## Local Economic Governance and the Development of the Business Sector in Vietnam

### Dao Thi Bich Thuy\*

VNU University of Economics and Business, 144 Xuan Thuy, Cau Giay Dist., Hanoi, Vietnam

Received 30 November 2017 Revised 15 December 2017; Accepted 25 December 2017

**Abstract:** Local economic governance plays an important role in the development of the business sector. To assess its impact on business sector growth in Vietnam, this empirical study is conducted at the local level with all 63 provinces nationwide in the period from 2006 to 2014. The Provincial Competitiveness Index (PCI) is used as a measurement for local economic governance. The finding reveals that overall the PCI has a positive effect on growth in the number of enterprises and output generated in the business sector. At the sub-index level, 5 indicators show positive effects with labor training having the largest impact, followed by time costs of regulatory compliance, informal charges, transparency and finally business support service. Land access and security of tenure and proactivity of the provincial leadership unexpectedly show negative effects while the other 2 indicators, including entry cost for new firms and legal institutions, have no significant impact on business sector growth.

Keywords: Local economic governance, Provincial Competitiveness Index, business sector growth.

#### 1. Introduction

The business sector takes an important position in an economy as it is a key sector that creates the economy's output, generates employment and income for workers, and is a main source of tax contribution to the government. In Vietnam, business sector development is determined to be a factor ensuring the achievement of the country's objectives in industrialization and modernization, improving economic efficiency, stability and sustaining creating more competitiveness for the economy in the process

Email: thuydaokt@vnu.edu.vn

of integration. Recognizing this importance, the government has enacted and perfected corporate laws in favor of business sector development, namely from the Corporate and Private Enterprise Laws 1990, to Enterprise Laws 1999, and from State Enterprise Laws 1995 to State Enterprise Laws 2003. Enterprise Laws 2005 set a remarkable milestone when it replaced the previous laws on enterprises and applies uniformly to all enterprises disregarding their types of ownerships.

Beside laws and various macroeconomic policies at the national level, economic governance of local government is also a matter important to business sector growth since it determines the business environment at the provincial level. Good economic governance

<sup>\*</sup> Tel.: 84-912583355.

https://doi.org/10.25073/2588-1108/vnueab.4130

creates a reliable system in which to conduct economic activity. A transparent business climate creates opportunities for businesses to have fair access to business information and necessary legal documents and thereby promotes fair competition. Local administrative reform efforts help reduce the time and informal expenses that businesses have to pay for administrative and inspection procedures. The availability of good quality local infrastructure reduces the distribution costs of production input and output, and thus enhances productivity for businesses. The proactivity of local governments in addressing business issues, business support services, and the legal and judicial systems for fair and effective dispute resolution contributes to the creation of a business environment conducive to business operation and development.

Since 2000 Vietnam's economy has witnessed a remarkable growth in the business sector in terms of the number of operating enterprises as well as the size of the output generated in this sector. In the 2000 - 2014 period, the number of operating enterprises in the whole country grew at an average annual rate of 17.7%, bringing this number in 2014 to more than nine times higher than in 2000. Similarly, the annual growth rate of output in this sector reached 12.7% on the average. As a result, the sector's output value (in terms of 2010 price levels) in 2014 to be five times higher than in 2000 [1].

The study aims to assess the impact of local economic governance and its effectiveness on business sector development in Vietnam.

# 2. The role of local economic governance in business sector development

The development of the business sector depends very much on the macroeconomic environment. The studies by Abel (2014) and Irungu and Muturi (2015) identify basic macroeconomic indicators that affect the business sector, including the state of the economy's performance, interest rates, inflation rates and exchange rates [2, 3]. Firstly, the state of the economy's performance occurs in cyclical patterns with periods of growth and contraction. In times of growth, the economy thrives, incomes rise, unemployment decreases, and high consumer confidence drives people to spend more on goods and services. This creates a great opportunity for businesses to grow in quantity and scale of production to meet high consumer demand. Conversely, during businesses must face recessions. many challenges and difficulties. The declining economy makes consumers with lower incomes or concerned for their future employment to be more cautious in their spending. The decline in demand for goods and services will reduce companies' revenues and profits, limit growth opportunities, and even drive inefficient businesses into bankruptcy.

