Trade and Entrepreneurship in Vietnam's High Growth Enterprises

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Abstract

This paper studies the role of international trade and openness in support of local entrepreneurship in high growth enterprises in Vietnam during its fast development in the past two decades. In addition to descriptive analysis of historical data, the paper develops a new methodology, the endogenous enterprise growth model, to empirically explore the major global engines and barriers to an enterprise growth. Best practice policy for sustainable business development, regional co-operation and crisis management is finally recommended for informed debate and policy implementation analysis.

Keywords: Growth Enterprises, Entrepreneurship and Trade, Globalisation Growth Factors, Economic and Management Policy

Introduction

Vietnam has experienced remarkable economic growth and development in all its sectors since the introduction of its economic reform (Doi Moi) beginning in 1986 (Harvie @ Tran, 1997; Phan et al., 2006). In particular, Vietnam's opening-up policy (the so-called free-market-with-a-socialist orientation reform), new laws on the enterprises in 2001 and 2006, and a high economic growth have had a deep impact on the development, transformation, dynamic structure, management, and entrepreneurship of its industrial sector (Ronnas and Ramamurphy, 2001; GSO, 2011). In recent years, however, the country has faced serious problems such as high inflation in 2007-08 immediately after its 2007 WTO membership, 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 early 2011 (WB, 2011), and the current Euro sovereign debt crisis. All these developments have affected Vietnam's growth, industrial development, business survival, crisis management, living standard, legal and institutional infrastructure.

The paper is a rigorous study on the transformation and dynamics of Vietnamese enterprises during the past 20 years or so and their growth sector. Its focus is first on descriptive analysis of historical enterprise data, and second on developing a new endogenous

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enterprise growth model to empirically explore, in addition to an internal entrepreneurial model, HR management capability and quality, finance and regulatory support, the fundamental national and global factors that have contributed to (or hindered) this sector. The findings are for use in an enterprise sustainable development, regional co-operation and crisis management policy.

Literature Review

Transformation and Dynamics of Vietnam's Enterprises and Research Hypotheses
After many decades of devastating, colonial and independence wars and their aftermaths, Vietnam has achieved much in recent years with its 1986 renovation reform and earned an increased international acclaim. The transformation and dynamics of the country as observed through the structural movements, output shares, growth, and profit rates of its principal sectors: state-owned economy (SOE), non-state-owned economy (NSOE) (and their three components: collectives, private and households), and foreign invested enterprises' (FIE) output during the period 1995 to 2009, are given in Figures 1-3. A previous detailed study based on the two extensive 1991 and 1997 surveys of Vietnam's enterprises and entrepreneurship has been reported by Ronnas and Ramamurpthy (2001). A more recent comprehensive official report on the principal sectors based on the annual surveys of Vietnam's enterprises between 2000 and 2008 after the introduction of the Laws on Enterprises in 2001 and 2006 is given by the General Statistical Office (Vietnam GSO, 2011).
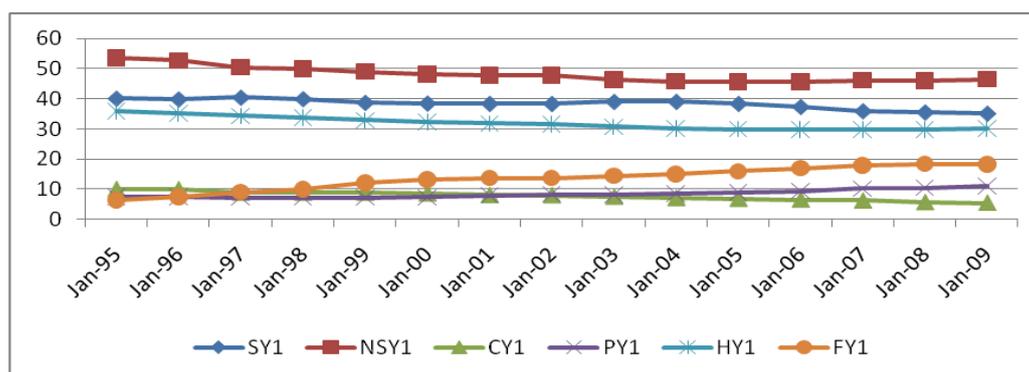

Note: SY1, NSY1, CY1, PY1, HY1 and FY1 respectively denote output shares of SOE, NSOE, collective, private, household and FIE sectors.

