Company's internal characteristics, environmental uncertainty, the use of accounting information, and the performance of SMEs

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A B S T R A C T

Accounting information allows management to implement strategies and operational activities which are necessary to achieve the objectives of the organization as a whole, including on Small and Medium Enterprises (SMEs). Many SMEs have difficulty in understanding the accounting information well, whereas the accounting information plays an important role in creating the flow of financial information to support survival or going concern of the SMEs. This study has two objectives. First, to determine the effect of knowledge of accounting, business scale, business experience, and types of businesses on the use of accounting information with the environmental uncertainty as a moderating variable on SMEs in Surabaya and Sidoarjo, second, to determine the effect of the use of accounting information on the performance of SMEs. The result shows that knowledge of accounting, business scale, and business experience affect the use of accounting information. However, the variable of type of business does not affect the use of accounting information. The result of hierarchical regression analysis shows that the variable of environmental uncertainty strengthens the efffect of the variables of knowledge of accounting, business experience, and type of business on the use of accounting information. However, the environmental uncertainty does not strengthen the effect of business scale on the use of accounting information. The test result also shows that the use of accounting information can improve the performance of SMEs.

A B S T R A K

Sudah diketahui bahwa informasi akuntansi memungkinkan manajemen untuk menerapkan strategi dan kegiatan operasional guna mencapai tujuan organisasi secara keseluruhan. Khusus untuk usaha kecil menengah (UKM), perusahaan jenis ini mengalami kesulitan dalam memahami informasi akuntansi, meskipun itu memainkan peran penting dalam menciptakan arus informasi keuangan untuk mendukung kelangsungan hidup (going concern) UKM. Penelitian ini mencoba mengetahui pengaruh pengetahuan akuntansi, skala usaha, pengalaman usaha, dan jenis usaha terhadap penggunaan informasi akuntansi dengan ketidakpastian lingkungan sebagai moderating variable pada UKM di Surabaya dan Sidoarjo. Selain itu, juga mencoba untuk mengetahui pengaruh penggunaan informasi akuntansi terhadap kinerja UKM. Hasil penelitian menunjukkan bahwa pengetahuan akuntansi, pengalaman bisnis dan skala mempengaruhi penggunaan informasi akuntansi. Namun, variabel skala tidak mempengaruhi penggunaan informasi akuntansi. Hasil analisis regresi hirarkis menunjukkan bahwa pengaruh ketidakpastian lingkungan memperkuat pengetahuan akuntansi, pengalaman bisnis, skala usaha penggunaan informasi akuntansi. Namun, ketidakpastian lingkungan tidak memperkuat pengaruh bisnis pada penggunaan informasi akuntansi. Hasil pengujian juga menunjukkan bahwa penggunaan informasi akuntansi dapat meningkatkan kinerja UKM.

1. INTRODUCTION
Accounting information is very useful for Small and Medium Enterprises (SMEs) because it serves as an instrument used by the user of the information for decision-making, (Nicholls and Holmes 1988). Gordon and Miller in Gudono (2007) claimed

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that accounting information is an instrument used by management to help in the face of business competition. Accounting information produces relevant and timely information for planning, controlling, decision-making and performance evaluating. Accounting information allows management to implement strategies and operational activities required to achieve the objectives of the organization as a whole.

Holmes and Nicholls (1989) revealed that the accounting information which is much prepared and used by small and medium enterprises is the information required in accordance with the laws or regulations (statutory). In addition, the accounting information that should be required by the management of small and medium enterprises in the use of accounting information is very limited. Philip (1977) revealed that there are many weaknesses in accounting practices in small firms. The weaknesses are caused by several factors, such as education and overload of accounting standards which are used as guidelines in making financial reporting (William et al. 1989; Knutson and Henry 1985; Nair and Rittenberg 1983; Wishon 1985; Murray et al. 1983). From the description, it is clear that medium-sized industries have a lot of difficulties in understanding the accounting information properly, whereas accounting information plays an important role in creating the flow of financial information to support the survival or going concern of SMEs.

This research intends to investigate the effect of knowledge of accounting, business scale, business experience, and type of business on the use of accounting information in small and medium industries. In addition, this research also intends to provide empirical evidence that the use of accounting information affects the performance of SMEs. In this research, environmental uncertainty is positioned as a moderating variable because this variable is thought to have a potential which is strong enough to affect knowledge of accounting, business scale, business experience, and type of business on the use of accounting information.