Secondly, interest rates have a strong impact on businesses, especially for small and medium enterprises when borrowing is a significant source of financial mobilization for the companies. Research by Gertler and Gilchrist (1994) shows that US small-scaled manufacturing companies are highly affected in periods of rising interest rates [4]. High interest force small businesses to reduce rates inventories, incur high production costs and experience a decline in sales which ultimately hurts profitability and growth. According to Greenwood (2003), small and medium enterprises have long-term material assets but mainly short-term debt [5]. Increasing interest rates will cause the present value of the property to fall more drastically than the present value of the debt, which in turn makes the business less creditworthy and thus less attractive to external financing. In another channel, interest rates have an indirect impact on businesses when fluctuations in interest rates would change the behavior of consumers for consumption loans and thus affect the demand for goods and services [6]. Thirdly, according to OsoroandOgeto (2014), the impact of inflation on businesses can be viewed from two

angles: impact on aggregate demand and impact on production costs [7]. During a period of high inflation, consumers with fixed incomes will have less purchasing power due to the devaluation of the currency and thus reduce the demand for goods and services. In addition, rising inflation drives production costs and reduces corporate profits. Fourthly, changes in the exchange rates have a direct impact on multinational enterprises, enterprises involved in export and import of goods and services or import of inputs for the purpose of production. Additionally, fluctuations in the exchange rates will change the relative prices of domestic goods and imported goods and thus indirectly affect domestic firms producing goods competing with imported goods [8].

Obviously, the government can play an active role in influencing the macroeconomic environment. Various macro economic policies that government often uses, such as fiscal, monetary, or foreign trade policies, can affect those basic macroeconomic indicators and thus the performance of the business sector.

In addition to macroeconomic policies at the national level, economic governance at the local government is also a matter of importance to business sector growth since it determines the business environment at the provincial level. According to the UNDP (2009), local governance is the process by which public policy decisions are made and implemented through the interactions, relationships and networks between the local government, public sector, private sector and civil society [9]. Good local governance denotes quality, effectiveness and efficiency of local administration and public service delivery, the quality of local public policy and decision-making procedures, their inclusiveness, their transparency, their accountability and the manner in which power and authority are exercised at the local level.

Local economic governance is a broad concept and open to a range of conceptualizations. In a limited sense, it means the governance of private economic activity [10]. Local economic governance covers a wide

of activities, including range granting permissions and licenses, collecting revenue (taxes, fees, fines and other revenue), providing services (local infrastructure and services, business development programs and resolution of disputes), regulating and monitoring (setting rules/standards that influence business business operations and inspections) and engaging and dialoguing with business (mechanisms for citizen and business engagement with government, involvement of constituents in decision-making and providing information to businesses).

The Local Economic Governance Report (2011) identifies 9 aspects through which local economic governance influences the economic performance of private businesses [11]. First is land access. Land is an essential aspect in creating a positive investment climate for businesses; therefore, policies that promote ease of access to land and certainty about the status of land-use will promote investment. Second, the availability and quality of infrastructure strongly influences business and production operations. Good quality roads, street lighting, reliable telecommunications, stable power and water supplies are a prerequisite for business activities to operate effectively and efficiently. Third is business registration and licensing. A simple and inexpensive business licensing will encourage development of new businesses while a difficult, long and expensive business licensing procedure discourages the establishment of new businesses and dissuades entrepreneurs from formalizing their businesses. Fourth, local level regulations are policy instruments that indicate the local government's position toward the business community. Local regulations can be used to stimulate and provide incentives to, or conversely, impede the development of business. Fifth, transaction costs include local taxes, user charges and donations legalized by local-level regulations. Transaction costs may become obstacles to business if they are imposed solely to increase local revenue without taking into account their impact on business development. However, it would not be of much concern if transaction costs were enforced based on explicit reasons, properly implemented, and the proceeds were directed toward improving public services. Sixth, capacity and integrity of local government officials is critical to guarantee effective implementation of government policies. Trusted and capable regional heads implement investment-friendly policies and thus enhance investor confidence. Seventh. interaction between local government and business is important to ensure policies and public investments undertaken by local governments to be in line with the needs of businesses and support for this sector's growth. Eighth, business development programs carried out by local governments aim to improve business management capacity and skill of workers, and to find new business opportunities for local enterprises. Finally is security and conflict resolution. A safe investment climate and a good mechanism for resolution of business conflicts or disputes enhance investors' confidence in starting and doing business.

