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Performance of Foreign Investment Enterprises in developing economies: the case of Vietnam Redux[1]

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ABSTRACT

The paper studies the growth and performance of foreign investment enterprises in developing countries in the context of global economic integration, financial crises and domestic reform with a focus as a case study on Vietnam with its official updated business survey data. A SUR mixed micro and macro model of enterprise performance is constructed to provide empirical findings and evidence-based policy implications on the role of capital, labour, investment, monetary and development policy, entrepreneurship, and legal reform in this important private sector's performance. The findings show the importance of employment, global crises, entrepreneurship and especially beneficial legal reform in assisting these enterprises' performance as measured by high profitability per capital invested and per enterprise turnover. Openness in particular helps the dominantly high performance of joint ventures.

Keywords: Foreign investment enterprises, capital and investment, entrepreneurship, domestic reform and economic integration, business and trade policy.

JEL Classification: C51, C53, F14, F17, F31

1. Introduction

Vietnam, a major transition economy in South East Asia and an important member of the Comprehensive and Progressive Trans-Pacific Partnership, has achieved remarkable economic growth and development since the introduction of its economic reform (Doi Moi) beginning in 1986 (Harvie and Tran, 1997; Phan et al., 2006; Tran, 2012). In particular, Vietnam's opening-up policy (the so-called free-market-with-a-socialist orientation reform), new laws on the enterprises in 2001, 2006 and 2014, and high economic growth have had a deep beneficial impact on the development, transformation, dynamic structure, entrepreneurship and performance of its industrial sector (Ronnas and Ramamurpthy, 2001; GSO, 2018). In recent years however, the country has faced serious problems. These include high inflation in 2007-08 immediately after its 2007 World Trade Organization (WTO) accession and also in 2012, the rise of China's growth, exports and regional economic power, the impact of the global financial crisis (GFC) that started late in 2008 and was still lingering in 2010s, the 2011-2012 Euro sovereign debt crisis and its global contagion, and the slow-down of regional economies in the mid-2010s. All these developments have adversely affected Vietnam's growth, industrial development, enterprise performance, living standards, and legal and institutional infrastructure.

The paper is a rigorous econometric study on the performance of one of Vietnam's important high-growth and high-profit industrial private sectors, namely the foreign investment enterprises (GSO, 2018), during the past 20 years or so, and the role of capital, labour, investment, development policy, entrepreneurship, legal reform, crises and economic integration on this performance. Its main focus is on

constructing a multi-equation model of enterprise performance (measured in terms of the sector's profit rates) to provide empirical findings to confirm or reject the relevance of this causal role. Policy implications from the findings for corporate and government decision-makers are then briefly discussed.

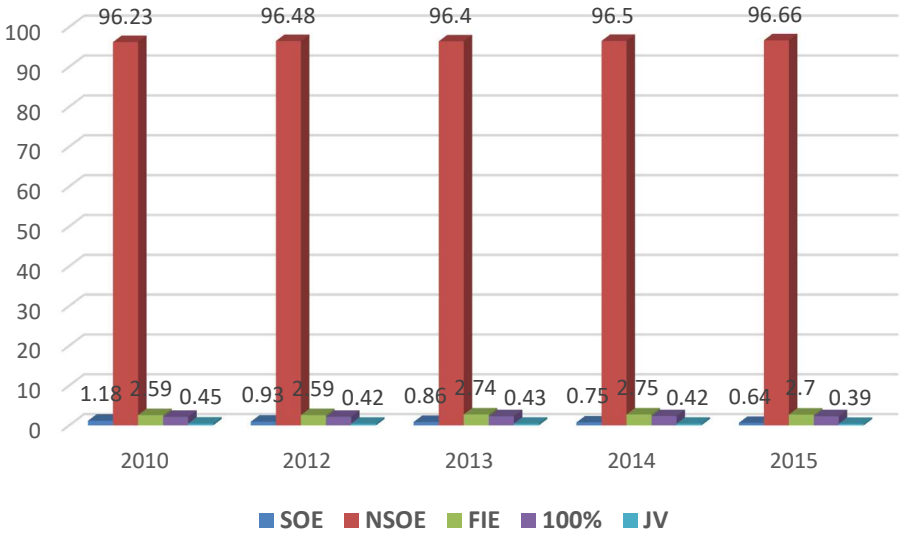
The plan of the paper is as follows: in Section 2, historical and survey statistical data are used to describe the main structural and performance characteristics of the foreign investment enterprises in Vietnam and in relation to the features of the other two major sectors, namely, state-owned and non-state-owned enterprises. A seemingly unrelated regression (SUR) model of enterprise performance incorporating both industrial production process and economic integration developments is constructed in Section 3 to explore and confirm the causal relationships between the sector's performance and its testable postulated contributing microeconomic, macroeconomic, entrepreneurial, crisis and legal reform drivers. Section 4 reports the empirical findings based on available enterprise data for 2000-2014 published by Vietnam's General Statistical Office. Section 5 provides an analysis of the findings and their policy implications. Conclusions are given in Section 6.

