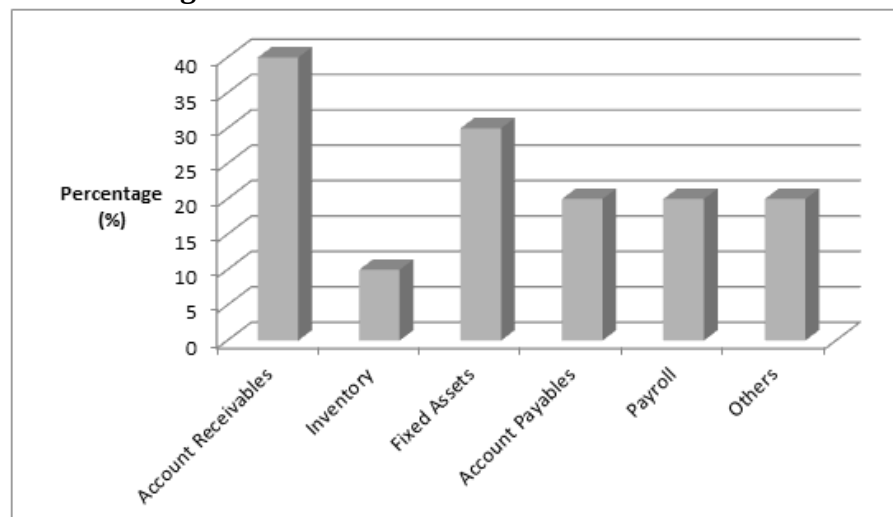


Switzerland, Saudi Arabia, America, and Europe. However, the process of coconut sugar exports has not been carried out directly by SMEs in Banyumas but by exporters in other cities such as Cirebon, Bandung, and Jakarta. That happens because of internal and external constraints, including the lack of capital and poor knowledge of export procedures. Most of the total respondents have started their business more than ten years. Fifty percent of SMEs have sales of between 1 billion and 3 billion, while the rest earn less than 1 billion.

Accounting Information Systems needs of SMEs

Some SMEs have adopted administrative procedures based on the results obtained from some financial institutions. Recording of the most widely performed is recording receivables done every day and only reached 40 percent of respondents who implement it. The system used is still manual and straightforward. The financial administration procedures that several SMEs have implemented can be seen in Figure 1.

Figure 1 Procedure Financial Administration



Source: primary data (processed)

Financial reporting for SMEs is beneficial both for internal and external parties. Although the owners of SMEs recognize the importance of financial reporting, few SMEs, especially in Banyumas regions, apply. It is not despite SMEs' lack of socialization of accounting information systems.

Accounting Information System Utilization by SMEs

Understanding the characteristics of accounting information systems used by SMEs, respondents were asked to indicate the diversity of forms of financial reporting and the frequency of reporting. Table 2 shows that only 20 percent of the financial reporting every four-monthly, and 80 percent of SMEs do not draw up a cash flow statement. Some 60 percent of SMEs prepare financial statements, and only 20 percent utilize the services of external parties.

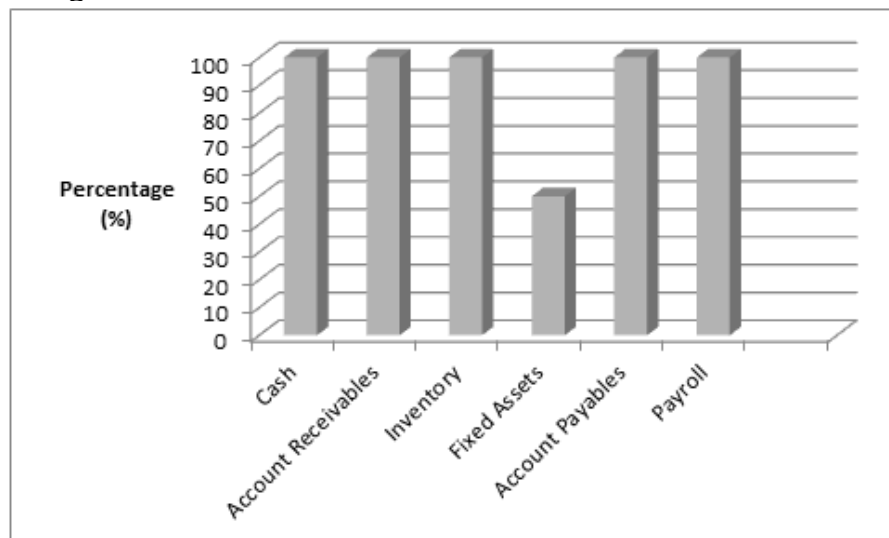
Table 2 Types of Financial Reporting and Reporting Frequency