Fig. 1. Vietnam – Industrial Output Shares by Ownership (%)

We note from Figure 1 an almost uniform increase in output shares by the FIE and NSOE private sectors and a decline in the SOE and collective sectors. From Figure 2, however, this transformation in terms of output growth can be more clearly seen to covering not only a continuously increased growth but wide fluctuations both between the different sectors and for each sector over time. For example, for the national and SOE sectors, growth had been severely affected, and with a lingering impact by the Asian 1997-98 financial crisis, and especially the emergence of the GFC (Global Financial Crisis) in 2008. The data also show that, on the other hand, the NSOE and FIE sectors seem to have been more resilient to the damaging effects of these crises. A notable feature here is that, the FIE (Foreign Invested Enterprises) sector with its special characteristics of imported and joint capital accompanied by better international technical know-how transfer, had achieved much higher growth than the SOE and NSOE sectors over the whole period except during the year of the World Trade Centre terrorist attacks in 2001. The average growth for the period 1995-2009 for the whole economy, the SOE, NSOE and FIE sectors are 7.35, 6.93, 6.69 and 12.86 per cent respectively.

However, as a result of its high growth and transnational characteristics, the FIE sector's growth had also been subjected to more fluctuations especially from the emergence of the GFC. It is worth noting from Figure 2 that probably due to Vietnam's strong market enterprise and investment policy reforms (through the Law of Enterprises, 2001 and 2006) and development priorities during the 2000s, the NSOE growth has consistently exceeded the growth in the SOE sector since 2005. The data from Figure 2 also indicate that, in contrast to the NSOE and FIE sectors, growth in the SOE sector has been continually declining since 2004. This decline of the SOE sector can be attributed to the impact of the country's continuing structural and economic integration reforms.
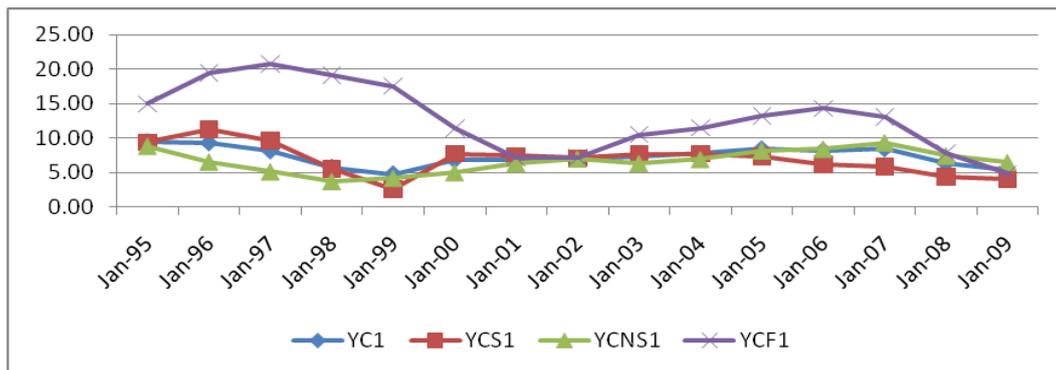
Note: YC1, YCS1, YCNS1 and YCF1 respectively denote national growth and growth in the SOE, NSE and FIE sectors.

Fig. 2. Vietnam – National and Sectoral Output Growth (%)