2. Vietnam's Foreign Investment Enterprises and their performance

After many decades of devastating colonial and independence wars and their aftermaths, Vietnam has achieved much in recent years with its 1986 renovation reform (Harvie and Tran, 1997) and earned increasing international acclaim (World Bank, 2018). An important result of this achievement is the transformation and dynamics of the economy as observed, during the period 2010-2015, through the structural enterprise movements (Figure 1), enterprise

output shares (Figure 2) and enterprise profit rate (Figure 3) of its three principal sectors by ownership. These are the state-owned (SOE), non-state-owned (NSOE), and foreign investment enterprises (FIE) (and its two subsectors, 100% and joint-venture (JV)). Reasons for foreign ownership and mode of entry choice were explored by Tsang (2005). In Figure 1, we note that while the proportion of NSOEs in Vietnam had posted a small rise from 96.23% to 96.66% during the period, the relative number of SOEs had had a marked decline, due to, to a large extent, the government industry reforms, from 1.18% in 2010 to 0.64% in 2015. The FIE sector share on the other hand showed a rise from 2.59% in 2010, to 2.75% in 2014 and a dip to 2.70% in 2015. In 2015, the total number of enterprises in Vietnam was 442,485.

Figure 1. Enterprise Shares (%) by Ownership, 2010-2015



Note: Data in Figures 1-5 from GSO (2018) and own calculations.

Figure 2 shows the trend in real gross domestic product (GDP) at 2010 prices of three sectors (SOE, NSOE and FIE) and three of NSOE subsectors (private, collective, and household) during 2005 to 2016. The figure indicates a rising trend of all sectors and subsectors and especially a faster trend for the NSOE and FIE sectors since 2010 (the post-global-financial crisis), and that the household subsector GDP had exceeded the SOE GDP also since 2010. The NSOE GDP, as a result of its largest enterprise share (Figure 1), is the largest at VND1,138,877 billion in 2016, followed by the SOE GDP at VND848,292 billion and by the FIE GDP at VND489,817 billion. Some interesting features of the sectoral GDP trend can be seen better in Figure 3 where the GDP shares by ownership are given for 2005 and 2016.

Figure 2. Real GDP (VND billion) by Ownership, 2005-2016

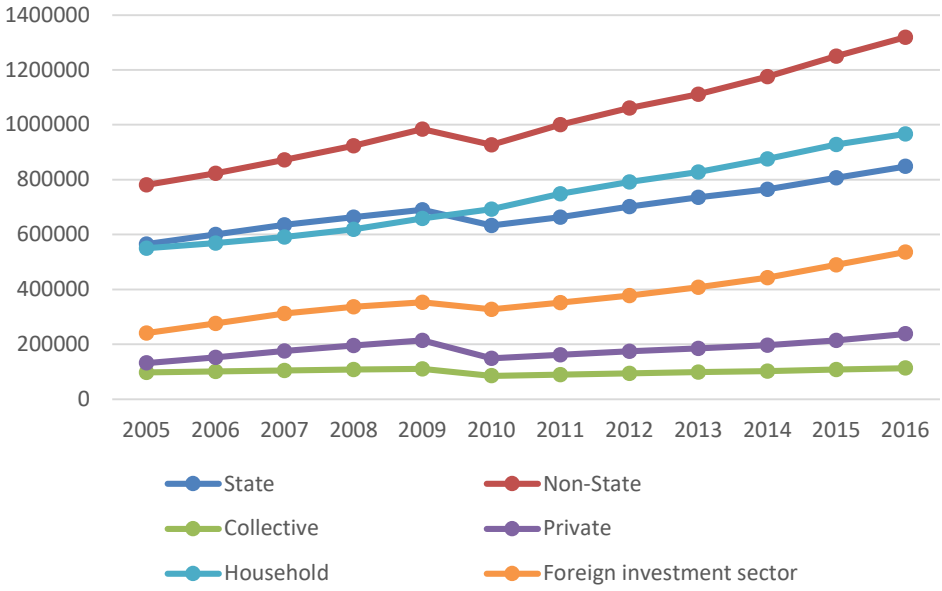
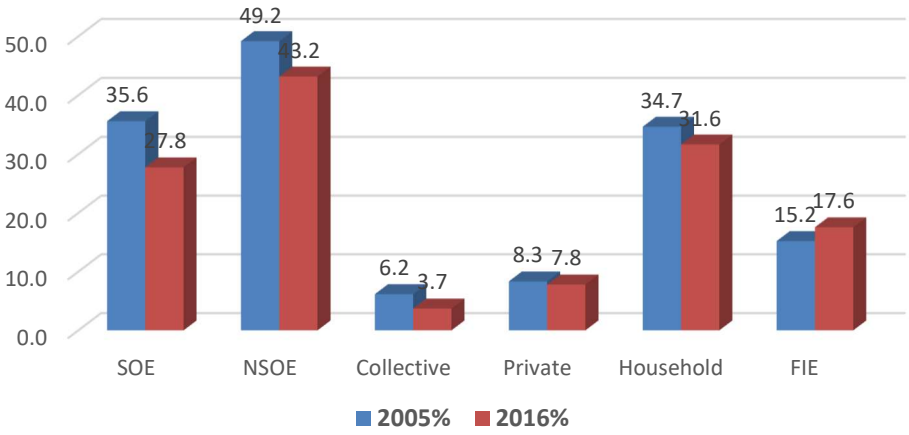


