

# The Contribution of Small and Medium-Sized Enterprises in the Economic Growth of the Southeast Region of Vietnam\*

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## Abstract

This research was conducted to check the impact of factors related to the small and medium-sized enterprises (SME) on the economic growth in the Southeast region of Vietnam, over the years from 1996–2019. This paper applies a combination of FEM, DKSE, GMM, and RIDGE-FEM regression methods to estimate the influence of independent variables on the economic growth of the whole Southeast region with the panel data collected from GSO; and applying the OLS regression model for each province. The study finds that all variables have a statistically significant positive impact on the economic growth of the study area. Accordingly, the importance of the variables is in the following order: (1) the proportion of workers by professional and technical qualification (SMEH), (2) the number of vocational training schools (LnTSCH), and educational level of workers (LnSchool), (3) the number of SME enterprises (LnSME); (4) The average number of years in the schooling of employees in the enterprise (LnSchool); (5) Enterprise capital (LnCAP); and (6) the average number of employees of SME (LnSMER). The research results also show that factors related to the quality of labor resources have a more positive influence on growth than both the labor size and financial capital of SMEs.

**Keywords:** Small and Medium-Sized Enterprises, Economic Growth, Capital, Labour, Southeast Region, Vietnam

**JEL Classification Code:** E2, J24, O47, O11 R11

## 1. Introduction

Small and medium-sized enterprises (SMEs) are considered to play a labor settlement role and are of great importance to economies of developed countries (Túlio, 2010). Also, SMEs contribute to the state budget through tax payments. SME sector employs the majority of the

domestic workforce and Sander and Roy (1999) assessed this as a channel to fulfill individual entrepreneurial aspirations. SMEs are assessed by many researchers to have positive impacts on economic growth (Audretsch & Keilbach, 2004; Audretsch & Keilbach, 2007). Because these are enterprises that employ a large number of domestic workers, helping to solve the unemployment issue and creating jobs for workers (Túlio, 2010). And enterprise block contributes to the national budget through corporate tax.

In Vietnam, during the period 2010–2017, the SME sector accounted for about 98.1% of the total number of operating enterprises, contributed about 45% of GDP and 31% of the total state budget revenue, and created jobs for more than 5 million employees (Le, 2017). The Southeast provinces (SE) were the most dynamic and developed economic regions in the country, accounting for about 40.9% of SMEs compared to the whole country in 2019. Therefore, the contribution of this SME sector to economic growth was not small.

Therefore, this paper is empirical evidence of the influence of factors related to small and medium enterprises on economic growth in the Southeast region of Vietnam. This is a scientific and practical basis to identify policies and necessary solutions to support SMEs to develop, contributing to promoting economic growth in the region.

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## **2. Literature Review and Research Hypotheses**

### **2.1. Literature Overview**

#### **2.1.1. Theory of Economic Growth**

The origins of economic growth have been studied and published by economists in their writings. There are many different definitions of economic growth, however, we can generally define it as follows.

According to World Bank (1991), economic growth is only an increase in the quantity of the major quantities that characterize an economic state, firstly the gross social product, taking into account the population. Or economic growth is the annual percentage increase in real GDP or real GDP per capita in the long run (Begg, 1991).

#### **2.1.2. Relationship of SMEs and Economic Growth**

As a result of the development of the world's tested economic theories, factors that influence economic growth have been found, such as:

Smith (2008) argued that the value of output relies heavily on the role of labor, not wealth or money (the theory of labor value). Complementing and developing such theories, Marshall (1890) proposed a neoclassical model of economic growth marked by the 'principles of economics' in 1890. He affirmed the role of technological progress. Not denying the role of labor, however, Marshall (1890) argued that labor can be replaced by capital. As a result, he gave two developmental perspectives: development in width (increasing capital per unit of labor) and development in depth (increasing efficiency of capital use). Such theories were further perfected by the Harrod-Domar model with emphasis on the role of capital in growth, or Barro (1991), with the theory of human capital.