While growth in the FIE sector was the highest and its profit rate the largest (Figures 3&4), this growth was also most volatile in Vietnam. It is interesting to note from Fig 1 that this sector's share of national output in 2009, for example, was the lowest at 18.33 per cent as compared to 35.11 and 46.54 per cent for the SOE and NSOE sectors respectively. Over the whole period of 1995-2009, the average output shares of the SOE, NSOE and FIE sectors were 38.35, 48.11 and 13.54 per cent respectively. In the NSOE sector, its largest component was the household subsector with an average output share of 31.88 per cent followed by the collectives (with 7.77 per cent) and private (8.46 per cent) subsectors.
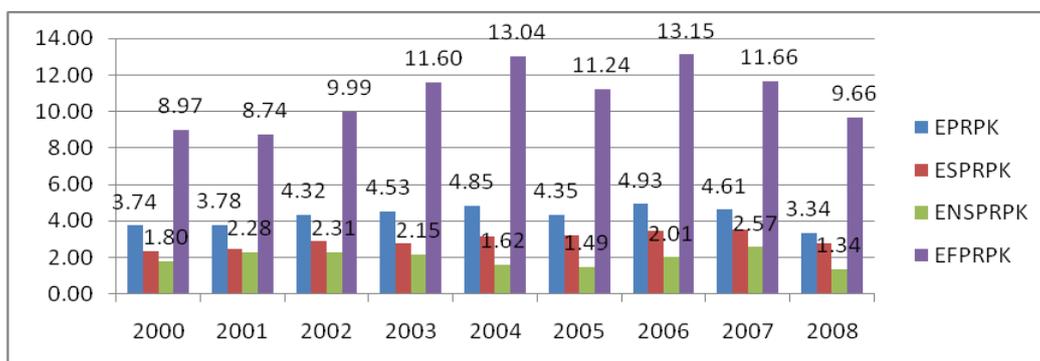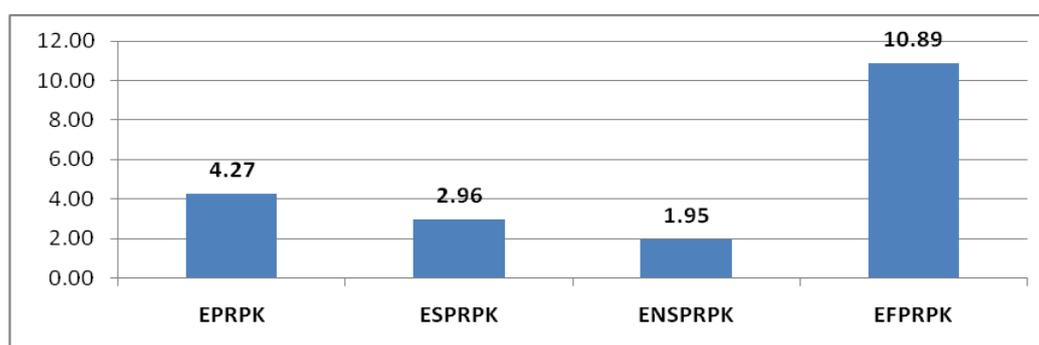

Fig. 3. Profit Rate/Capital in Vietnam in Four Key Sectors of Enterprises

A recent declining share of output in the SOE sector (Figure 1) coupled with the dynamism and significant contribution to growth of the FIE (Foreign Invested Enterprises) sector in the Vietnamese economy (Figure 2) in the face of increasing regional economic integration, globalisation and financial crises, provides important challenges and opportunities to policy-makers: How to develop a credible and suitable policy in economic and trade integration and business entrepreneurship for the growth sector; the FIEs to maintain the country's sustainable high growth, high employment, effective poverty reduction and beneficial regional co-operation for national prosperity and regional security and stability. *More specifically, an important research question is: in addition to internal entrepreneurship and finance factors, what are other external and global factors that are drivers of (barriers to) business success and growth in Vietnam?*

Source: Fig 1:4: GSO (2011) and data calculations.
Note: EPRPK, ESPRPK, ENSPRPK and EFPRPK respectively denote profit rate/capital in the national, SOE, NSOE and FIE sectors.

Fig. 4. Average Profit Rate/Capital in Vietnam in Four Key Sectors of Enterprises, 2000-2008

The literature on the nexus between entrepreneurship, trade or globalisation, and enterprise performance has been limited to descriptive and survey data analysis (see for example McKinnon, 2003; Rauch and Watson, 2004; Baumol, 2007; and Vinig & Kluijver, 2007). A rigorous study of the contribution by trade or globalisation determinants to enterprise performance in general or to the success of growth enterprises is conceptually and empirically desirable but currently lacking. In the section below, a rigorous modelling analysis using an endogenous enterprise growth modelling methodology to develop evidence-based policy and with credibility is described and its implications are presented. The findings based on Vietnam's industrial sectoral data are useful for informed debate and as guidance to high growth and sustainable development policy in the case of Vietnam's growth enterprises.

Conceptual Framework

In a number of recent papers, Tran (2004, 2008, 2010) introduces a simple, effective, general and flexible modelling approach (the endogenous growth-trade theory or EGT for short) to empirically study ex-entrepreneurship and ex-finance factors such as international trade, economic policy, reform, crises and their causal link to national growth in major developing countries in Asia. The major and novel features of an EGT model are: unlike other popular modelling studies in this genre (e.g., CGE/GTAP and growth regression), (i) it incorporates explicitly the interdependence (reverse causality or feedback) between trade, growth and, significantly, major macroeconomic conditionality or activities that simultaneously affect both trade and growth in the economy (see arguments in Krueger, 2007; Kilian, 2009); (ii) it assumes complex nonlinearity in the functional form (Minier, 2007); (iii)

it incorporates merchandise trade, FDI, services (or comprehensive trade, a standard free trade agreement or economic integration theory scope), and other reform and non-economic events (e.g., crises) that have affected an open country's trade and growth in recent years (for earlier treatment of this feature, see Johansen, 1982; Tran, 2001, 2002a, 2002b, and op. cit.).