Figure 3 shows that while the NSOE sector has the largest enterprise share at over 96% on average during 2010-2015 (Figure 1), its proportion in terms of national real GDP came only at 49.2% in 2005 and 43.2% in 2016. In comparison, the SOE sector's real GDP share was, because of its size per enterprise, at 35.6% in 2005 and 27.8% in 2016. Both the SOE and NSOE sectors show a substantial declining share of real GDP during the period. In particular, all three subsectors of the NSOE, namely, the collective, private and household, uniformly show a decline in real GDP share between 2005 and 2016. The importance of the FIE sector in Vietnam's economy can be seen from this figure where, in spite of its relative small enterprise share of over 2.6% on average (see Figure 1), its real GDP share was however at 15.2% in 2005 and 17.6% in 2016. In fact, the FIE sector is the only sector in the country that shows an increase in real GDP share during the period.

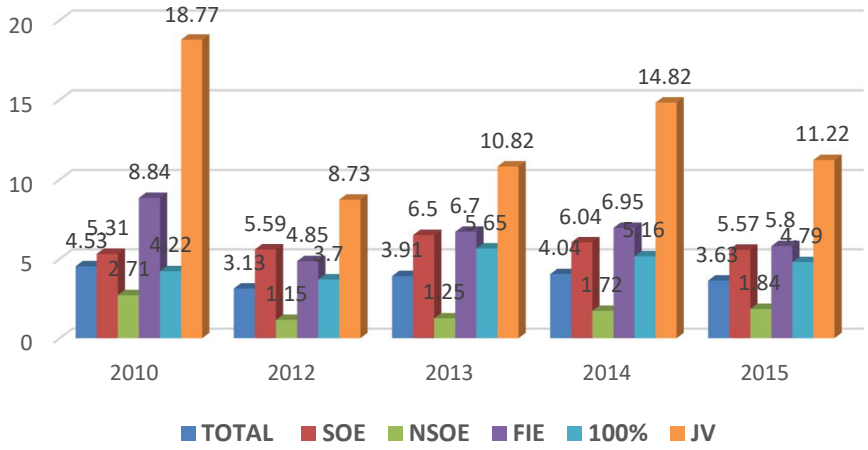
Figure 3. Output Shares (%) by Ownership, 2005 & 2016



Note: 2005% and 2016% denote the output shares by ownership in 2005 and 2016 respectively.

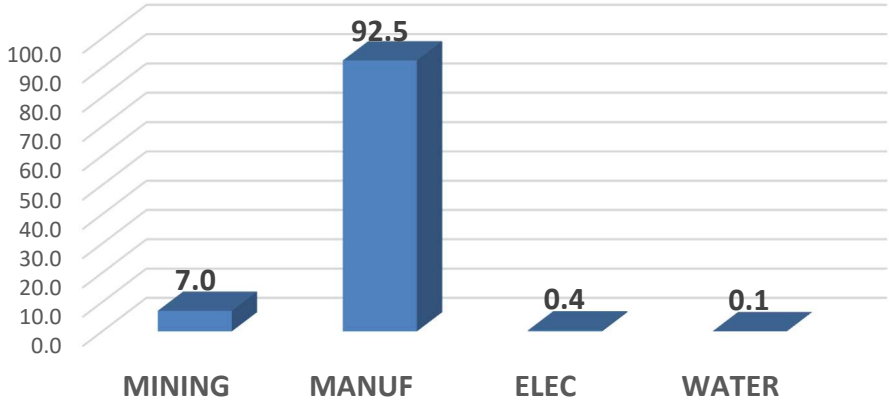
What has contributed to the remarkable growth and economic performance of Vietnam's FIE sector during the period under study? Some data to support this potential contribution are given in Figure 4 where the profit rates of the various sectors/subsectors of Vietnam's enterprises between 2010 and 2015 are given. From this figure, we note the dismal lowest rate of the NSOE sector, compared even to the SOE sector that has been universally domestically and externally criticised for its supposedly inefficient government-subsidised management and operation. Most significant observations from the figure are that except in 2012, the FIE sector as a whole outperforms all other sectors. More specifically, the FIE subsector, namely joint-venture, uniformly outperforms all other sectors and subsectors (e.g., 100% owned) by a large margin for the whole period. For example, in 2015, the profit rate was 3.63% for the whole country, 4.47% for SOE, 1.84% for NSOE, 4.79% for 100%-owned, and 11.22% for joint-venture.