The level of accounting knowledge of a manager/owner determines the understanding of the manager/owner on the importance of the use of accounting information (Holmes and Nicholls 1988 and 1999). Business scale also affects the use of accounting information by the SMEs. It can be understood that the larger the company, the more complex the information needed by the company. Another factor that affects the use of accounting information is the business scale. The level of accounting information provided depends on the business scale of the SMEs. If the business scale increases, the proportion of the company in providing accounting information will also increase (Holmes and Nicholls 1988 and 1999; Murniati 2002; Grace 2003 and Hadiyahfitriyah 2006). Business experience and type of business are also factors that affect the decision on the use of accounting information by SMEs. The longer the company operates and the more complex the type of business, the more complex the information needed. This is due to the demand of the development which is experienced by the company, (Holmes and Nicholl 1988 and 1999; Murniati 2002; Grace 2003 and Hadiyahfitriyah 2006).

High environmental uncertainty is defined as a sense of inability of an individual to predict something happening in his environment accurately (Darlis 2002). An organization will survive in the long term if it can adapt to its environment. While in the relatively stable environment (low uncertainty), the individual can predict the future condition so that the steps that will be taken can help the organization to arrange the plan more accurately (Darlis 2002). From this explanation, environmental uncertainty is chosen as the moderating variable that strengthens or weakens the factors that affect the use of accounting information by the SMEs.

This research is conducted on SMEs in Surabaya and Sidoarjo. The reason is that because the majority of East Java SME centers is located in Surabaya and Sidoarjo and has great potential in the development of industries in East Java. Bank of Indonesia (BI) recorded a positive growth in lending to micro, small and medium enterprises (MSMEs) in East Java at the end of 2013. Surabaya City recorded the largest MSMEs loans with a nominal of Rp 34.22 trillion or 41.09% of total loans of East Java MSMEs. Seeing the development, continuous effort is required by the SMEs themselves, the government and the business community, so that the role of SMEs in the economy is getting bigger. The growth potential of East Java SMEs is still quite large, considering that 50 percent of gross domestic regional product (GDRP) in 2013 is the contribution of this sector. This reason encourages East Java province government to focus on the development of SMEs in the Regional Medium Term Development Plan 2014.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS
Small and Medium Enterprises (SMEs)
Judging from the amount of net asset and turnover, the criteria for Micro Enterprise, Small Enterprise and Medium Enterprise based on Regualtions No

20 of 2008 are as follows: a business unit is classified as Micro enterprise if the business unit has maximum asset of Rp 50 million and maximum turnover of Rp 300 million, and a business unit is categorized Small Enterprise if the asset and turnover are amounted to Rp 50 million – Rp. 500 million and 300 million - 2.5 billion, while a business unit is classified as Medium Enterprise if it has asset of Rp. 500 million - Rp. 10 billion and a turnover of Rp. 2.5 billion- Rp. 50 billion.

The role of micro, small and medium enterprises (MSMEs) in the Indonesian economy at least can be seen from: 1) its position as a major player in economic activity in various sectors, 2) the largest provider of employment, 3) an important player in the development of local economic activity and community empowerment, 4) the creator of new markets and sources of innovation, and 5) its contribution in maintaining the balance of payments through exports. This important position, since being hit by the crisis, has not all successfully maintained so that the economic recovery has not been optimal yet.

The empowerment movement of MSMEs should become a serious concern of the government, and surely in cooperation with NGOs and universities. The emphasis on accounting issues is conducted because a good accounting system requires a good structure of the organizations as well. Similarly, good planning and increased marketing and sales capabilities without the support of good accounting information system will impede the operation and financial performance of SMEs.

The entrepreneurs of small and medium enterprises (SMEs) are identical with the lack of awareness to run bookkeeping in the business world properly. Most of them run their own business. With the lack of knowledge in bookkeeping, it will automatically prevent them from running the activities of financial accounting. While the lack of knowledge of the SME entrepreneurs in bookkeeping is frequently also not accompanied by the fulfillment of the resources to run business accounting activities. The emphasis on accounting issues is conducted because accurate accounting information will support SME development program itself.

The Importance of Accounting Information for SMEs
Accounting information has an important role to achieve the success of the business, including for small enterprises (Holmes and Nichols 1989). Accounting information can be a reliable basis for economic decision-making in small enterprise

management, such as market development decisions, pricing, and others. The provision of accounting information for small enterprises is also needed especially for the access to government subsidies and access to additional capital for small enterprises from creditors (Bank). The obligation of accounting administration for small enterprises has actually been implied in the Small Enterprises Act no. 9 of 1995, in the Taxation Act. The government and accounting community have emphasized on the importance of recording and organizing accounting for small enterprises.