Business sector growth needs good economic governance. Dixit (2001) argues that good economic governance consists of the processes that support economic activity and economic transactions by protecting property rights, enforcing contracts, and taking collective actions to provide appropriate physical and organizational infrastructure [12]. The study by Wal and Hilhorst (2007) suggests various ways that local government can contribute to the development of the business sector [13]. Among them are fostering effective and efficient registration and licenses, predictability and reliability of action by local government, collection and use of taxes and levies in a transparent way, fostering investments in physical infrastructure and preferring procurement of local services.

#### 3. Empirical study

The development of the business sector in the Vietnamese economy is well recognized with the growth in the number of enterprises, the size of the business sector's output and capital investment and employment created by the sector. In the period 2000-2014, on the average the number of enterprises grew at a rate of 17.7% per annum, bring this number in 2014 to more than nine times higher the number in 2000. However, the number of enterprises tended to grow faster in the earlier years with the average annual growth rate of 21.9% during 2000-2005 reduced to 20.5% during 2005-2010 and in the period 2010-2014 this number was only 10.1%.

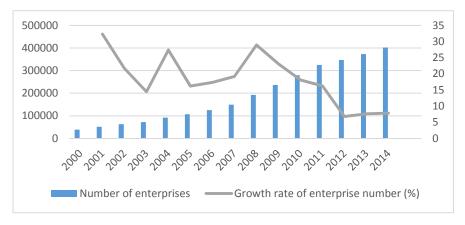


Figure 1. Growth in number of enterprises. *Source:* GSO Vietnam.

Output generated in the business sector measured by the net turnover from the business of enterprises experienced a noticeable growth at an average annual rate of 12.7%. In 2014, net turnover from the business of enterprises (valued at 2010 price level) was more than 5 times higher than its value in 2000. Beside the growth of output, the capital of enterprises also grew at a significant rate of 14% per annum. Compare to 2000, the capital of enterprises in 2014 increased more than 6 times. Again it can be seen that the pattern of growth rates of the business sector's output and capital is similar to that of the number of enterprises. During 2000-2010, output and capital grew at a high rate of 15.5% and 17.4% per annum respectively and then the annual growth rate slowed down to only 7.1% for output and 8.9% for capital in the period 2010-2014.

The growth in employment created in the business sector helps to lessen the employment demand pressure that has been increasingly rising from the labor force. In the period from 2000 to 2014, the number of jobs in the whole country measured by the number of employed population of 15 years of age and above increased at an average annual rate of 2.6% (GSO Vietnam). Meanwhile, employment in the business sector grew at an impressive annual rate of 9.3%, much higher than the growth rate of employment in the country. In the economy's employment structure, the share of employment in the businesssector is still low but this proportion has continuously increased over the years, from 9.5% in 2000 to 23% in 2014. This reflects that businesses take a more important position in the creation of jobs for workers in the economy.