Other existing modelling approaches which have been used for this kind of study are inappropriate or not credible for policy uses because of their structural and econometric limitations. For example, the CGE/GTAP is essentially scenario-based or confirmatory with its assumed causal relationships and given impact parameters. The gravity theory (Frankel and Romer, 1999) is beset with serious cross-country heterogeneity lacking endogeneity. Growth regression is econometrically fragile (Levine and Renelt, 1992) and lacks the well-known circular causality in the sense of Marshall or Haavelmo among economic (e.g., trade, growth, monetary, fiscal and industry policies) activities (see also Beck et al., 2005; Krueger, 2007). The specification of a linear or log-linear function for empirical trade-growth studies has been increasingly regarded as unsuitable (Minier, 2007; a feature under criticism in recent popular dynamic stochastic general equilibrium models, see Tovar, 2008). Previous studies have also demonstrated the excellent modelling performance of the EGT model when this performance is assessed by conventional statistical diagnostic tests and, significantly, the Friedman (1953) or Kydland data-model consistency (2006) criterion. In addition, the economic variables in the EGT model are expressed in their rates of change (see the derivation in Tran, 1992, and below). All their parameters are then simply the elasticities, the central concept and measurement in economic theory and impact analysis. Finally, the model has full dynamics in this rate-of-change or, equivalently, log-difference specification: the model's findings can be regarded as short-run or Granger causality outcomes if all these variables are integrated of degree zero, or they can be interpreted as long-run outcomes in the sense of Engle and Granger cointegration causality if all of these variables are I(1).

The Research Model

A flexible EGT growth-trade model for studying external and global factors that may – in addition to entrepreneurship, finance and regulation determinants – have contributed to sectoral (SOE, NSOE and FIE) industrial growth (ESGT for short). The paper is built on the gravity-theory work of Frankel and Romer (1999), the endogenous growth-trade concept (Tran, op.cit.), economic integration theory, emerging developments on contemporary economy-wide policy modelling for developing or non-steady-state economies (Krueger, 2007) and appropriate inferential analysis (Kilian, 2009), and the relevance of structural change (reform and crises). It contains testable determinant hypotheses for industrial growth in Vietnam that are consistent with the country's Doi Moi policy, exports and foreign direct investment-oriented development, and amid increasing globalisation (WTO membership) and regional integration (ASEAN free trade agreement (FTA) membership) and contagious regional and global financial crises. The model can be written for illustration, say for national output (GDP) and sectoral output (GDPI), trade, and their testable determinants in implicit form as (GDP,GDPI,GDPP,T,FDI,F,S,XR,TT)=0, or as three normalised implicit structural functions in focus for national GDP(.), sectoral GDPI(.) and merchandise trade T(.) as

$$GDP=GDP(GDPI,T,FDI,F,S) \tag{1}$$
$$GDPI=GDP(GDP,T,FDI,F,S) \tag{2}$$
$$T=T(GDP,GDPP,XR,TT,S) \tag{3}$$

where GDPI=GDP from the SOE, NSOE and FIE sectors, FDI=foreign direct investment, F=financial services, S=crises, reform or regional trade agreement (RTA) events, GDPP=trade partner output, XR=real exchange rates, and TT=terms of trade (export prices/import prices). As the model is implicit and can be highly nonlinear, it is not statistically estimable. For

empirical implementation, Tran (1992) has demonstrated that the model can be written mathematically equivalently, using Taylor's series planar approximations (see Baier and Bergstrand, 2008, for a more recent use) and invariant transformations, as three linear stochastic equations (with Y% and YI% for national GDP% and sectoral GDPI% respectively)

$$Y\% = a11 + a12GDPI\% + a13T\% + a14FDI\% + a15F\% + a16S + u1 \qquad (4)$$

$$YI\% = a21 + a22GDP\% + a23T\% + a24FDI\% + a25F\% + a26S + u2 \qquad (5)$$

$$T\% = b1 + b2Y\% + b3YT\% + b4XR\% + b5TT\% + b6S + u23 \qquad (6)$$

where % indicates the rate of change, the u's denote error terms or omitted determinants (Frankel and Romer, 1999), and the a's and b's are the elasticities (a12-a15, a22-a25, b2-b5) or simply impact parameters (a16, a26, b6). The model's theoretical rationale can be described as follows. In (1)-(2) and (4)-(5), Vietnam's GDP growth (Y%), inconsistent with the theory of economic integration and the FTA-RTA scope (ASEAN, 2011), and non-steady-state political economy (McMahon et al., 2009), is assumed to be (or to be tested) as being dependent on its sectoral industrial production (GDPI), trade in goods with its partners (T), other factors of production (such as FDI (capital) and financial services (F) or labour), and crises, shocks, policy reforms or FTA/RTA events (S). But this trade (T) is also causally affected by Vietnam's and its trading partner's GDP (and FDI and F) and conventional testable microeconomic determinants (e.g., real exchange rates and terms of trade) as assumed in (3) and (6). In (3) and (6), Vietnam's trade is simply a derived demand equation for tradable goods as stipulated in standard microeconomic and international trade theory. The equations for endogenous FDI and services or other suitably endogenised variables in the more complete model can be similarly structurally specified, but they are not explicitly focused in this paper.