In many studies, capital or capitalism is considered to be the most influential factor in economic growth. As Smith (2008) argued, the increase in accumulation and capital investment in production increases the labor productivity of society. Meanwhile, according to Aghion and Howitt (1992), creating new knowledge is a factor to create miraculous growth for the economy. According to Lewis (1954), the source of economic growth is the efficient use of excess labor in the agricultural sector. Through the two-sector model, the labor factor influences industrial growth. The economic growth model of Solow (1956) and Kaldor (1961) which is based on scientific and technical progress and high-quality human resources will increase the competitiveness of the economy.

Solow (1956) pointed out that while economic growth based purely on capital and labor can lead to

short-term growth, which is typical of the early stages of industrialization, the productivity of aggregate factors is the foundation for long-term economic growth. While Solow (1956) only mentioned that simple or crude labor influences economic growth, the new growth or endogenous growth theory economists argued that crude labor will not account for long-term growth or differences in per capita income between countries. The study by Mankiw et al. (1992) mentioned qualified, skilled and experienced labor, which is called human capital, in Solow's growth model. If human capital is an irreplaceable and indispensable commodity, growth disparities between countries are attributable to human capital, and effective labor includes the abilities, skills, and knowledge of each individual worker.

According to Barro (1991), the difference in economic growth between countries is greatly explained by the difference not only in investment efficiency but also in knowledge and human capital. Models by Lucas (1988), Romer (1990), and Becker et al. (1990) also show that human capital has an effect on economic growth. Barro (2001) also argued that human capital facilitates the uptake of cutting-edge technologies and generates growth through technological innovation stimulus. In addition, educational attainment is proven to play an important role in stimulating both the uptake of cutting edge technologies and innovation, especially for SMEs and stimulating economic growth.

### **2.2. Research Hypothesis**

Based on researching theories and previous empirical studies on the economic growth and SME enterprises, the authors have proposed 06 research hypotheses on factors affecting the influence of small and medium-sized businesses on economic growth in the southeastern region of Vietnam as follows.

#### **2.2.1. Number of SME and Economic Growth**

Acs (1992) argued that small enterprises play an important role in the economy by acting as agents of change in their business activities. It is also the source of significant innovation, driving industry growth and creating new jobs. Several other researchers have also argued that SMEs are important growth determinants that have been ignored in the neoclassical growth framework (Audretsch & Keilbach, 2004, 2007). Furthermore, Solow (2007) recognized private enterprise as an important force driving the combination of knowledge and aggregate factor productivity. It can bridge the gap between specific parts of technological knowledge and innovation through the creation of new companies. Hence, explaining how SMEs influence growth can add to the exploratory power of growth theory. In addition, Willis (2011) argued that the establishment of small enterprises

plays an important role in promoting the prosperity of the economy. Because it increases the competitiveness of emerging industries, helps economic growth and innovation capacity in many areas. The establishment of new enterprises creates many jobs. SMEs have created millions of jobs worldwide (Kelley et al., 2011).

In recent years, many studies have shown that small enterprises play a very important role in economic development and start-up in the economy to motivate the socio-economic development of many countries around the world (Verzat & Bachelet, 2006). Particularly in Vietnam, the role of SMEs is increasingly recognized by society by making a significant contribution to the country's economy, with GDP accounting for about 45% of the country's total GDP, annually attracting more than 90% of new employees. Small enterprises are the backbone of the private sector, creating more jobs and contributing taxes to the government, and improving the infrastructure.