In Vietnam, local economic governance is well measured by the Provincial Competitiveness Index (PCI) [14]. The PCI is designed to assess the quality of governance, and the capacity and willingness of provincial governments to develop business-friendly regulatory environments for business sector development. Essentially, the PCI is built on a weighting of 10 sub-indexes, including entry cost for new firms, land access and security of tenure, transparency, time costs of regulatory compliance, informal charges, proactivity of provincial leadership, policy bias toward state owned enterprises, business support services, labor training and legal institutions. Each subindex is constructed with a maximum score of 100 and a higher score reflects a better quality of local economic governance in creating a healthy and favorable business environment.

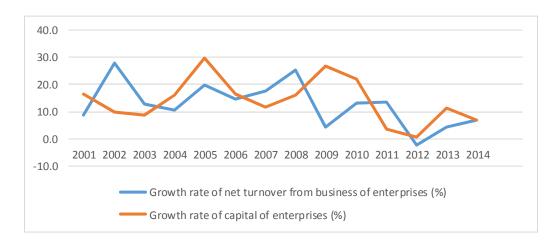


Figure 2. Growth in business sector output and capital. Source: The author's own calculations from data collected from GSO Vietnam.

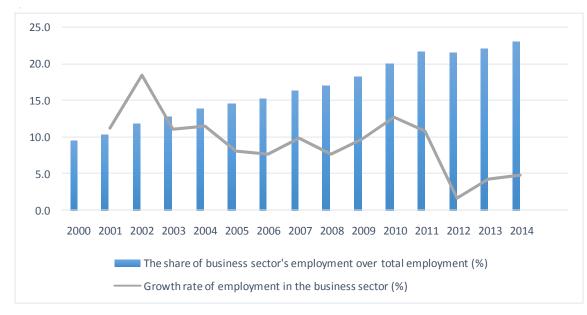


Figure 3. The share and growth rate of employment in the business sector. *Source*: The author's own calculations from data collected from GSO Vietnam.

It is reasonably expected that growth in the number of enterprises and their output would result in more jobs created and larger investment of capital in the sector. The study thus focuses on two measurements of business sector development which are: number of enterprises and output generated in the business sector. To assess the impact of local economic governance on business sector development, the proposal question would be: how do each of the PCI sub-index affect growth in the number of enterprises and the size of the business sector's output? Toward this end, two separate regression equations are established with all 9 sub-indexes of the PCI (except for policy bias toward state-owned enterprises because this sub-index is not built continuously over the years) regressed on the two dependent variables, which are number of enterprises and business sector output.

$$LNNE_{i,t} = c + \beta_1 PCIMK_{i,t} + \beta_2 PCILA_{i,t} + \beta_3 PCITR_{i,t} + \beta_4 PCITC_{i,t} + \beta_5 PCIIC_{i,t} + \beta_6 PCIAP_{i,t} + \beta_7 PCIES_{i,t} + \beta_8 PCILT_{i,t} + \beta_9 PCILR_{i,t} + e_{i,t}$$
(1)  

$$LNRE_{i,t} = c + \beta_1 PCIMK_{i,t} + \beta_2 PCILA_{i,t} + \beta_3 PCITR_{i,t} + \beta_4 PCITC_{i,t} + \beta_5 PCIIC_{i,t} + \beta_6 PCIAP_{i,t} + \beta_7 PCIES_{i,t} + \beta_8 PCILT_{i,t} + \beta_9 PCILR_{i,t} + e_{i,t}$$
(2)

Where subscript *i* indicates province and subscript *t* is time in years.

The dependent variable (LNNE) is the natural logarithm of the number of enterprises each year in each province. The dependent variable (LNRE) is the natural logarithm of business sector output each year in each province. The number of enterprises, recorded by the number of enterprises currently operating in business, and net turnover from business of enterprises, are taken as proxies for the business sector's output. The data is taken from Vietnam statistical yearbooks. To adjust for the impact of inflation, the net turnover data collected in each year is divided by GDP deflator to convert it to the value at the base year 2010 price level. The 9 explanatory variables include: PCIMK is entry cost for new firms, PCILA is land access and security of tenure, PCITR is transparency, PCITC is time costs of regulatory compliance, PCIIC is informal charges, PCIAP is proactivity of provincial leadership, PCIES is the business support service, PCILT is labor training and PCILR is the legal institutions. The coefficient  $\beta$  indicates a 1-percentage point change in the explanatory variable which leads to how much the percentage change is in the dependent variable. We would expect all 9 coefficients  $\beta$ take positive value and state the following hypothesis.