As the ESGT model is a simultaneous-equation model, the use of regression or maximum likelihood estimation methods will have to assume exogeneity in the RHS variables and, as a result, produce biased, inconsistent or unreliable findings, and, *a fortiori* not creditable policy outcomes. When all parameters in (4)-(6) are, *a priori*, assumed or given and the equations are made non-stochastic (i.e., u1=u2=u3=0), the model is reduced to a simplified time-varying version of the CGE/GTAP analysis and its uses and policy recommendations may be regarded as simply scenario setting (simulation) or confirmatory in nature.

As the multi-equation model (4)-(6) has jointly dependent variables and equations, an instrumental-variables (IV) system method such as the 3SLS or the generalised method of moments (GMM) is more appropriate statistically (in terms of parametric consistency criteria) and theoretically (in terms of Marshall and Haavelmo economy-wide transmission mechanism reality and the increasingly recognised influence of a country's economic conditionality on its domestic and international activities) (Krueger, 2007; Kilian, 2009). Appropriate and relevant IVs for the model's estimation include exogenously determined variables affecting Vietnam's growth and trade and satisfying their statistical exogeneity requirements. Assuming, for convenience and for lack of sufficient sampling sizes of data, that GDP of Vietnam's trade partners is a proxy for all variables reflecting their own economic activities in addition to their policies and shocks, then the IVs for our ESGT model include the exogenous factors such as Vietnam trade partners' GDP (named YT), Vietnam's fiscal policy (FP), monetary policy (MP), inflation pressure (INF) – see Romer (1993), real exchange rates (XR) – see Rose (2000), industry policy (IP) – see Otto et. al. (2002), population (POP), a gravity factor – see Frankel and Romer (1999), and structural change (S) – see Johansen (1982) and Tran (2004). The tests for significant causality of Vietnam's national and sectoral growth and trade are then based on the estimation and testing of (4)-(6) above by the 3SLS or GMM, conventional diagnostic testing procedures, and, more importantly, the Friedman (1953)-Kydland (2006) model-data consistency or realism criterion.

Methodology

The Data and Measurements

Trade, economic and conditionality or IV data for the estimation were obtained from the databases of Vietnam General Statistics Office, the United Nations, the Asian Development Bank, and the USDA-Economic Research Service. For consistency with previous studies, all economic data (except GDP growth) are in current value. In our study, all original data are obtained as annual and then transformed to their ratios (when appropriate). The ratio variables include trade (T) in goods (exports + imports), FDI, financial services (F), money supply (M2), government budget (G) and debt (D), all divided by Vietnam's GDP. Other non-ratio variables include population (a gravity theory factor proxy) and binary variables representing the occurrence of economic, financial and other major crises, policy shift or reforms over the period 1995 to 2009. All non-binary variables are then converted to their percentage rates of change. The use of this percentage measurement is a main feature of our ESGT approach and avoids the problem of *a priori* known functional forms (see above) and also of logarithmic transformations for negative data [such as budget (fiscal) or current account deficits]. In this paper, we have focused on a unidirectional path of trade and growth below in a 'dual' context, that is: Vietnam's trade with its trading partners and its possible causal impact on Vietnam's national and sectoral growth.

Results

Substantive Findings and Their Policy Modelling Realism Properties

The empirical findings via the system of 3SLS estimation method for the ex-entrepreneurship and ex-finance factors that contribute to or hamper national and sectoral (SOE, NSOE and FIE) growth in our ESGT model of the Vietnamese economy are given in the table below together with their conventional diagnostic tests.