Most recently, SMEs were the key economic drivers of Southeast Asian countries in the period 2010–2019, accounting for 97% of the total number of businesses and 69% of the workforce. This business sector contributes an average of 41% of the GDP of the countries in the region. In Vietnam, household businesses accounted for 30% of MSME contribution and 12% of GDP in 2018. The hypothesis is proposed as:

*H1: The number of SMEs positively affects the economic growth of the region.*

### 2.2.2. Labor in SMEs

Human capital is one of the essential elements and sustainable approaches to promote economic growth. Human capital has a significantly positive relationship with economic growth in some selected ASEAN countries for the study. Especially skilled human resources contribute dramatically to the economic growth and development of a country (Che Sulaiman et al., 2021). Human capital is extremely important and crucial. It encourages a faster acceleration in a country's economic growth. Human capital can often be calculated by mean years of schooling and expected years of schooling (Indra, 2020). Similarly, Erum et al. (2016) stated that labor is positively and significantly related to the GDP and that a growth strategy that ignores human capital investments will not bring long-term benefits.

Studies of the effects of SMEs on economic growth show that the educational level of workers in SMEs is crucial. It helps to increase the diffusion of technology and the application of new innovations and has a positive effect on growth (Nelson & Phelps, 1966). According to the study by Túlio (2010), SMEs affect Brazil's economic growth. The author evaluated that the average number of school years of

workers has a positive effect on economic growth. However, the size of employment by SMEs/the total formal workforce in production, and the share of employment in SMEs by educational attainment hierarchy have a negative effect on Brazil's economic growth over the period of 1980–2004, due to the grouping of rich and poor regions.

Hanushek and Woessmann (2012) had studied cognitive skills and the number of school years to assess the influence of human resources on economic growth. The results showed that only the average number of school years has an effect on economic growth. The higher quality of human resources, the higher its influence on economic growth. Human resources with good training quality is also an asset that can create economic benefits not only for enterprises but also the country (Wensley & Evans, 2020).

Widarni & Bawono (2021) believed that well-invested human resources in education and training are very important factors for economic growth. Education development is the key to the success of increasing human resources and developing the technology because education plays a role in improving the quality of human resources. Therefore, human capital investment has a positive impact on economic growth.

Therefore, the authors put forward the following hypotheses:

*H2: The number of employees in SMEs positively affects the economic growth of the region.*

*H3: The proportion of skillful SME workers has a positive effect on the economic growth of the region.*

*H4: The educational qualification of workers in SMEs positively affects the economic growth of the region.*

*H5: The number of universities and vocational training institutions has a positive influence on the economic growth of the region.*

### 2.2.3. Capital of SMEs

In the context of developed countries, Audretsch and Thurik (2001) argued that a "thriving economy" based on small enterprises has emerged thanks to telecommunications innovation, the microprocessor revolution, and the advent of low-cost but highly skilled (mainly) competition in Eastern Europe and Asia. In developed countries, SMEs can be a driver of economic growth based on new technologies. For example, Audretsch and Keilbach (2004) and Mueller (2007) measured trustworthiness using the start-up rate and found a positive effect of business capital on growth in Germany. Dias and McDermott (2006) assessed that modern economic growth depends not only on human capital and institutions but also on the role of enterprises. As enterprises grow and do more business, it leads to more human capital formation.

It was assessed that 97.6% of enterprises operating in Vietnam are SMEs (VCCI & USAID, 2016a). These enterprises are constantly striving to contribute to economic growth. The proof is that this enterprise sector contributes 45% to GDP and nearly 50% to the total annual budget revenue. In addition, the role of SMEs in creating new jobs, social security, and poverty reduction has always been recognized. VCCI and USAID (2015, 2016b) also showed the characteristics of the SMEs sector. Accordingly, the majority of SMEs in Vietnam come from a model of small individual production and business. The general education level of SME owners is relatively high and they come from diverse backgrounds. The report also noted that SMEs still face many difficulties in reaching international markets and remain persistent in the domestic market due to limitations in equity, technology, and human resources.