Hypothesis: Improvement in each of the 9 sub-indexes of the PCI has a positive effect on the development of the business sector.

The study was conducted at the local level with all 63 provinces nationwide in the period from 2006 to 2014. Since the data for the variables of all provinces was collected over the same period then it creates a panel data. The analysis of panel data requires controls for unchanged and unobservable factors that affect the independent variables. Because each province has its own characteristics, these unobservable factors are considered as provincial heterogeneity. The panel data regression analysis is performed with the Stata program. Diagnostic tests show that the panel has a contemporaneous correlation, data heteroskedasticity, and serial correlation. To overcome these problems, [15] suggests a regression with the Driscoll-Kraay standard error. The regression results are presented in Table 1.

Explanatory variables	of the numl ent	natural logarithm per of operating erprises	LNRE - the natural logarithm of net turnover from business of enterprises		
	Coefficient	p-value	Coefficient	p-value	
PCI	0.065	0.000**	0.103	0.000**	
CONSTANT	3.749	0.000**	4.512	0.000**	
Number of observations: 567	F statistic = 69		F statistic $= 10$	3	
	$R^2 = 0.17$		$R^2 = 0.23$		
PCI Sub-Indexes					
PCIMK - entry cost for new firms	0.0012	0.894	-0.0037	0.745	
PCILA - land access and security of	-0.0181	0.021*	-0.0234	0.007**	
tenure					
PCITR - transparency	0.0192	0.001**	0.0243	0.000**	
PCITC - time costs of regulatory	0.0219	0.006**	0.0289	0.002**	
compliance					
PCIIC - informal charges	0.0123	0.276	0.0294	0.046*	
PCIAP - proactivity of provincial	-0.0159	0.009**	-0.0141	0.037*	
leadership					
PCIES - business support service	0.01195	0.007**	0.0174	0.003**	
PCILT - labor training	0.0303	0.043*	0.0431	0.023*	
PCILR - legal institutions	0.0002	0.972	0.0005	0.950	
CONSTANT	3.932	0,008**	4.759	0.008**	
Number of observations: 567	F statistic = $12$	21	F statistic $= 595$		
	$R^2 = 0.33$		$\frac{R^2}{R} = 0.36$		

Table 1. The impact of local economic governance on business sector development

\*\*1% statistical level of significance, \*5% statistical level of significance. Source: The author's own calculations. As the table shows, the overall PCI has positive effects at a 1% level of significance on the growth in the number of enterprises and on the output generated in the business sector; or stated differently, local economic governance matters and the improvement in its quality fosters the development of the business sector. At the sub-index level, 7 out of 9 sub-indexes have statistically significant impacts on business sector development.

Among the 5 sub-indexes that have positive effects, labor training has the largest impact, followed by time costs of regulatory compliance, informal charges, transparency and finally business support service. The fact is that a major part of the workers in Vietnam are unskilled. In the period 2006-2014, trained workers in the country accounted for only nearly 20% of the labor force. Trained workers are defined as those who have graduated from a technical training school or equivalent in the national education system of 3 months or more (with diploma or certificate of recognition of training results). Improving labor qualification and skills of workers is an urgent need. If labor productivity is one of the important factors for business sector development then labor training indeed plays a crucial role here. According to the enterprises' opinion poll, cumbersome and overlapping administrative procedures. excessive number of enterprise inspections, unprofessional and harassing behavior of public officials, unhelpful state agencies, slow and prolonged work-related tasks and regular changes in tax regulations are among the reasons that increase the time and informal costs for businesses. Reality shows that the speed up of the administrative procedures reform process such as simplification of administrative procedures, implementation of "one door" and "one door connected" policies in all areas of the provincial departments, transparent public listing of administrative procedures with fees and charges, improving the quality of the service and management capacity of public officials, and increasing the dissemination of tax policies to enterprises all help to reduce time and informal costs for businesses as well as enhance transparency. Furthermore, the publication of investment promotion policies and assistance programs for the development of small and medium enterprises, the implementation of business promotion, legal consultancy for businesses, and assistance in finding business partners proved to be effective.