Table 1. Determinants of Vietnam's National and Sectoral Growth ESGT Estimation by 3SLS in Flexible Structural Form, 1996-2009

	National	SOE	NSOE	FIE
Const	-1.446**	3.720**	-6.771**	19.452**
SOE Growth	0.476**			
NSOE Growth	0.516**			
FIE Growth	0.119**			
Trade/GDP	-0.005**		-0.030**	0.131**
FDI/GDP		-0.014**		0.055**
Services/GDP	0.001**	0.0279**	0.007**	-0.130**
Vietnam Growth		2.036**	0.481**	-0.658**
Japan Growth		0.552**	-0.477**	-0.462**
China Growth		-1.570**	0.996**	1.634**
US Growth		-0.299**		1.622*
Exchange Rate		0.156**	-0.255**	0.585**
Inflation Pressure		-0.052**	0.041**	0.056**
Asia Crisis 1997-98	0.513***	2.472**	2.565**	-24.307**
Reform 1999	0.350**			
Reform 2003/Iraq		1.675**	-1.055**	-2.210**

Invasion				
Reforms 2005	5.420**			
Pre-GFC 2007		-1.683**		5.304**
GFC 2008	0.122**			
R-Squared	0.999	0.984	0.976	0.999
DW	3.183	2.905	2.802	3.007

Notes. **=Significant at 5%

Judged from the table, the standard statistical performance of the estimated ESGT models for Vietnam's national and sectoral growth appears good in terms of the conventional R^2 and DW values. The performance of the models can also be more accurately and appropriately evaluated by the Kydland (2006) data-model consistency criterion where the trend gap and discrepancy between historical data and predictions have to be tight and small. The criterion was advocated earlier by Milton Friedman (1953) in the sense of model (theory) and reality consistency and it seems to have been overlooked by serious modellers and policy-makers alike in recent years. This observation-by-observation modelling performance for Vietnam's national and SOE growth is given in Figs 5-6 and for Vietnam's NSOE and FIE growth in Figures 7&8.
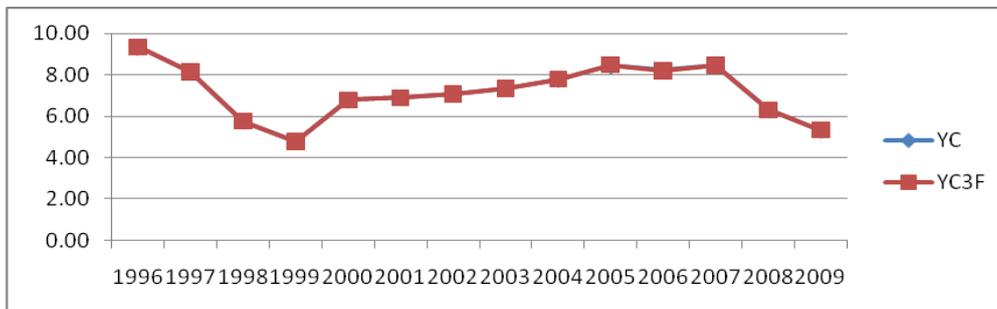

Fig 5. ESGT Modelling Performance of Vietnam's National Growth – Friedman-Kydland Criterion
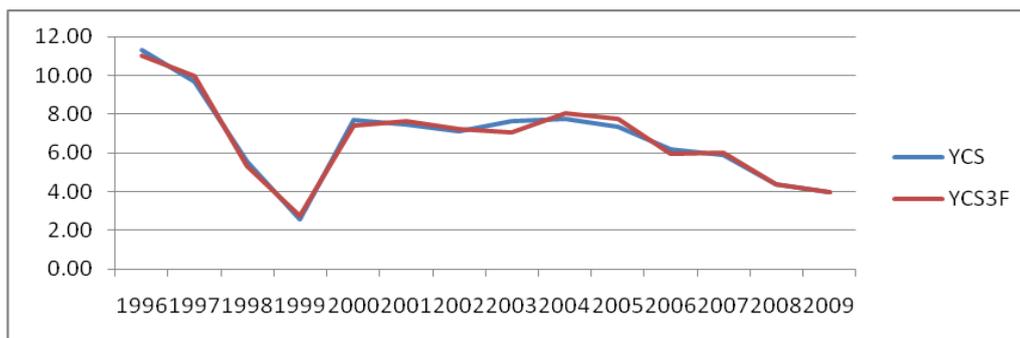

Fig 6. ESGT Modelling Performance of Vietnam's SOE Growth – Friedman-Kydland Criterion

A visual indicates that the estimated ESGT models emulate very well the troughs, peaks and turning points of Vietnam's observed national and sectoral growth over the whole sample