**H6:** *The capital of SMEs has a positive influence on the economic growth of the region.*

### 3. Research Methodology

#### 3.1. Research Model

In this paper, we applied the classical, neoclassical economic models of economic growth by Smith (2008), Ricardo (1817), Solow (1956), Mankiw et al. (1992)

Barro (1991), Lucas (1988), Romer (1990), and Becker et al. (1990) and the methods of measuring the impact of SMEs on economic growth was used by previous research (Acs, 1992; Nelson & Phelps, 1966; Audretsch & Keilbach, 2004; Solow, 2007; Túlio, 2010; Willis, 2011) to measure the influence of factors of small and medium-sized enterprises on economic growth in the Southeast region. The research model is shown in Figure 1 and equation (1):

$$\text{LnGDP} = \beta_0 + \beta_1 \text{LnSME} + \beta_2 \text{LnSMER} + \beta_3 \text{LnSMEH} + \beta_4 \text{LnSchool} + \beta_5 \text{LnTSCH} + \beta_6 \text{LnCAP} + u_i \quad (1)$$

#### 3.1.1. Dependent Variable

LnGDP: The Gross domestic product (GDP), a measure of the market value of all the final goods and services produced within a region in a specific time period (calculated by natural logarithms).

#### 3.1.2. Independent Variables

LnSME: Number of SMEs (calculated by natural logarithms).

LnSMER: The relative size of an SME, measured by the average proportion of employees per SME (calculated in natural logarithms).

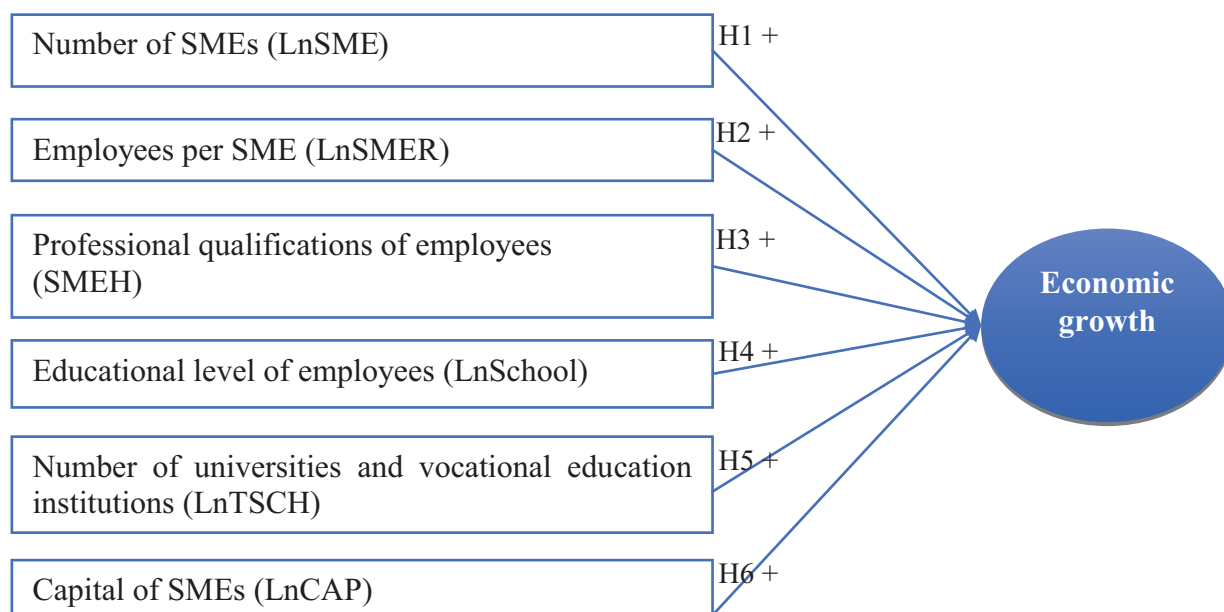


Figure 1: Proposed Research Model

SMEH: The proportion of employees working in SMEs is classified by professional and technical qualifications. SMEH is calculated as follows:

$$\text{SMEH} = \frac{\sum_{i=0}^N (E^i \times S^i)}{E} \quad (2)$$

Where:

$E^i$  is the number of employees of SMEs classified by each type of education level;  $S^i$  is the classification score for each educational level (specifically: 1 = No training; 2 = Elementary level; 3 = Intermediate level; 4 = College level; 5 = University level; 6 = Postgraduate level)  $E$  is the total number of employees of SMEs. SMEH is calculated by natural logarithms.