There are still many Small and Medium Enterprises (SMEs) that have not recorded their business financial statements. As a result, they get difficulty in obtaining credit. The need for the preparation of financial statements for SMEs is not only for the ease of obtaining credit from lenders, but also to control the assets, liabilities, capital, revenue planning, and cost efficiency occured that ultimately serves as an instrument for corporate decision-making.

Many businesses, on the scale of SMEs, are experiencing problems due to not having a recording and financial accounting. In fact, there are some that have not posted their business finance in complete. Several studies have revealed that financial weakness and the influencing factors are one of the main causes of the SMEs failure (Peterson, Kometsky & Ridgway 1993; Monk 2000). The shortage of accounting records will cause problems of taxation or other government institutions, and also makes it difficult for the coporate manager to measure the achievement of the company. Wichman (1983) explained that the accounting capability is an important factor that will affect the success and failure of the SMEs.

Factors affecting the use of accounting information on SMEs, according to Holmes and Nicholls (1988), among others are knowledge of accounting, business scale, type of business, and business experience. Holmes and Nicholls (1988) classified accounting information in three different types according to the benefits for its users, i.e.: a) *statutory accounting information*, is the information that must be prepared in accordance with existing regulations; b) *budgetary information*, is the accounting information presented in the form of a budget that is useful for internal party in planning, assessing, and decision-making, and c) *additional accounting information*, is other accounting information prepared by company to increase the effectiveness of decision making by managers. Nicholls and Holmes' concept of accounting information is used in this study because the concept includes all accounting information required by the company.

Hypothesis Development

a. The effect of knowledge of accounting on the use of accounting information

Wichman (1984) stated that the occurrence of problems in the application of accounting due to the lack of knowledge of the company's owner or manager about accounting. Peacock (1985) concluded that the business owner's lack of accounting knowledge caused many companies to fail.

Holmes and Nicholls (1988) examined the use of accounting information. This study was conducted in Australia on 928 small companies. Holmes and Nicholls analyzed the level of preparation and the use of accounting information by the owners or managers of small companies. The result showed that the company's leader or manager with low education leads many companies use the services of Public Accountant in the provision of accounting information.

Suhairi, Yahya and Haron (2004) examined the relationship of accounting knowledge and entrepreneurial personalities on the use of accounting information. This research was conducted at the manufacturing companies. The samples spread across four provinces in West Java, Central Java, East Java and Jakarta. The result showed that the accounting knowledge of an entrepreneur has a positive influence on the use of accounting information. Based on the description, the first hypothesis is formulated as follows:

Hypothesis 1: Knowledge of accounting affects the use of accounting information by SMEs.

b. The effect of business scale on the use of accounting information

Business scale has positive effect on the level of preparation and the use of accounting information (Holmes and Nicholls 1988). The results suggest that the level of accounting information provided depends on the scale of the business, as measured by the amount of revenue or sales revenue and the number of employees. If the scale of the business increases, the proportion of companies in the supply and the use of accounting information (*statutori, budgets and additional information*) will also increase. Based on the description, the hypothesis that will be tested in this study is as folows:

Hypothesis 2: Business scale affects the use of accounting information by SMEs.

c. The effect of business experience on the use of accounting information

Holmes and Nicholls (1988) studied the relationship of business experience on the use of account-ing information. The result of the research shows that business experience has a positive effect on the use of accounting information. The management of companies conducted by the manager is really influenced by management approaches with different management styles

The manager's experience in managing a company will continue to grow along with his tenure in managing the company. It can also be influenced by the level of competition in the industry and the state of the economy where the company operates. Other factors that also reproduce variations of approach and management styles of the company are the complexity of the company's business. Information obtained from inside and outside the company is influenced by the length of time in managing the company (Holmes and Nicholls 1988). This is because the management has a desire to make the right and fast decisions in solving his problems. Based on this explanation, the hypothesis that will be tested in this study is:

Hypothesis 3: Business experience of the owner or the manager affects the use of accounting information by SMEs.