Type of Financial Reporting	Reporting Frequency by SMEs		
	Monthly	Four-monthly	Yearly
Profit and Loss Statement	5	5	15
Capital Statement	-	-	2
Balance Sheet	-	-	15
Cash Flow	-	5	5

Source: primary data (processed)

Financial administration procedures that the SMEs have developed include administrative accounts receivable, accounts payable, inventory, fixed assets, cash, and payroll. SMEs' knowledge about accounting information systems is highly diverse. The data indicate that only 60 percent of SMEs understand accounting procedures. Figure 2 shows how financial administration procedures have strived in SMEs' development of accounting information systems.

Figure 2 Practices Financial Administrative Procedure SMEs



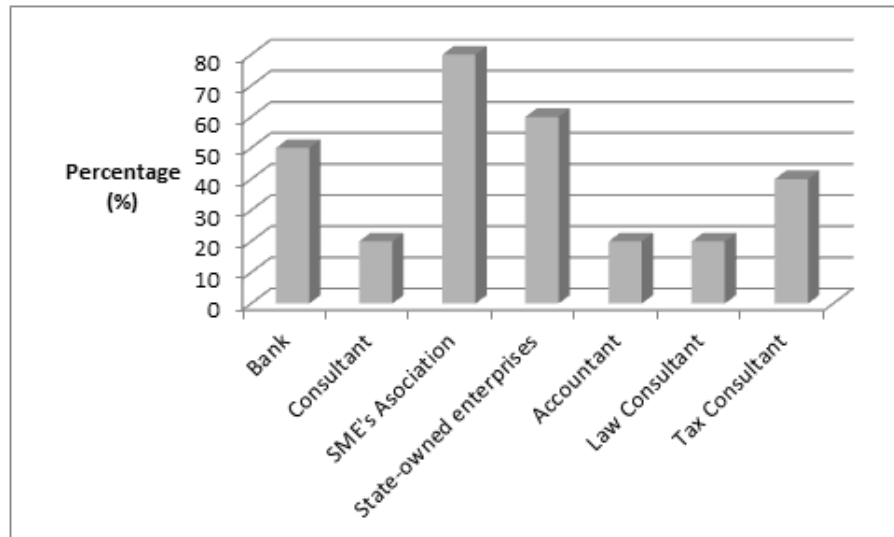
Source: primary data (processed)

Data showed that the knowledge sector SMEs in the regions of accounting information systems are still relatively low. Around 50 percent thought that the accounting procedures applied in the preparation are not critical accounting information systems. They assume that there is a lack of added value in using accounting information systems. Those who do not use accounting computer applications are still doing manual bookkeeping reasoned that the manual accounting system was enough, and they do not have sufficient financial resources to implement a computerized AIS. However, the majority of SMEs in the regions with the potential export agrees to invest in developing information technology AIS in the future if the government provides incentives in the form of a reduction in the tax burden, training, and consultation free of charge.

Some external parties related to financial reporting are made by SMEs, including banks, business consultants, SME associations, associate state/local enterprises, public accountants, lawyers, and tax offices. These parties have a

business relationship with the application of accounting information systems carried out by SMEs. The services they received after collaboration with external parties include audit, tax consulting, financial planning and consulting, and preparation of financial statements according to accounting standards.

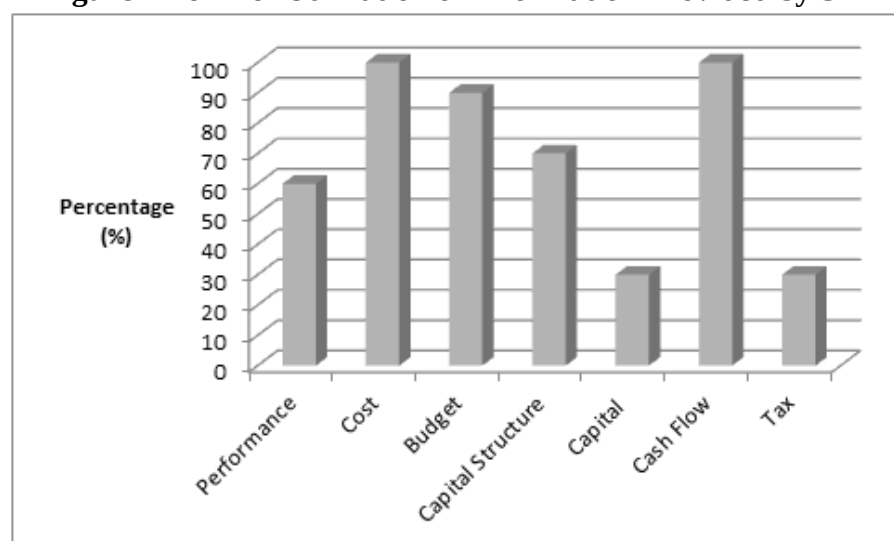
Figure 3 External Parties Relating to the Implementation SIA