Figure 4. Profit Rates (%) by Ownership, 2010-2015



It should be noted that the FIE in Vietnam is involved almost wholly in four subsectors where foreign capital and expertise are generally required: mining, manufacturing, electricity and water. The largest proportion (92.5%) of the FIE GDP sector is in manufacturing (Figure 5).

Figure 5. Real GDP Shares (%) of Major FIE Sectors, 2010



It is well-known that the performance of enterprises can be measured conventionally by output (real GDP) growth or productivity (output per employee) using the production function or alternative growth theory approaches (McMahon et al., 2009), sales (Thang and Trung, 2011) or even export growth (Pham, 2001). In terms of the theory of international business (Cavusgil et al., 2012), it can also be measured justifiably in terms of the survival rate of enterprises, the growth of enterprise output shares, employment in the firms, capital invested and fixed assets, wage rates paid, and even the financial contribution of enterprise activities to national revenue (GSO, 2018).

In this paper, we will focus on the performance of enterprises, especially foreign investment enterprises in Vietnam, as measured by two important criteria: profit rate per capital and profit rate per enterprise turnover. A justification is that the profit rate attained is a good indicator of an enterprise's success and *a fortiori* survival rate and potentially domestic and external expansion. The historical performance of the SOE, NSOE and FIE sectors and the two FIE sub-sectors of 100% owned and joint-venture enterprises in Vietnam during 2010-2016 in this context is given in Figures 1-4. In these figures, we note the prominent sustained dominance of the FIE sector's high profit rate performance over the SOE and NSOE sectors. A study on the causes or drivers of this performance for 100%-owned and especially joint-venture FIEs is particularly interesting and important for foreign business operation and planning strategy especially in developing and open economies such as Vietnam.

The literature on the relationship between enterprise performance, defined variously as growth, survival, exports and sales, and its potential determinants has been limited. Previous studies by McKinnon (2003), Hansen and Tarp (2004), Rauch and Watson (2004), Baumol (2007), and Vinig and Kluijver (2007) have focused chiefly on this relationship by descriptive analysis of time-series and survey data. As correlational or associative analysis, these studies lack causality content. Related studies of enterprise performance causality from a conventional production function framework have been reported by Pham (2001) and Thang and Trung (2011). A previous macroeconomic study on the firm performance in terms of the growth of enterprise output shares in Vietnam has also been reported (Tran, 2011 and 2012). Vu and Nguyen (2013) investigated by panel regression the effects of banking relationships on firms' returns on assets and equities in Vietnam. However, a rigorous multi-sectoral

modelling study of causality of the enterprise performance in terms of profit rates in an open developing economy with economic integration commitments and with existing production technology in general and in Vietnam in particular is conceptually and empirically desirable for foreign enterprise development policy analysis. But this kind of study is currently lacking. The study is also relevant to a better understanding of the success, survival and expansion of FIEs in developing economies from an international business strategic development perspective (Cavusgil et al., 2012).

In this context, the paper will focus on an econometric modelling study of the causality of the FIE sector's high performance, expressed as profit rates, in a major transition developing open economy, namely Vietnam, for corporate and government policy analysis. It will address the following specific research questions:

(i) What fundamentally contributes to the high performance of the 100%-owned and especially joint-venture foreign investment enterprises in Vietnam in recent years?

(ii) Are these contributors different for these two sub-sectors and why?

(iii) Did the 2006 and 2014 legal reforms assist in this performance?

(iv) What are the effects of economic integration and financial crises on the FIE performance in Vietnam?, and

(v) What are best practice strategies for FIE development and survival in Vietnam.