In general, the 5 PCI sub-indexes have different size effects on growth in the business sector's output and growth in the number of enterprises with a quite larger effect on the first than on the second. Moreover, while the improvement in the informal charges indicator is found to stimulate the increase in output generated in the business sector, it does not have a statistical effect on the growth in the number of enterprises.

The 2 sub-indexes including land access and security of tenure and proactivity of the provincial leadership unexpectedly show negative business effects on sector development. This is a given sign of ineffectiveness for these two indicators. On the land access issue, transparency still remains a problem. Various PCI reports show that the personal relationship with civil servants continues to play an important role in accessing important information and documents on the production and business activities of enterprises, including information on land-use planning and investment projects and policies related to land use. The provincial leadership's creativity and transparency in the implementation of central policy as well as its own initiative to develop the business sector seems to be ineffective. In some cases the central policies may be unclear and local government fail to apply the policies in favor of enterprises. When there is a weak dialogue between public and private institutions, limited capacity for analysis and bottom-up communication will result in a limited understanding of the real constraints to business sector growth. This calls for the need for

strengthening dialogue between enterprises and the state, local authorities paying greater attention to businesses, and a hotline to reflect the business concerns of state management.

#### 4. Conclusion

In Vietnam, the business sector has been experiencing a continuous growth in terms of the number of enterprises as well as the size of the sector's output, capital and employment and has increasingly taken an important position in the economy. Contributing to this growth is the role of local economic governance in creating a conducive business environment. This is evidently supported by the result of the study. However, the research finding shows that not all aspects of local economic governance are effective and have the same size effect on business sector growth. Aspects of labor training, time costs of regulatory compliance, informal charges, transparency and business support service promotes their effectiveness when having positive impacts on the development of the business sector. Improvement in these indicators fosters the growth in the number of enterprises and the business sector's output. Meanwhile, aspects in land access and security of tenure and proactivity of provincial leadership are ineffective in the sense that the improvement of these indicators is not in a way that favors business sector growth. The study then suggests the need for accelerating the improvement in the effective aspects of local economic governance and finding other appropriate ways to improve the ineffective aspects in order to create breakthroughs for business sector development in the coming time. In fact, as the value of the PCI and its sub-indexes isstill far away from the limit of 100 then there is an ample opportunity to accelerate the improvement.