LnSchool: Educational level of employees in SMEs. Mean years of schooling, calculated by the average number of completed years of education of laborers in SMEs. This is a widely used measure of a stock of human capital of a country or province (calculated by natural logarithms).

LnTSCH: Number of universities and vocational education institutions (vocational education centers, junior colleges). LnTSCH was calculated by natural logarithms.

LnCAP: Capital of small and medium-sized enterprises (calculated by natural logarithms).

### 3.2. Research Data

Data used in this study was collected by six provinces in the Southeast region including Ho Chi Minh city and five other provinces, which are Dong Nai, Tay Ninh, Binh Duong, Binh Phuoc, and Ba Ria-Vung Tau, from 1996 to 2019, provided by The General Statistics Office of Vietnam. Data was processed and analyzed by statistical software Stata version 16 and R.

Depending on the country, there will be criteria to classify SMEs. In Vietnam, SMEs are regulated in Decree No. 39/2018/ND-CP signed by the Prime Minister on March 11<sup>th</sup>, 2018, detailing a number of articles of the law to support small and medium-sized enterprises. Accordingly, SMEs are classified by size, including micro, small and medium enterprises. In general, SMEs are a group of enterprises with less than 200 employees.

### 3.3. Research Methods

The analytical data is fully collected over the years. The authors conducted statistical analysis to describe the variables and analyze the correlation. This study applies a combination of Fixed-effects model (FEM), Driscoll-Kraay standard errors (DKSE), generalized method of moments (GMM), and Ridge and Weighted Regression for Fixed-Effects Panel Data (RIDGEM) regression methods

with panel data to estimate the influence of independent variables on the economic growth of the whole Southeast region; and applying the Ordinary Least Squares (OLS) regression model with time-series data for each province. After choosing the appropriate methods to run the model, the authors conducted the hypothesis tests to test the defects of the regression model.

## 4. Results and Recommendations

### 4.1. The Current Situation of SMEs in the Southeast Region

#### 4.1.1. The Economic Role of the Southeast Region

The Southeast region of Vietnam has one city directly under the Central Government (Ho Chi Minh City) and 5 provinces (including Ba Ria - Vung Tau, Binh Duong, Binh Phuoc, Dong Nai, and Tay Ninh). The total area of the whole region is 23,552.8 km<sup>2</sup>, accounting for 7.11% of the country's area (GSO 2020). The total population of the region in 2019 was 17,930,300 people (excluding the number of permanent residents), accounting for 18.58% of the country's population, with an average population density of 761 people/km<sup>2</sup> (GSO, 2020).

The Southeast is the most economically developed region in Vietnam, with the highest urbanization rate in the country (about 62.8%). It is also the largest industrial center in the country, with a dense network of industrial parks concentrated mainly in the provinces of Binh Duong, Dong Nai, Ba Ria - Vung Tau, and Ho Chi Minh City. The economic development level of the Southeast region is generally higher than that of the whole country in almost all sectors, fields such as industry, tourism services, telecommunications, high technology, finance, banking, research, application and deployment, and human resource training, etc.

Specifically, the Southeast region's average Gross domestic product (GDP) growth rate from 2016 to 2018 was 7.71 percent, while the region's GDP per capita in 2018 was 5,289 USD/person. (According to the report of the Ministry of Planning and Investment in 2020). It is the region that contributes over 50% of the national budget revenue and over 35% of the country's GDP (mainly from Ho Chi Minh City, accounting for 23.9% of the country's total GDP, ranking first among 63 provinces and cities).