3. A mixed micro-macro model of enterprise performance in the context of production technology, domestic reform & economic integration

Theoretical Framework – An early detailed study based on a descriptive analysis of the data from two large 1991 and 1997 surveys of Vietnam's enterprises was carried out by the World Bank and reported by Ronnas and Ramamurpthy (2001). A number of quantitative studies especially on the impact of human resource management and training on Vietnam's enterprise performance in terms of output and organisation in a production function framework has also been undertaken (e.g., Thang and Trung, 2011). A previous quantitative study on the foreign investment enterprise performance in terms of exports and sales using a non-production function framework has also been carried out by Pham (2001). A more recent comprehensive official data report on the three principal sectors' activities, output, industrial structure and dynamic transformation based on the nine annual surveys of Vietnam's enterprises between 2000 and 2008 is given by Vietnam's General Statistical Office (GSO, 2020). A macroeconomic multi-structural equation model of output growth share performance for Vietnam's enterprises classified by ownership (i.e., SOEs, NSOEs and FIEs) in the context of economic integration has been constructed and reported (Tran, 2012). Econometric modelling study of the causality of the performance in terms of profit rates of the FIE sector in Vietnam, while crucial for strategic business development, has not been carried out and reported with data updated to 2014.

In the present paper, a number of theoretical and methodological innovations in modelling enterprise performance will be introduced. First, we assume conceptually that the enterprises and their performance in an open economy, developed and developing, with economic integration

(globalisation) commitments are constrained by two sets of complementary factors: domestic and international. Second, domestically, the enterprises operate in a generalised meta-production framework where capital, labour, entrepreneurship, and legal enterprise reform are assumed to play an important part in determining their performance. Third, internationally, as the country has economic integration commitments and benefits in the form of liberalised trade in goods (exports and imports), investment (portfolio and foreign direct investment) and financial services as sanctioned by the WTO (WTO, 2018), the enterprises and their performance are assumed to be concurrently affected by these factors. This is a modelling specification feature distinct from conventional stochastic frontier analysis. As has been mentioned earlier, enterprise performance in our study is defined as profits per capital invested and profits per enterprise turnover. For pragmatic functional specification reasons, only the linear model is specified for the study (see Tran, 2012, for other functional forms that can be adopted). Finally, as the FIE sector in Vietnam consists of two subsectors, namely 100%-owned FIEs and joint-ventured FIEs, the two subsectors are related functionally by virtue of the adding-up property (i.e., FIE = 100%-owned FIE + joint-ventured FIE), As a result, ordinary least-squares estimation in this case is inefficient, and a multi-equation model of 100%-owned and joint-ventured FIE equations without endogeneity should be efficiently estimated by an appropriate generalised least-squares method such as Zellner's SUR (seemingly unrelated regression).

The Model - A simple mixed micro macro model of the enterprise profit determination within the conceptual framework of meta production function technology, Johansen (1982) add- and sub-factors, and regional and global economic

integration theory (WTO, 2018) and its key testable causal determinants can then be written generally in implicit form as

$$P = P(L, K, I, W, TO, T, FDI, D, C, C06, C14) \qquad (1)$$

where P=PK, profit per capital or P=PT, profit per enterprise turnover, L=average employees per enterprise, K=average capital per enterprise (VND billion), I=average fixed assets and long-term investment per employee, W=average monthly labour wages per employee, TO=average business turnover per employee, T=trade openness [(exports+imports)/GDP], FDI=foreign direct investment/GDP, D=entrepreneurship or its proxy, C=global financial crisis, C06=2006 legal reform, and C14=2014 legal reform.

The model's theoretical foundation can be briefly described as follows. In (1), enterprise performance or profit is assumed for testing purposes to be determined by the conventional domestic production factors of labour (L) and capital (K), augmented by fixed assets and long term investment (I), labour wage costs (W), business turnover (TO), management skills or entrepreneurship or its proxy indicator (D), global financial crisis (C), and the legal reforms in the form of Vietnam's 2006 and 2014 Laws of Enterprises. Importantly, this performance is also assumed to be determined by the international factors such as trade liberalisation or openness (T) and foreign direct investment (FDI) in the context of economic integration theory for open economies with free trade agreement commitments.

The model (1) implies an implicit flexible functional relationship among its determinants that can be highly nonlinear and that, as it stands, cannot be statistically estimated. A derived model from (1) based on its planar approximations can be obtained for empirical implementation (see Tran, 1992, 2012). Due to data limitations however, this

general approach is not taken here. As a simple specification for illustration purposes, the model (1) can be written explicitly for empirical implementation in its linear form as (a log form is not appropriate as some data on profits in the early 2000s were negative).

$$P = \alpha_1 + \alpha_2 L + \alpha_3 K + \alpha_4 I + \alpha_5 W + \alpha_6 TO + \alpha_7 T + \alpha_8 FDI + \alpha_9 D + \alpha_{10} C + \alpha_{11} C06 + \alpha_{12} C14 + \mu \quad (2)$$

where the α's are regression parameters and μ is the disturbance with regular statistical properties representing other potential determinants omitted from the model.