1996-2009. The modelling performance of Vietnam's growth by the ESGT approach is interesting in two aspects. First, the three major troughs attributable to the 1997-98 Asian financial crisis, the 2001 World Trade Centre terrorist attacks (especially on the FIE sector) and the GFC were accurately emulated. Second, the high volatility of the FIE growth as observed during the period of early 1990s (reform), mid-1990s (Asian crisis), mid-2000s (reform) and late 2000s (GFC) has also been captured by the model. These findings would enhance the quality and credibility of the policy outcomes we propose below.
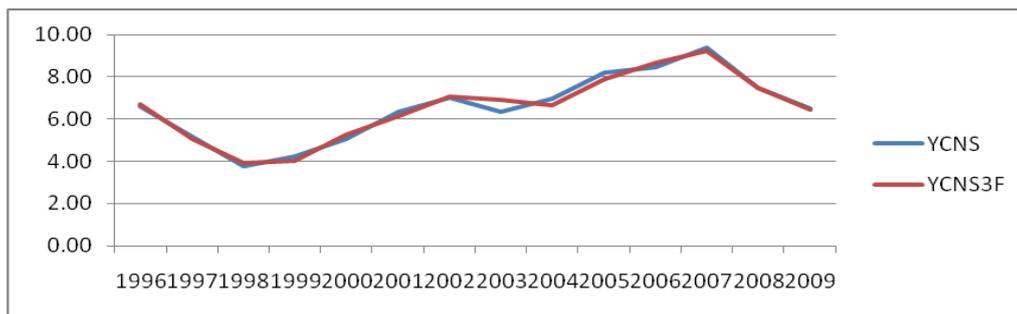

Fig 7. ESGT Modelling Performance of Vietnam's NSOE Growth – Friedman-Kydland Criterion
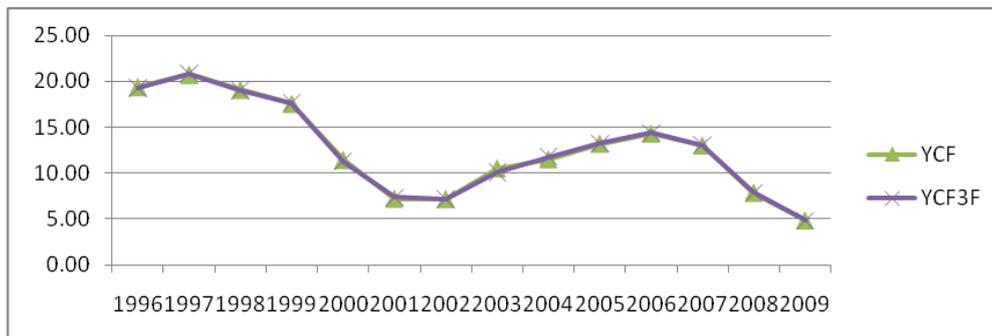

Fig 8. ESGT Modelling Performance of Vietnam's FIE Growth – Friedman-Kydland Criterion

Note to Figures 5-8: YC, YCS, YCNS, YCF, YC3F, YCS3F, YCNS3F and YCF3F=Vietnam's national, SOE, NSOE and FIE growth and their predictions by ESGT-3SLS modelling.

Implications of Globalisation Policy and Crisis Management for Vietnam's Growth Enterprises

What are then the implications of our substantive empirical findings for constructive discussions and policy uses in supporting growth enterprises, appropriate entrepreneurship policy development, HR management and crisis management relevant to Vietnam in the face of the country's high economic achievements and sustainability priority, substantial structural

dynamics and transformation in enterprises, growing regional integration and competitiveness, and adverse crises with global impact? Some of these major implications are discussed below.

What Drives FIE Growth

As described earlier, **o**ur ESGT models are developed for an open economy and acknowledge that both the major domestic micro (ability, income and regulation) and macro economic and global factors affect all sectors of the Vietnamese economy, i.e., SOEs, NSOEs (and their subsectors) and FIEs. More specifically, while SOE growth is helped by national and especially by Japanese demand (growth), services, exchange rates, and reform, it is hampered by China's growth, inflation pressure and crises. NSOE growth is assisted by national and US demand and inflation pressure but adversely affected by Japan's growth, exchange rates and the 2003 reform. *Interestingly, FIE growth is assisted by US growth, FDI, exchange rates, inflation pressure, and pre-GFC activities, but negatively affected by services, 2003 reform, and heavily by the 1997-98 Asian financial crisis. The finding that only the FIE sector has been severely affected by the Asian financial crisis is particularly illuminating: it shows the important coupling of the FIE sector in Vietnam to regional crises. This is in addition to the findings above that this sector is the only sector that has significantly benefited from FDI inflows and technology transfer in Vietnam during 1995-2009.*

How are These Drivers Relevant to Vietnam's Innovation and Entrepreneurship Development Policy?