d. The effect of type of business on the use of accounting information

Research conducted by Holmes and Nicholls (1988) shows that business sector affects the amount of accounting information prepared and used by the company. The results of this study demonstrate that the accounting information, on *statutory, budget and additional information,* is more prepared and used in manufacturing sector compared to other sectors. Accounting information on *statutory-budget* is more prepared and used in the trade sector, while accounting information on statutory is more prepared and used in transport sector. This indicates that the types of manufacturing business require more complete and thorough accounting information than any other types of business. Based on this explanation, the hypothesis that will be tested in this study is:

Hypothesis 4: Type of business affects the use of accounting information by SMEs.

e. The environmental uncertainty moderates the factors affecting the use of accounting information

Environmental uncertainty is one of factors that affect the success of the company (Al-Shaikh 1998; Gaskill et al. 1993; Ibrahim & Goodwin 1986). Environmental uncertainty has become the focus of analysis by accounting researchers since the 1970's,

among others by Khandwalla (1972), and Gordon and Miller (1976).

The higher the environmental uncertainty perceived by the organization manager makes the manager of the organization may require additional information to cope with the complexity of the environment (Chia et al. 1994). The sense of environmental uncertainty requires relevant information in order to be able to improve performance, because the relevant information can provide a more accurate prediction of the condition of the environment, so as to provide an effective option for the actions it takes.

Fisher (1996) conducted a study on the effect of environmental uncertainty and individual behavior on the use of management accounting information. This study used a sample of 143 managers from 9 different industry groups in the city of Hobart, Tasmania, Australia. Pressure of environmental uncertainty (PEU) and individual behavior (LoC) use an instrument developed by Chenhall and Morris (1986) and Mia (1987). Based on this explanation, the hypothesis that will be tested in this study is:

Hypothesis 5: Environmental uncertainty moderates the effects of accounting knowledge, business scale, business experience, and type of business on the use of accounting information.

f. The effect of the use of accounting information on the performance of SMEs

Performance of company, according to Ferdinand (2000), is a construct that is commonly used to measure the impact of corporate strategy activities, one of which is the use of accounting information. However, performance measurement becomes the problem and classical debate, because performance is multi-dimensional in which it contained a variety of goals and the type of organization (Bhargava, et al. 1994; Lumpkin & Dess 1996). Therefore, the performance is conceptualized in many ways and methods in which the measurements are also diverse (Bhargava, et al. 1994). Slater & Narver 1997 suggested 3 criteria of performance measurement, i.e. effectiveness, efficiency and adaptability.

Based on the previous research on a positive relationship between the use of accounting informatioin and the performance, there are two main streams (Suhairi 2004) which state that the use of accounting information by SMEs improve the company performance. From the result of the research on the effect of strategic planning with accounting information on the firm performance, it can be summarized and hypothesized as follows:

Hypothesis 6: The use of accounting information affects the performance of the company.

3. RESEARCH METHOD
Sample and Data

The population of this study is SMEs in Surabaya and Sidoarjo as many as 1,346 SMEs. The population in this study is the managers or owners of SMEs in Surabaya and Sidoarjo. The sampling is done using purposive sampling technique with the folowing criteria:

1. Managed by the owners themselves;
2. Having two or more permanent employees;
3. Having location and facilities that can be monitored by the researcher;
4. Having annual turnover above Rp. 10 million and not more than 1 billion.

Operational Definition and Measurement of Research Variable

Operational definition needs to be done to avoid mistakes in interpreting variables which are analyzed, including:

1. The Use of Accounting Information

The accounting information in this study is defined as statutori information, budget information and additional information resulted from the accounting process that is used as a basis in making decisions.

The variables of the use of accounting information consist of 3 indicators:

1. Statutori Information
   Statutori information is accounting information consisting of Balance Sheet, Profit/Loss Statement and Cash Flow.
2. Budget Information
   Budget information is accounting information consisting of Profit/Loss projection and Cash Flow projection information.
3. Additional Information
   Additional information consists of Cost of Production reports and Financial Ratios information (Holmes and Nicholls 1988).

From the three indicators are then made some inquiries. In this study is developed with two ratings, they are based on the level of interest and based on the amount of use. Then, from the two information models are made weighted average. The measurement of the use of accounting information in this research is carried out by using a five-point Likert scale.

2. Knowledge of Accounting

Knowledge of accounting in this study is the knowledge of the leaders or owners of the business about accounting. The Indicator of accounting

knowledge is using two-dimensional measurements which are typically used in the audit review (Spliker 1995; Bonner and Walker 1994), namely:

1. Declarative knowledge is the knowledge of facts and based on a concept, for example: cash is part of current assets; this knowledge facilitates the analysis of the ratio, in which declarative knowledge is usually dependent on existing instructions.
2. Procedural knowledge is the knowledge that is consistent with the rules or applicable accounting standards (Bonner and Walker 1994; Spilker 1995), usually depending on the experience.