#### References

- [1] GSO Vietnam, Vietnam statistical yearbooks.
- [2] Abel, C., The Effect of Macroeconomic Variables on Profitability of Small and Micro Enterprises Industry in Nairobi County, 2014.
- [3] Irungu, S. and W.Muturi, "Impact of Macroeconomic Variables on Performance of Firms Quoted in the Energy and Allied Sector in the Nairobi Securities Exchange", *International Journal of Education and Research* 3 (2015) 10.
- [4] Gertler, M. and S. Gilchrist, "Monetary Policy, Business Cycles, and the Behavior of Small Manufacturing Firms", *The Quarterly Journal of Economics* 109 (1994) 2, 309-340.
- [5] Greenwood, R., "Evidence for a Debt Financing Channel in Corporate Investment", Unpublished working paper, Harvard Business School, Harvard, MA, 2003.
- [6] Bernard, B., Sare, Y. and A.Musah, "The Effects of Interest Rate on Micro, Small and Medium Enterprises Financing Decision in Wa Municipality of Ghana", *International Journal of Business, Humanities and Technology* 4 (2014) 4, 81-90.
- [7] Osoro, C. and W.Ogeto, "Macroeconomic Fluctuations Effects on the Financial Performance of Listed Manufacturing Firms in Kenya", *International Journal of Social Sciences* 12 (2014), 34-87.
- [8] Grambovas, C. and S. McLeay, "Corporate Value, Corporate Earnings and Exchange Rates: An Analysis of the Eurozone", *The Irish Accounting Review* 13 (2006), 65-83.
- [9] UNDP, A Users' Guide to Measuring Local Governance, 2009.
- [10] Bissinger, J., "Local Economic Governance in Myanmar", *The Asia Foundation*, No. 21 (2016).
- [11] Local Economic Governance: A Survey of Business Operators in 245 Districts /Municipalities in Indonesia, 2011.
- [12] Dixit, A., "On Modes of Economic Governance", CESifo Working Paper Series No. 589, 2001.
- [13] Wal, F. and T. Hilhorst, "The Role of Local Government in Stimulating Pro-poor Economic Development: What and How?", retrieved on, 26 September 2007, p.2012.
- [14] Provincial Competitiveness Index (PCI) reports.
- [15] Hoechle, D., "Robust standard errors for panel regressions with cross-sectional dependence", *Stata Journal*, 7 (2007) 3, 281.

#### APPENDIX

## Regression results

Regression with Driscoll-Kraay standard errors	Number of obs	=	567
Method: Pooled OLS	Number of groups	=	63
Group variable (i): <b>province</b>	F( <b>9</b> , <b>8</b> )	=	595.55
maximum lag: 1	Prob > F	=	0.0000
-	R-squared	=	0.3560
	Root MSE	=	1.0915

lnre	Coef.	Drisc/Kraay Std. Err.	t	P> t	[95% Conf.	Interval]
pcimr	0037777	.0112013	-0.34	0.745	0296079	.0220525
pcila	0234808	.0065249	-3.60	0.007	0385271	0084344
pcitr	.0243662	.0026175	9.31	0.000	.0183301	.0304022
pcitc	.028908	.0063827	4.53	0.002	.0141894	.0436266
pciic	.0294375	.0124959	2.36	0.046	.0006219	.058253
pciap	0140996	.0056335	-2.50	0.037	0270904	0011088
pcies	.0174398	.004235	4.12	0.003	.0076738	.0272057
pcilt	.0431429	.0153407	2.81	0.023	.0077672	.0785186
pcilr	.000545	.008454	0.06	0.950	01895	.0200399
_cons	4.759139	1.363785	3.49	0.008	1.614246	7.904033

Regression with Driscoll-Kraay standard errors	Number of obs	=	567
Method: Pooled OLS	Number of groups	=	63
Group variable (i): <b>province</b>	F( <b>9</b> , <b>8</b> )	=	1231.44
maximum lag: 1	Prob > F	=	0.0000
-	R-squared	=	0.3307
	Root MSE	=	0.8247

lnne	Coef.	Drisc/Kraay Std. Err.	t	P> t	[95% Conf	. Interval]
pcimr pcila pcitr pcitc pciic pciap pcies pcilt pcilr _cons	.001209 0181236 .0192603 .0219855 .0122809 0159945 .0119513 .0303402 .0002458 3.932047	.0087657 .0063561 .0036118 .0059162 .0104964 .0047087 .0033395 .0126406 .0067248 1.134591	0.14 -2.85 5.33 3.72 1.17 -3.40 3.58 2.40 0.04 3.47	0.894 0.021 0.001 0.276 0.009 0.007 0.043 0.972 0.008	0190047 0327808 .0109315 .0083426 0119239 0268528 .0042504 .0011909 0152616 1.315675	.0214228 0034664 .027589 .0356284 .0364856 0051363 .0196522 .0594895 .0157532 6.54842