Source: primary data (processed)

SMEs that develop accounting information systems benefit from the information. Such as information on company performance in the form of profit or loss; the number of information costs (calculation of the cost of production); information about planning activities (financial budgeting); information about the fund position of the company in the form of balance sheets; information on cash flow and tax information on SMEs as shown in Figure 4.

Figure 4 Form of Utilization of Information Provided by SIA



Source: primary data (processed)

General information obtained through AIS utilized owners, managers, lenders, local governments, suppliers, and employees. Utilization of such information aimed at the production; managerial decision-making more by the owner; financing decisions by the creditor; the interest burden of coaching as well as the determination of the tax by the government as well as the bonus policy determination/payroll for employees. The absence of a standardized information system following the type of transaction they are doing brings difficulties for regional seed sector employers. Obtain the information needed to process the required data, or the SMEs should use various software. It is necessary for an accounting information system that is easy and appropriate to the needs of SMEs (user-friendly software) so that the users can perform input after the first transaction without having to think about the type of account that is not yet available in the list of existing accounts.

CONCLUSIONS

SMEs did not fully maximize the utilization of accounting information systems. That is due to the lack of socialization of information systems accounting for SMEs. However, they know that applying accounting information systems is essential, yet they think that their business activities are still running without implementing them. As for SMEs that already export, accounting information systems that are used not maximized, they later can use Microsoft Excel to record daily transactions to financial reports every month. Preparing an accounting information system based on SAK-ETAP financial reporting standards for SMEs in Indonesia is necessary. They have required training applications for SMEs' accounting information systems. Then along with training in export procedures so that SMEs can independently export process, the benefits for SMEs even more.

REFERENCES

- Adam, Latif, and Esta Lestari. 2017. "Indonesia's Guaranteed Microfinance Programme (KUR): Lessons from the First Stage of Implementation." *Southeast Asian Economies* 34 (2): 322–44. <https://doi.org/10.1355/ae34-2e>.
- Ali, Zulqurnain, Bi Gongbing, and Aqsa Mehreen. 2018. "Does Supply Chain Finance Improve SMEs Performance? The Moderating Role of Trade Digitization." *Business Process Management Journal* 26 (1): 150–67. <https://doi.org/10.1108/BPMJ-05-2018-0133>.
- Assrfa, Minyahil, Yadavilli Jagannadha Rao, and Abenet Yohannes. 2020. "Designing of Accounting Information System for Small and Medium Enterprises: Application of PLS-SEM." *International Journal of Sciences: Basic and Applied Research (IJSBAR)* 54 (3): 124–39. <https://ssrn.com/abstract=3734436>.
- Azizah, Siti Nur. 2017. "Analysis of Factors Affecting the Implementation of Computer-Based Accounting Information System on Small and Medium Enterprises." *Jurnal Ekonomi & Studi Pembangunan* 18 (2): 111–15. <https://doi.org/10.18196/jesp.18.2.4021>.