This variable is measured using a questionnaire consisting of 4 questions related to declarative knowledge and 4 questions for procedural knowledge. This instrument has been modified adjusted with the levels of question which are made. The answer to this question is designed by using a 5-point Likert scale (Indriantoro 2000).

3. Business Scale

The development of the company is always expected by the owner which is resulting in company scale. Changes in the company's development can also be seen from the changes of assets owned by the company from year to year, such as, from the number of employees that continue to increase. This is certainly resulting from the progress made by the company that truely needs a larger number of employees, especially for medium-scale enterprises in line with the increasing number of company activities and the greater degree of complexity of the company, so that the accounting information is truely needed (Nicholls and Holmes 2001: 61). Business scale in this study is based on data obtained from the Department of Industry and Trade which is based on the number of employees employed in the medium-scale enterprises. The instrument in this study is measured using a nominal scale.

4. Business Experience

Experience in operating business is based on the business that has been carried on. This will indicate the need for necessary accounting information (Nicholls and Holmes 1988). The period of time to manage the company is measured from the time when the manager or owner of the business started to manage or lead the company until this study was conducted.

5. Type of business

Holmes and Nicholls (1988) classified seven types of business and demonstrated that additional ac-

counting information is information which is relatively large used on the type of business, compared with the other sectors. The measurement of the type of business is categorical in nature and it is in accordance with the type of business that is studied, which is based on a nominal scale. The research is conducted on the type of business and trade in accordance with the data obtained from the Department of Industry and Trade of Surabaya City and Sidoarjo Regency and measured using a nominal scale

6. Environmental Uncertainty

Environmental uncertainty can be defined as a sense of inability of an individual in predicting the environment accurately (Miliken 1987) and is one of the factors that influence the success of the company (Al-Shaikh 1998; Gaskill et al. 1993; Ibrahim & Goodwin 1986). The measurement of variables or indicators used to describe the condition of environmental uncertainty will be conducted using questions developed by Miliken (1987) and Fisher (1996), which have been modified. The Measurement is performed by assessing the extent to which the respondents can predict the uncertainty of business environmental they face. The higher the ability to predict, the lower the level of uncertainty of business environment they face. These indicators include:

1. The information related to business conditions in the future.
2. The information related to the effect of external factors, such as condition of economy, technology, and others.
3. The non-economic information, such as government regulation, business competition, market opportunities, price forecast, and others.

This instrument has been modified and adjusted with the levels of questions which are made. The answers to these questions are designed by using 5 Likert scale (Indriantoro 2000).

7. Performance of SMEs

What is meant by performance of SMEs is the managerial performance of SMEs. Managerial performance is a measure of how effective and efficient managers have worked to achieve organizational goals. This variable is measured by several questions developed by Mahoney (1965). The measurement of these variables is using 1 to 7 Likert scale, ie from strongly disagree (1) to strongly agree (7).

4. DATA ANALYSIS AND DISCUSSION
Description of the Data
The population used in this research is SMEs in

Table 1
Results of Questionnaire Return

Description	First Shipment	Second Shipment	Total
The number of questionnaires sent to respondents	150	200	350
The number of questionnaires not returned	124	146	270
The number of questionnaires returned	26	54	80
Rate of return	16.67%	27.00%	22.85%
The number of questionnaires returned but incomple filling	1	3	4
The number of questionnaires returned but not meet criteria	0	1	1
The number of questionnaires returned and used in analysis	25	50	75
Percentage of questionnaires used in analysis	16.67%	25.00%	21.42%

Table 2
The Test Result of the Effect of Accounting Knowledge, Business Scale, Business Experience, and Type of Business on the Use of Accounting Information

$PIA = \alpha_0 + \beta_1 PAK + \beta_2 SUS + \beta_3 PUS + \beta_4 JUS + e$

Variable	Coefficient	Std. Error	t-Statistics	p-Value
Constant	2.143	0.372	5.760	0.000
PAK	0.420	0.160	2.615	0.011
SUS	0.222	0.109	2.028	0.048
JUS	-0.053	0.148	0.356	0.040
PUS	0.052	0.030	1.726	0.039
F-stat = 1.821			Adjusted R^2 = 0.731	
Sig. = 0.009				

Surabaya and Sidoarjo. Data collection is conducted by mail survey methods, by sending a letter to each respondent address. Questionnaires are distributed in two stages. The first stage is sent 150 questionnaires to respondents, either directly or through the mail. In the first dispatch, 124 questionnaires are not returned or the level of response rate is 16.67%. The distribution of the questionnaires is repeated, as many as 200 questionnaires are sent, and 146 questionnaires are not returned with the level of response rate of 27%. In overall, 350 questionnaires are sent, and as many as 350 questionnaires are not returned with a level response rate of 22.85%.