#### 4.1.2. The Stature of Small and Medium-Sized Enterprises in the Southeast Region

In 2019, there were 758,610 active enterprises in the country. Where, the Southeast region had 312,821 enterprises, accounting for 41.24% of the country's total number of enterprises (GSO, 2020).

Particularly, SMEs in the Southeast region in 2019 was 262,414 units, accounting for 44.21% of SMEs compared to the whole country (total of 593.629 units). In recent years, SMEs in the Southeast region have been increasing in number and accounting for a high proportion of the total number of existing enterprises. Revenue from SMEs in the Southeast region in 2018 reached VND 2,540,507 billion, an increase of 10.31% compared to 2017 and an increase of 62.91% compared to the period of 2011–2015, accounting for 29.16% of the total revenue of all enterprises in the area (MPI, 2020).

The average index of laborer attraction to work in companies for the 2016–2017 period increased compared to the average for the 2011–2015 period in provinces that are key industrial hubs of the Southeast area and the entire country. Specifically, Ho Chi Minh City increased by 17.4%; Dong Nai increased by 23.8%; Binh Duong increased 22.6% (MPI, 2020).

However, laborers in SMEs are mostly general, unqualified, unskilled, and low-educated, and this situation is more exacerbated by the number of laborers in small businesses. Calculations from the statistics showed that by 2019, up to 76% of laborers in SMEs in the Southeast region had been untrained, laborers with elementary qualifications being about 5.8%, laborers with intermediate were about 4.0%, college laborers was about 8%, and after graduate laborers were about 1.4%. The corresponding rates for 1995 were 87.2%, 5.6%, 3.9%, 1.2%, 1.8%, 0.4% (MPI, 2020). It proved that the technical level of laborers has been improved, but not much.

## 4.2. Empirical Results

### 4.2.1. Effect of the Factors on Economic Growth in the Southeast Region

The results of the SME-related characteristics are shown in Table 1. The authors used 4 regression methods, including

FEM (shown in column 2), DKSE (column 3), GMM (column 4), and RIDGEFEM regression (column 5) to assess the effect of SMEs on economic growth in the Southeast region. Specifically, as follows.

With the FEM regression model and the DKSE regression model, all three variables have a statistically significant influence on the economic growth of the region, including SMEH, LnSchool, and LnCAP. With the GMM regression model, there are 4 variables that have a statistically significant influence on the economic growth of the region, including SMEH, LnSchool, LnCAP, and LnSME. Finally, the RIDGEFEM regression model found that all 06 variables have a statistically significant influence on the economic growth of the region.

RIDGEFEM regression model has helped to overcome the phenomenon of multi-collinearity in the research data. Besides, the RIDGEFEM model has the highest  $R^2$  coefficient (0.9895) among the four models. Therefore, we choose RIDGEFEM regression results to analyze the influence on the economic growth of the Southeast. According to this result, the factors of the number of SME enterprises (LnSME), labor size (LnSMER), professional level of labor working in enterprises (SMEH), average years of schooling of labor (LnSchool), the number of colleges and universities (LnTSCH), and capital of small and medium enterprises (LnCAP) all have a positive and statistically significant effect on the economic growth in the Southeast region. Hence, the expectations of hypotheses H1, H2, H3, H4, H5, and H6, are satisfied. The results are similar to some previous studies on the influence of variables on economic growth, specifically on the positive role of the number of SMEs in economic growth (Acs, 1992; Verzat & Bachelet, 2006; Willis, 2011; Pham et al., 2020); on the positive impact of the number of employees in SME (Erum et al., 2016; Indra, 2020; Che Sulaiman et al., 2021); the positive influence of technical expertise (Nelson & Phelps, 1966; Tulio, 2010); the positive effect of the number of years of schooling of employees in