- Batubara, Zakaria. 2019. "Akuntansi Dalam Pandangan Islam." *JAS (Jurnal Akuntansi Syariah)* 3 (1): 66–77. <https://doi.org/10.46367/jas.v3i1.163>.
- Berk, Abigail. 2017. "Small Business Social Responsibility: More than Size." *Journal of Corporate Citizenship* 2017 (67): 12–38. <https://doi.org/10.9774/TandF.4700.2017.se.00004>.
- Bernhardt, Thomas, Giles Dickenson-Jones, and S. Kanay De. 2017. "New Kids on the ASEAN Block: Myanmar SMEs and Regional Economic Integration." *Southeast Asian Economies* 34 (1): 4–38. <https://doi.org/10.1355/ae34-1b>.
- Burch, Sarah. 2018. "Small Businesses and Sustainability Innovation: Confronting the Gap between Motivation and Capacity." *Centre for International Governance Innovation*, April 2018. <https://www.cigionline.org/sites/default/files/documents/PBno.127web.pdf>.
- Charoenrat, Teerawat, and Charles Harvie. 2017. "Thailand's SME Participation in ASEAN and East Asian Regional Economic Integration." *Southeast Asian Economies* 34 (1): 148–74. <https://doi.org/10.1355/ae34-1f>.
- Choi, Thomas Y. 2003. "Korea's Small and Medium-Sized Enterprises: Unsung Heroes or Economic Laggards?" *Academy of Management Perspectives* 17 (2): 128–29. <https://doi.org/10.5465/ame.2003.10025207>.
- Dasewicz, Agnes, John Simon, and Sundar R. Ramanujam. 2020. "Financing Small Business Is Critical for a Strong Post-Covid Recovery." *Center for Strategic and International Studies (CSIS)*. <https://www.jstor.org/stable/resrep26410>.
- Deaconu, Adela, and Anuta Buiga. 2015. "Financial Reporting and Mimetic Theory for Small and Medium Enterprises." *Current Science* 108 (3): 334–40. <https://www.jstor.org/stable/24216560>.
- Ermawati, Nanik, and Nurul Rizka Arumsari. 2021. "Sistem Informasi Akuntansi Pada Kinerja Usaha Kecil Menengah." *Jurnal Bisnis Dan Akuntansi* 23 (1): 145–56. <https://doi.org/10.34208/jba.v23i1.973>.
- Gimede, V. 2004. "Export Propensities and Intensities of Small and Medium Manufacturing Enterprises in South Africa." *Small Business Economics* 22 (5): 379–89. <https://doi.org/10.1023/B:SBEJ.0000022212.08739.54>.
- Gou, Qin, and Yiping Huang. 2019. "Financing Support Schemes for SMEs in China: Benefits, Costs and Selected Policy Issues." In *The Chinese Economic Transformation: Views from Young Economists*, 193–214. ANU Press. <https://doi.org/10.22459/CET.2019.10>.
- Hong, Huang-Yao, and Florence R Sullivan. 2009. "Towards an Idea-Centered, Principle-Based Design Approach to Support Learning as Knowledge Creation." *Educational Technology Research and Development* 57 (5): 613–27. <https://doi.org/10.1007/s11423-009-9122-0>.
- Hosain, Md. Sajjad. 2019. "The Impact of Accounting Information System on Organizational Performance: Evidence from Bangladeshi Small & Medium Enterprises." *Journal of Asian Business Strategy* 9 (2): 133–47. <https://doi.org/10.18488/journal.1006.2019.92.133.147>.
- Kunttu, Anna, and Lasse Torkkeli. 2018. "Rainer Hampp Verlag Service Innovation and Internationalization in SMEs: Implications for Growth and Performance." *Management Revue* 26 (2): 83–100.



- <https://www.jstor.org/stable/24570252>.
- Lee, Cassey, Dionisius Ardiyanto Narjoko, and Sothea Oum. 2017. "Southeast Asian SMEs and Regional Economic Integration." *Southeast Asian Economies* 34 (1): 1–3. <https://doi.org/10.1355/ae34-1a>.
- Okello Candiya Bongomin, George, Joseph Mpeera Ntayi, John C. Munene, and Charles Akol Malinga. 2017. "The Relationship between Access to Finance and Growth of SMEs in Developing Economies." *Review of International Business and Strategy* 27 (4): 520–38. <https://doi.org/10.1108/RIBS-04-2017-0037>.
- Rasheed, Rabia, and Sulaman Hafeez Siddiqui. 2019. "Attitude for Inclusive Finance: Influence of Owner-Managers' and Firms' Characteristics on SMEs Financial Decision Making." *Journal of Economic and Administrative Sciences* 35 (3): 158–71. <https://doi.org/10.1108/JEAS-05-2018-0057>.
- Rasiah, Rajah, and Govindamal Thangiah. 2017. "Government Policies, Regional Trading Agreements and the Economic Performance of Local Electronics Component Producing SMEs in Malaysia." *Southeast Asian Economies* 34 (2): 302–21. <https://doi.org/10.1355/ae34-2d>.
- Salimzadeh, Parisa, and Jerry Courvisanos. 2015. "A Conceptual Framework for Assessing Sustainable Development in Regional SMEs." *Journal of Environmental Assessment Policy and Management* 17 (04): 1550039. <https://doi.org/10.1142/S1464333215500398>.
- Whah, Chin Yee, and Lim Ee Shiang. 2018. "Policies and Performance of SMEs in Malaysia." *Southeast Asian Economies* 35 (3): 470–87. <https://doi.org/10.1355/ae35-3i>.
- Xu, Feng, Shaoquan Zhao, and Yi Yang. 2019. "Industry-Finance Integration for Small and Medium-Sized Enterprises in Southeast Coastal Areas of China." *Journal of Coastal Research* 94 (sp1): 803–7. <https://doi.org/10.2112/SI94-159.1>.