However, from 80 questionnaires available, there are only 75 questionnaires that can be used. 5 questionnaires cannot be used because they are incomplete and do not meet the criteria. The end result of the questionnaire that can be used is 75 questionnaires or 21.42% of the total questionnaires sent. Table 1 explains the level of questionnaire return.

Hypothesis Test
Hierarchical Regression Analysis
Hierarchical Regression Analysis is a regression analysis performed in phases based on the basic concepts developed in the multivariate analysis.

Regression Phase I, aims to determine the effect of knowledge of accounting, business scale, business experience, and business type on the use of accounting information. While the regression phase II, aims to determine the effect of knowledge of accounting, business scale, business experience, and business type on the use of accounting information with the moderation of environmental uncertainty. The study aims to determine the moderating effect of environmental uncertainty variables, whether it can strengthen (R2 Phase II > R2 Phase I) or weaken (R2 Phase II < R2 Phase I) the effect of knowledge of accounting, business scale, business experience, and business type on the use of accounting information.

Regression Phase I
Regression Phase I is used to determine the amount of the effect of knowledge of accounting, business scale, business experience, and business type on the use of accounting information. The results of the regression analysis can be seen in Table 2.

Regression Phase II
Regression Phase II is used to determine the amount of the effect of accounting knowledge, business scale, business experience, and business

Table 3
The Test Result of the Effect of Accounting Knowledge, Business Scale, Business Experience, and Type of business on the Use of Accounting Information with the moderation of Environmental Uncertainty

$PIA = α0 + β1PAK + β2SUS + β3PUS + β4PJUS + β5KLI + β6PAK*KLI + β7SUS*KLI + β8PUS*KLI + β9JUS*KLI + e$

Variable	Coefficient	Std. Error	t-Statistics	p-Value
Constant	2.453	0.707	3.467	0.001
PAK	0.190	0.476	1.019	0.042
SUS	0.743	0.729	2.028	0.048
JUS	-0.103	0.494	-0.209	0.089
PUS	0.053	0.148	1.019	0.032
KLI	0.326	0.141	2.321	0.024
PAK*KLI	0.143	0.113	1.264	0.001
SUS*KLI	-0.177	0.170	-1.044	0.001
PUS*KLI	0.012	0.036	0.321	0.049
JUS*KLI	0.030	0.114	0.259	0.006
F-stat = 2.243		Adjusted R^2 = 0.822		
Sig. = 0.040				

type on the use of accounting information with the moderation of environmental uncertainty. The result of the regression analysis phase II can be seen in Table 3.

This study aims to find out the moderation of the effect of environmental uncertainty variables, whether to strengthen (R2 phase II > R2 phase I) or to weaken (R2 phase II <R2 phase I) the effect of knowledge of accounting, business scale, business experience, and business type on the use of accounting information. From the results of the regression analysis, it can be seen the effect of moderating variables on the relationship between independent variables and the dependent variable in Table 4.

From the result of the analysis it can be seen that the environmental uncertainty strengthens the variable influence of the effect of knowledge of accounting, business scale, business experience, and business type on the use of accounting information, in which the results obtained value (R2 phase II> R2 phase I) with a difference of 0.091.

The effect of knowledge of accounting on the use of accounting information

The significance value of accounting knowledge variable is 0.042 which is smaller than α = 0.05. This means that hypothesis 1 is accepted that knowledge of accounting affects the use of accounting information. The result of this hypothesis testing confirms the research conducted by Suhairi, Yahya and Haron (2004) that the accounting knowledge of an entrepreneur has a positive influence on the use of accounting information. This indicates that if the accounting knowledge increases, the use of accounting information will also increase, because the

accounting knowledge is needed by the managers or owners of the company in running the company's operations. The motivation to learn about accounting knowledge will increase the understanding of the principal or owner in applying accounting in the company (Bedard and Chi 1993; Libby 1993; Spilker 1995).