**Table 1:** Results of General Regressions for the Entire Southeast Region

Variables (1)	FEM Regression (2)	DKSE Regression (3)	GMM Regression (4)	RIDGEFEM Regression (5)
LnSME	-0.0488	-0.0488	-2.4600**	0.3541***
SMEH	5.7033***	5.7034**	28.2782**	0.8597***
LnSMER	0.1554	0.1554	10.4342*	0.0266***
LnSchool	-0.5589**	0.5589**	8.9799*	0.1248***
LnTSCH	-0.7364	-0.7364	–	0.4933***
LnCAP	0.5010***	0.5010***	-2.0546	0.0324***
_cons	-9.5934***	-9.5934***	-144.8012**	6.2919***
$R^2$	0.85	0.9094		0.9895

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ .

enterprises (Hanushek & Woessmann, 2012; Indra, 2020); and the positive influence of capital in SMEs (Audretsch & Thurik, 2001; Audretsch & Keilbach, 2004; Mueller, 2007; Pham et al., 2020).

Thus, the RIDGEFEM regression results show that the importance order of the influence of the six factors on the economic growth of the SME sector in the Southeast region of Vietnam is arranged as follows: Labor’s technical level (SMEH) is the most influential factor; followed by the number of colleges and universities (LnTSCH); the number of SMEs (LnSME); the average number of school years of employees in enterprises (LnSchool); capital of enterprises (LnCAP); and finally the average labor size of SMEs (LnSMER). All of these factors have positive and statistically significant effects on the economic growth in the Southeast region.

The above results show that the small and medium-sized enterprises (SME) sector have a positive effect on the Southeast region’s economic growth (Table 1). In particular, the factors related to the quantity and quality of SME labor have become quite important in driving the region’s economic growth.

#### 4.2.2. Effect of Factors on Economic Growth of Each Province in the Southeast Region

The results in Table 2 showed that the influence of factors related to SMEs on economic growth in each province was different. Specifically.

On the influence of the variable LnSME: The study found a statistically significant influence of the number of small and medium enterprises (LnSME) on Tay Ninh province,

but this factor has a negative effect. The result is contrary to some previous studies (Acs, 1992; Verzat & Bachelet, 2006; Audretsch & Keilbach, 2007; Willis, 2011).

On the influence of the SMEH variable: The study found a statistically significant positive effect of the proportion of employees by professional and technical qualifications on the economic growth of Ho Chi Minh City. Because this is the locality capable of attracting the highest qualified human resources in the country. This result is similar to some previous empirical studies (Acs, 1992; Keilbach, 2004; Verzat & Bachelet, 2006; Audretsch & Keilbach, 2007; Willis, 2011; Pham et al., 2020).

Regarding the influence of the LnSMER variable: The study found a statistically significant negative effect of the average labor rate in the enterprise (LnSMER) on the economic growth of 03 provinces including Tay Ninh, Binh Duong, Dong Nai. But it has a positive effect on the economic growth of Ba Ria - Vung Tau province.

On the influence of the variable LnSchool: The results show that there is a statistically significant positive influence of the number of years in the schooling of workers in SMEs on the economic growth of Tay Ninh province and Ho Chi Minh City. There are similarities with some statements in previous empirical studies (Acs, 1992; Verzat & Bachelet, 2006; Audretsch & Keilbach, 2007; Willis, 2011; Pham et al., 2020).

Regarding the influence of the LnTSCH variable: The results showed a statistically significant positive influence of the number of universities and vocational education institutions on the economic growth of Tay Ninh, Binh Duong, and Dong Nai provinces. But it has a negative effect on the economic growth of Ba Ria - Vung Tau province.