The Data – The enterprise production and performance data for the model were obtained from the national surveys of Vietnam's General Statistical Office (2018), and trade and FDI data from the Asian Development Bank (2018). While the ABD macro data are available from 1990 to 2016, the GSO survey data are available only from 2000 to 2014, the sampling period adopted was from 2000 to 2014. Three qualitative variables were used for the GFC and the introduction of the Law of Enterprises in 2006 and 2014. The trend of the two profit rates (i.e., per capital invested and per enterprise turnover) over the sample period can also be attributed to enhanced entrepreneurship and improved business management skills over time or a deterioration of them which can also be equated partially to development progress of the country. This was proxied for simplicity by a trend variable.

4. Substantive findings

The empirical findings by the SUR estimation method for the model of enterprise performance (2) applied to two types of profit rates (per capital – PK - and per enterprise turnover -

PT) and simultaneously to both 100%-owned (100) and joint venture (JV) FIEs (that is, PK100, PKJV, PT100 and PTJV) in Vietnam for official 2000-2014 survey data are given in Table 1.

Table 1. Vietnam's Foreign Investment Enterprise Performance – SUR Estimation

Variable	Profit Rate per Capital		Profit Rate per Turnover	
	100%-owned	Joint Venture	100%-owned	Joint Venture
Constant	-0.922	-24.044	-0.286	-15.143
Employment	0.013*	0.235**	0.019**	0.159**
Capital	0.005	-0.009	0.001	0.017**
Fixed Assets	-0.007	0.013	-0.011	0.024**
Wages	0.045**	-0.060	0.061**	-0.076*
Turnover	-0.041**	0.003	-0.056**	-0.015**
Openness	0.009	-0.566**	0.007	-0.509**
FDI/GDP	0.024**	-0.013	0.037**	0.016
Entrepreneurship	0.263**	3.325**	0.352**	3.888**
Law 2006	0.178	5.918**	0.018	5.002**
Law 2014	-2.511**	7.324**	-3.391**	9.403**
GFC 2009	2.378**	-20.063**	3.496**	-18.820**
RSQ	0.972	0.966	0.965	0.960
DW	3.178	2.660	3.357	2.721
ADF-p	0.195	0.118	0.702	0.040

Notes. **=Significant at 5%, *=Significant at 10%, RSQ=R-squared, DW=Durbin-Watson statistic. ADF-p=Augmented Dickey-Fuller p-value for the equation residuals.

As described above, all variables represent the key conventional production technology process (labour, capital, wages and fixed assets/investment), legal reforms, Johansen add- and sub-factors, and the major economic integration activities (trade and FDI – a financial variable was not

introduced and tested due to unavailable data). While the degrees of freedom are moderate the serious econometric problem of high goodness-of-fit (RSQ) and low Durbin-Watson values in the estimated models was not present. Also as described above, the SUR instead of the ordinary least squares is used on the ground that within the FIE sector, there is likely some correlation between the activities of the 100%-owned and joint venture FIE sub-sectors. In addition, the panel regression estimation method was not employed due to the fact that the performance of the two sub-sectors is likely to be structurally characterised by their own determinant factors, and this likely structural or behavioural discrepancy is the model's objective or focus for testing purposes. As is well-known, the SUR estimates are statistically consistent and efficient in the class of generalised least squares estimators.

Judged from the results reported in the table, the standard statistical performance of the estimated models of enterprise performance in terms of profit rates for Vietnam's 100%-owned and joint venture FIEs appears good in terms of the conventional R^2 and a lack of first-order serial correlation. It is also econometrically consistent and efficient. The augmented Dickey-Fuller tests also indicate their residuals are statistically stationary at the 1% significance level. Policy implications are derived from these empirical findings.

In addition and more importantly, the modelling performance of Vietnam's 100%-owned and joint venture FIE profit rates per capital (PK100, and PKJV) and per turnover (PT100 and PTJV) and their 3SLS estimates PK1003, PKJV3, PT1003 and PTJV3 respectively is given graphically in Figures 6 and 7. These figures reflect the Friedman (1953)-Kydland (2006) criterion of data-model close representation or simply empirical fit.