If the thesis that innovation and entrepreneurship as the key elements for enterprise success domestically (via increased productivity and efficiency) (see Nguyen et al., 2009; EC, 2011) and internationally (via expanded exports) (see Nguyen et al., 2007) through enhanced competitiveness and comparative advantages is correct, then our findings are relevant to Vietnam's economic, trade or integration and industry policies for high growth and sustainable development. There are a number of reasons. First, when we take into account the dynamics and transformations of the economy in general and the SOE, NSOE and FIE sectors in particular, the SOE/GDP share has been declining and the NSOE/GDP share has been increasing in recent years. However, both SOE and NSOE activities have been characterised by a low growth. Second, high growth has occurred chiefly in the FIE sector where FDI and trade are found to be important contributors to its growth. Third, as innovation and entrepreneurship (and hence competitiveness and comparative advantages) are linked to enhanced trade (and economic development in general), their support, promotion and adoption are underpinned by the policies adopted by decision-makers especially for the FIE sector in Vietnam.

The Role of Domestic Reforms and Global Shocks in Vietnam's High-Growth Enterprises

While sudden crises, shocks and major gradual policy reforms have been acknowledged (even by CGE pioneers) as important sources of fluctuations in economic performance worldwide (see Johansen, 1982; Tran, 2001, 2002b, and op. cit.), they have rarely been incorporated in such well-known economic policy modelling studies as descriptive or graphical analysis, the CGE/GTAP, gravity theory, growth regression, or in a more realistic (or multiple structural breaks and with temporary or non-decaying effects) manner in the often-used long-term causality cointegration analysis. A novel modelling feature of the ESGT approach is in its flexibility in accommodating these events. The findings from the table above indicate that major events focused in our study do have a strong impact on Vietnam's national and sectoral economic growth. In particular, the finding of a severe adverse and strongly significant impact of the 1997-98 Asia crisis only on the FIE sector in Vietnam acknowledges

the relevance and contagion of this crisis but more precisely in the relevant sector of the economy (see also Tran, 2001, 2002a, 2002b). However, the beneficial effects of good economic governance or constructive and 'correct' policy reforms have also been substantiated empirically from our models. These lend credibility to our modelling study and its policy recommendations.

Does Vietnam's Trade or Openness Significantly Contribute to its Growth?

While opening-up and exports-oriented growth have been the country's formal policy since Doi Moi, the impact of this as a share of GDP on national growth at the aggregate level is not empirically clear-cut (see however micro survey findings in Nguyen et al., 2007), a finding often reported in the literature on international trade studies (Frankel and Romer, 1999). In fact, in our case, there is evidence that a rise in this share will result in a small but significant decline in national GDP growth. A larger adverse impact of trade shares is also found for NSOE growth. Our findings also show interestingly that while trade has no significant effect on Vietnam's SOE growth, *this trade has a statistically positive impact on growth in the FIE sector.* This evidence is interesting as this sector consists mainly of foreign invested (mainly 100 per cent owned) businesses which focus chiefly on producing or manufacturing goods for exports. Our evidence also shows that for this kind of impact study, a sectoral and not national analysis would be more appropriate.

How is this Contribution Relevant to Vietnam's Innovation and Entrepreneurship Development Policy?

The link between exports and business innovation (defined as new products, new production process and modified products) and entrepreneurship in Vietnam has been discussed earlier in Nguyen et al. (2009) where they reported a positive relationship. Our findings are important in pointing out, that, in the case of Vietnam in recent years, business innovation and entrepreneurship being relevant to the survival and health of all enterprises (see also EC, 2011), have been more gainfully adopted and utilised mainly in the country's foreign invested ventures. We acknowledge that, with the decline of SOEs and the rise of NSOEs and their contribution to national growth (see the Table), a growing development and policy focus has been on the NSOE sector in Vietnam. This focus may not however be adequate. As our evidence reveals, a focus on development and policy (including regulatory and administrative reforms (Hansen & Trap, 2004), improved infrastructure and enhanced marketing and financial support) on the FIE sector would be more appropriate to the county's changing dynamics and transformations and beneficial to its sectoral and national growth.

Conclusion

In the preceding sections, we have discussed the transformations and dynamics of Vietnam's enterprises in so far as the country's Doi Moi opening-up policy and recent law reforms support these enterprises, and have further identified the growth sector, namely, the foreign investments. We have also developed a new econometric model of enterprise growth to study empirically the contribution by the external and global factors to this growth. The findings lend support to the hypothesis that, in addition to internal entrepreneurship, financing and domestic regulatory support, this growth sector has benefited from globalisation in terms of liberalised trade and especially as a result of increased foreign direct investment, technology transfer, and also "good" policy reform. Being exposed to external factors, the sector has also been affected negatively by regional and global crises. A study on the combination of entrepreneurship and globalisation in enterprise performance or survival would be an interesting future research.

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