The effect of business scale on the use of accounting information

The significance value of accounting knowledge variable is 0.048 which is smaller than α = 0.05. This means that hypothesis 2 is accepted that the business scale affects the use of accounting information. The results of this study confirm the research conducted by Holmes and Nicholls (1988). This is acceptable because in business with greater scale then the data avalable to be processed into information is also increasingly complex. So, managers need a neat and systematic recording or, in other words, they need an adequate accounting system. The implication is in certain business scale, manually recording is still possible, but with the increasing scale of business, companies should consider the use of a computerized accounting system.

This indicates that if the business scale increases, the use of accounting information will also increase, because the complexity of business is getting increased. The business scale in this study demonstrates the ability of the company to manage its business by looking at the number of employees employed. The number of employees can show the capacity of the company in operationalizing its business. The greater the number of employees, the greater the degree of complexity of

Table 4
The Result of Hierarchical Regression Analysis

Hierarchical Regression	Adjusted R²
Regression Phase I	0.731
Regression Phase II	0.822
Changes	0.111

Table 5
The Test Result of the Effect of the Use of Accounting Information on the Performance of SMEs

KIN = α0 + β1PIA + e

Variable	Coefficient	Std. Error	t-statistics	p-value
Constant	3.974	0.257	15.479	0.000
PAK	0.070	0.061	1.150	0.045
F-stat = 1.322		Adjusted R² = 0.595		
Sig. = 0.004				

KIN = 3.974 + 0.070PIA

the company, so that the accounting information is truely needed. The result of this study is consistent with the study result conducted by Holmes and Nicholls (1988).

The business scale is positively related to the level of provision of accounting information. It can be understood that the larger the company, the more complex the needs of the company on the information required. The level of accounting information provided depends on the scale of the business, if the scale of the business increases, the proportion of companies in the provision of accounting information will also increase (Holmes and Nicholls 1988 and 1999; Murniati 2002; Grace 2003 and Hadiyahfitriyah 2006).

The effect of type of business on the use of accounting information
The significance value of accounting knowledge variable is 0.089 which is greater than α = 0.05. This means that hypothesis 3 is rejected, that the type of business does not affect the use of accounting information. The result of this study does not confirm the study of Holmes and Nicholls (1988) that the business sector does not affect amount of accounting information prepared and used by the company. The practice of accounting, especially financial accounting on SMEs in Indonesia is still low and has many weaknesses (Suhairi 2004; 2001; Raharjo & Ali 1993; Benjamin 1990; Muntoro 1990). The weakness is partly due to the lack of regulations requiring the preparation of financial statements for SMEs (Muntoro 1990).

Sudarini (1992) also provided evidence that small companies in Indonesia tend to choose the normal calculation (without preparing the financial statements) as the basis for calculating taxes. This is

due to the costs incurred for the preparation of financial statements which is far greater than the excess tax to be paid. Idris (2000) stated that small entrepreneurs view accounting a something that is very difficult to reach. For them; an accounting process is not too important to apply. The most important thing for them is how to generate profit as much as possible from the businesses they run without being troubled by bookkeeping and accounting problems.

The effect of business experience on the use of accounting information
The significance value of accounting knowledge variable is 0.032 which is smaller than α = 0.05. This means that hypothesis 4 is accepted that type of business does not affect the use of accounting information. The results of this study confirm the research of Holmes and Nicholls (1988) that business experience has a positive influence on the use of accounting information. Astuti (2007) provided evidence that the longer the period to lead the company reseults in an increase in the preparation and use of accounting information in small and medium-sized enterprises.

The experience of the owner or manager in managing the company will continue to grow along with his tenure leading the company. The longer the period for the manager or owner to lead the company, the level of preparation and use of accounting information is getting higher. This is because the management has a desire to make the right and fast decisions to solve his problems. The need of accounting information used for decision-making basis will be perceived by the owners or managers so as to be able to take alternative choice as closely as possible.

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The effect of accounting knowledge, business scale, type of business, and business experience on the use of accounting information with the moderation of environmental uncertainty

The significance value of the interaction variable of environmental uncertainty and knowledge of accounting is 0.001 which is smaller than α = 0.05. This means that the hypothesis of environmental uncertainty which strengthens the effect of accounting knowledge on the use accounting information is accepted. The result of this study confirms the research of Chia et al. (1994) that the higher the environmental uncertainty perceived by the organization manager makes the organization manager require additional information to cope with the complexity of the environment. The higher the environmental uncertainty, the higher the effect of accounting knowledge on the use of accounting information. Managers with appropriate accounting knowledge will need greater use of accounting information in conditions of high uncertainty. Shonhadji (2009) provided evidence that an entrepreneur who has an internal locus of control and high achievement desire will tend to continue to work actively for the success of his business. One way to be done is in the use of accounting information for business decision-making.