Figure 6. Modelling Performance of FIE Profit/Capital %

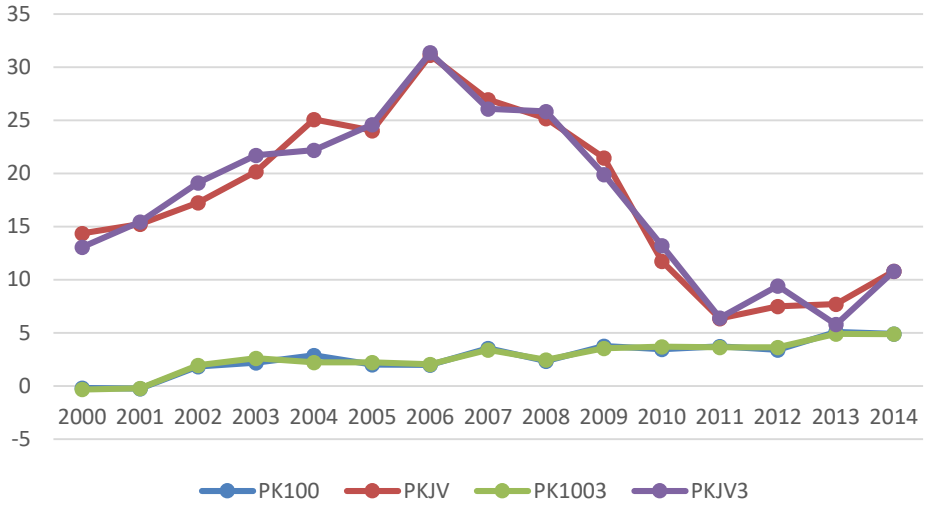
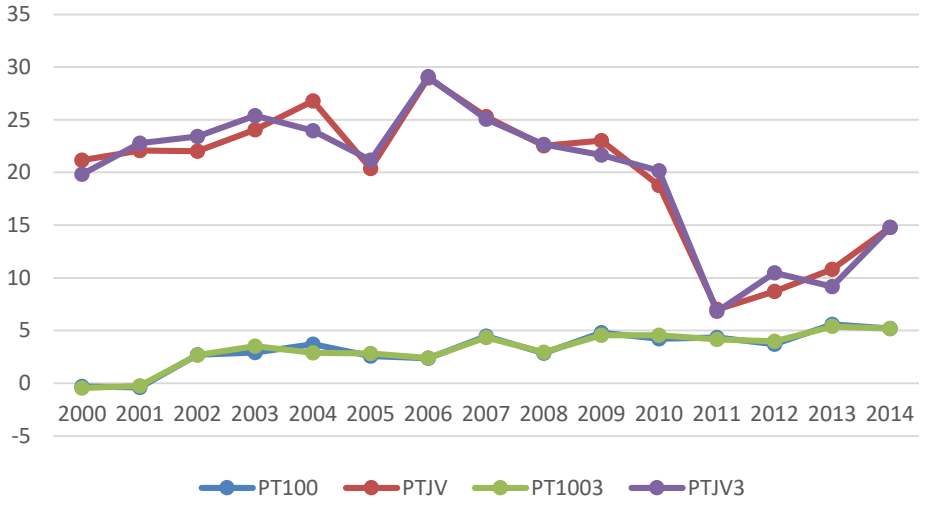


Figure 7. Modelling Performance of FIE Profit/Turnover %



From these figures, the model emulates very well the trend, the troughs, the peaks and especially the turning points of Vietnam's FIE profits during the volatile period in the country where the global financial crisis of 2008 took place, its WTO membership in 2007 was approved, and various national economic and enterprise reforms were adopted. Policy implications of our findings and their credibility are based on these characteristics and briefly described in the section below.

5. Policy implications for Foreign Investment Enterprises

The performance of FIEs in the 100%-Owned and Joint Venture Sub-sectors

It is interesting that the findings do not support the assumption of identical causal effects on the performance for both 100%-owned and joint venture FIEs in Vietnam. This outcome is expected as the observed performance (survey data by GSO, 2018) shows that the joint venture FIEs completely dominate the 100%-owned FIEs (see Figure 4) due probably to different contributors. One important modelling implication of this is that a combined study of these two sub-sectors would be inappropriate conceptually and methodologically and in policy analysis and practical implementation. Another implication for serious research in this field is that the use of panel data regression with constant effects from all determinants over all sub-sectors for example for this kind of study would also be inappropriate. A third implication is that while the 100%-owned and joint venture FIEs are two separate legal entities, our findings show that they also have apparently operated under two different production technologies and responded differently to the impact of legal reforms and

economic integration. These enterprises require therefore separate study, analysis and strategic policy.

What Are Fundamental Production and Integration Drivers of FIE Performance?

For 100%-owned FIEs – The sub-sector is characterised by relatively weak performance or low profit rates. The findings indicate that employment, wages and turnover are significant factors to FIE performance in terms of both profits per capital and per turnover. While openness does not appear to have a significant positive impact on the FIE profit rates, the importance of economic integration via FDI in-flows here cannot be underestimated for the survival and expansion of this FIE sub-sector. The 2006 legal reform with its limitations appears to have a positive but only statistically weak effects on this sub-sector's performance indicators. In contrast, the legal reform of 2014 creates only strong uncertainty in operation and profit outcomes in its introduction and this is reflected in its negative impression impact. Fixed assets and long-term investment surprisingly seem to have dampening effects. These reflect apparently the low quality or inappropriate business strategies for these FIEs. Both profit equations have a very high empirical fit. Entrepreneurship as a separate and important factor of achieving high profits for this sub-sector is strongly and statistically validated.