**Table 2:** Results of OLS Regressions for Each Province of the Southeast Region

Variable (1)	Binh Phuoc (2)	Tay Ninh (3)	Binh Duong (4)	Dong Nai (5)	Ba Ria – Vung Tau (6)	Ho Chi Minh City (7)
LnSME	-0.7773 (0.224)	-0.3525* (0.092)	0.4057 (0.519)	0.1118 (0.783)	0.6747 (0.115)	0.4531 (0.487)
SMEH	3.7417 (0.205)	-1.9132 (0.394)	8.2066 (0.112)	1.7115 (0.405)	1.5907 (0.583)	5.1249** (0.018)
LnSMER	0.7652 (0.162)	-2.6013*** (0.002)	-3.0174*** (0.000)	-2.7534*** (0.000)	1.1033* (0.086)	-0.1336 (0.901)
LnSchool	0.3215 (0.467)	0.5063* (0.072)	0.9656 (0.129)	-0.179 (0.607)	0.2940 (0.519)	0.6555* (0.066)
LnTSCH	5.1745 (0.155)	8.9406*** (0.002)	19.4998* (0.010)	11.8743*** (0.001)	-5.4201** (0.010)	-5.5502 (0.205)
LnCAP	0.4071 (0.326)	0.9119*** (0.001)	-0.9125 (0.497)	0.1027 (0.790)	0.3688 (0.113)	0.5927** (0.003)
Cons	-17.7167*** (0.003)	7.3698 (0.143)	6.2590 (0.418)	16.5062** (0.033)	-5.8231 (0.315)	-2.7085 (0.796)

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ .

This can be explained because, at present, most universities and vocational schools are concentrated mainly in Ho Chi Minh City, Binh Duong, and Dong Nai, while the number of schools is very small in Ba Ria - Vung Tau province.

On the influence of the LnCAP variable: The results showed a statistically significant positive influence of the financial capital of SMEs on the economic growth of Tay Ninh province and Ho Chi Minh City. This finding is similar to the results of previous empirical studies (Audretsch & Thurik 2001; Audretsch & Keilbach, 2004; Mueller, 2007; Pham et al., 2020).

In general, depending on the conditions of each province, the economic growth of each locality is affected differently by the variables in the research model. Collectively, the economic growth of the provinces is mostly influenced by the variables LnSMER, LnTSCHE, LnSchool, LnCAP, a few are influenced by the variables SMEH and LnSME.

## 5. Conclusion

In this paper, we mainly focus on studying the influence of factors related to small and medium enterprises on the economic growth of the Southeast region of Vietnam. Through a dataset collected from 6 provinces in the Southeast region from 1996–2019, the authors assessed and analyzed the impact of factors related to small and medium enterprises on the economic growth of the region. Through empirical results from 4 regression equations FEM, DKSE, GMM, RIDGEFEM, they show that most of the variables related to the quality of labor resources and capital of enterprises have a strong influence on economic growth. With the last option, the RIDGEFEM model, we find that all variables have a statistically significant positive impact on the economic growth of the study area. Accordingly, the importance of the variables is in the following order: (1) the proportion of workers by professional and technical qualification (SMEH), (2) the number of vocational training schools (LnTSCHE), and educational level of workers (LnSchool), (3) number of SME enterprises (LnSME); (4) Average number of years in the schooling of employees in the enterprise (LnSchool); (5) Enterprise capital (LnCAP); and finally (6) the average number of employees of SME (LnSMER). And the research results show that factors related to the quality of labor resources have a more positive influence on growth than both the labor size and financial capital of SMEs.

In addition, depending on the locality, the economic growth of each province will be affected differently by each research factor. But in general, the most important thing is the quality of the enterprise's labor resources. The research results of this paper are very useful for local government agencies, policymakers, and business administrators. It helps them make the right and appropriate investment decisions

and support policies to improve the quality of labor, increase capital in SME businesses to contribute to business development, and promote economic growth.

In this paper, we have not considered other macro-economic factors that may affect the economic growth of the region. It is expected that in the next studies we will proceed to evaluate more macroeconomic factors, at the same time explore the contribution of small and medium enterprises, and the difference in the influence of these factors on the economic growth among economic regions in the country.

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