The significance value of the interaction variable of environmental uncertainty is 0.001 which is smaller than α = 0.05. It means that the hypothesis of environmental uncertainty weaken the effect of knowledge of accounting on the use of accounting information. From the results of hierarchical regression analysis, the effect of moderating variables of environmental uncertainty should have strengthened the effect of business scale on the use of accounting information. Since the result is the opposite, then the hypothesis is rejected.

The results of this study do not confirm the research Chia et al. (1994) that the higher the environmental uncertainty perceived by the organization manager may make the manager of the organization require additional information to cope with the complexity of the environment. However, the results of this study confirm the research Suhairi, et al. (2004) which states that environmental uncertainty does not affect the locus of control and knowledge on the use of accounting information. The research findings of Wahidmurni (2003) indicate that in general, uncertainty condition of business environment faced by the manufacturing industry in East Java can be categorized as low (50% of respondents expressed this answer), although this category is followed by the category enough

(as much as 47% of respondents). Thus it can be said that the managers respond to the business uncertainty that occurs mediocre.

The significance value of the interaction variable of environmental uncertainty and knowledge of accounting is 0.049 which is smaller than α = 0.05. This means that the hypothesis of environmental uncertainty which strengthens the effect of business type on the use of business accounting information is accepted. The results of this study confirm the research Chia et al. (1994) that the higher the environmental uncertainty perceived by the organization managers may make the manager of the organization require additional information to cope with the complexity of the environment. Environmental factors play an important role for the companies, especially in the selection of the direction and formulation of corporate strategy. Type of business of SMEs determines the strategy of SMEs. The change in environment, either internal or external, requires the capability of the company to be able to adapt to such changes so that survival of the company can be maintained. While, the use of accounting information is one of information for decision-making and is also as the assessor factor for the company performance so as to be able to create advantage in competion.

The significance value of interaction variable of environmental uncertainty and business experience is 0.006 which is smaller than α = 0.05. This means that the hypothesis of environmental uncertainty that strengthens the effect of business experience on the use of accounting information is accepted. Environmental uncertainty is defined as a sense of inability of an individual to predict something accurately (Milliken 1987). Environmental uncertainty, as a whole social and physical factor, directly affects the behavior of decision-making by the people in the organization. A manager will have difficulty in making plans and performing control over the company (Duncan 1972) in which the planning and control will be an issue in the uncertainty condition due to the events that will come can not be predicted. According to Hirst (1981), on the situation of task uncertainty, accounting information is relatively perfect size to capture the results of manager's task and there is a small possibility for negative behavior to occur.

The effect of the use of accounting information on the performance of SMEs

The result of hypothesis test of the effect of the use of accounting information on the performance of SMEs can be seen in Table 5.

Adjusted R^2 value of the regression model is

0.595. This means that 59.50% of the variation of variable of KIN can be explained by the variable of accounting knowledge (PAK). The research model meets the goodness of fit test which is indicated with the F-stat value of 1.322 and significance of 0.004 which is smaller than α = 0.05. This means that hypothesis 6 is accepted in which the use of accounting information affects the performance of SMEs.

The results of this study confirm the research of Suhairi (2004) which states that the use of accounting information by SMEs improves the company performance. The results of the research conducted by Mia and Clarke (1999) claimed that the use of accounting information can help companies to implement their plans in response to their competitive environment. Mia and Clarke (1999) also mentioned that the market competition affects the use of accounting information which can improve the performance of the business unit. Managers use accounting information for decision-making about product pricing, market demand forecasting, market planning, raw materials purchasing, product palanning and the improvement of organisational infrastructure.

5. CONCLUSION, IMPLICATION, SUGGESTION AND LIMITATIONS

The result of the study provides evidence that knowledge of accounting, business experience, and business scale affect the use of accounting information. However, the variable of type of business does not affect the use of accounting information. From the result of hierarchical regression analysis shows that the variable of environmental uncertainty strengthens the effect of variables of knowledge of accounting, business experience, and type of business on the use of accounting information. Furthermore, the test result shows that the use of accounting information affects the performance of SMEs.

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