For joint-venture FIEs – Joint-venture FIEs have a much higher success (profit) rate than 100%-owned FIEs and the causality of this superior performance seems to be more complex. For this sub-sector of FIEs, the profit rates are strongly and dominantly supported by factors such as labour, fixed assets and long term investment, and especially the 2006 and 2014 legal reforms. These validate the important contributing role of labour and investment strategies in the

sub-sector and the view that a favourable business environment is crucial to a private sector, namely the FIEs, in Vietnam. In fact, the largest contributors to the performance of these FIEs as measured by the size of the impact parameters in the estimated model are the 2006 and 2014 legal reforms. Again, as in the case of 100%-owned FIEs, entrepreneurship as a separate and important factor of profit performance is also statistically supported in the joint venture sub-sector.

Is FIE Performance Affected by Economic Integration and Crises?

Economic integration has played a crucial part in Vietnam's economic "miracles" and put the country in the group of high growth economies in the world, and contributed to the establishment of FIEs and their high profit achievement especially in the recent years. In addition, the country's 1987 Doi Moi openness policy has also led to its industry, investment, structural and especially legal reforms (Hansen and Tarp, 2004). The results of this integration and reforms have however mixed benefits on the FIE performance by both profit per capital and profit per enterprise turnover measures in our study. A possible reason for this is that these enterprises, due to their independent or collaborative nature, are likely to use different levels of local knowledge and resources and network in addition to their overseas expertise and investment to manage more successfully their businesses. Strategically for business planning, joint-venture FIEs appear thus the best form, in terms of profits, of business development and operation in the case of Vietnam. The causes of high profits appear however more complex empirically. The large and different impacts of Vietnam's 2006 and 2014 legal reforms on the 100%-owned and especially joint-venture FIEs has been noted in Table 1 above.

Finally, while the usual expectation is that Vietnam's FIEs should be affected by the contagious GFC, our findings indicate that the situation is again more complex, perhaps due to the country's status as a transition economy with a strong state-control management and different corporate ownership structure and operation. The profit rates of the 100%-owned and joint venture FIE sub-sectors appear to have reacted differently to the contagion of the crisis in our study.

Entrepreneurship in Vietnam's FIEs

If the thesis that innovation and entrepreneurship are the key elements for enterprise success domestically (via increased productivity and efficiency) (see Nguyen et al., 2009; EC, 2012) and in international trade (via expanded exports) (see Pham, 2001; Nguyen et al., 2007) through enhanced competitiveness and comparative advantages is correct, then our model's findings with proxy measurement and with Vietnam's enterprise data can provide some statistical support for this thesis. There are a number of reasons for this. First, as our measurement reflects the accumulated knowledge or the dynamics and transformations of the economy in general and the FIE sub-sectors in particular over time, it captures the essence of innovation and entrepreneurship. Second, while entrepreneurship can produce high productivity and subsequently, as postulated and empirically validated, high profit, it can represent other contributors to profitability that conventional production technology, legal reforms and say Vietnam's trade liberalisation obligations and their effective implementation under its various regional and global trade agreements cannot capture. Our findings appear to support this hypothesis. An important policy implication is that, to improve labour and capital productivity in Vietnam's FIEs in the context of the

country's early development stages, capital and human resource management training for managers and directors for enterprises in general and for FIEs in particular in Vietnam would be a high priority. This implication is also compatible with the strong focus for funding support to Vietnam's enterprises in general and FIE sub-sectors in particular by national and international donors and policy-makers (IFC, 2009).

6. Conclusion

In the preceding sections, we have discussed the role of FIEs and their transformations, dynamics and performance in the Vietnamese economy in recent years. We then constructed a simple model of enterprise performance with micro, macro-economic and international trade foundations to explore and identify the fundamental factors for these FIEs' success, survival and possible expansion domestically and internationally in the two FIE sub-sectors in focus, namely 100%-owned and joint-venture FIEs. We have found mixed results for the conventional production factors of labour and capital, but strong support for the effects of economic integration, legal reforms and entrepreneurship on these enterprises' performance as measured by the profit rates. We speculate that, due to the development stage of the country, the enterprise performance has benefited from its trade and FDI liberalisation and co-operation with its trading partners (Tran, 2012) as has also increasing entrepreneurship capacity as a result of this engagement with the regional and global economies. We also caution about the risks of possible damaging contagion of the regional and global financial crises on this performance and call for appropriate policy to avoid them or to mitigate, to some extent, their adverse effects for national, regional and global benefits.

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