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Fiscal incentives and enterprise performance: Evidence from the UNIDO Viet Nam Industry Investor Survey 2011





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1. INTRODUCTION

This paper attempts to shed light on whether fiscal incentives support private direct investment in Viet Nam. Based on the enterprise level data collected in the ambit of the UNIDO Viet Nam Industry Investor Survey undertaken in 2011, the paper examines the link between enterprise performance and receipt or non-receipt of incentives. Every investment incentives policy has potential costs and benefits. Benefits arise from the resultant economic activity and the overall generated investment impact. Any cost and benefit analysis of investment incentives has to invariably take into account the opportunity cost and value of the incentives being provided to the investor. For example, public funds diverted to the use of investment incentive purposes may starve funds made available to other public policy functions, including those functions that could be conducive to private sector investments other than incentives. Furthermore, the value of incentives provided to investment which would have occurred without the receipt of incentives, increases the opportunity costs of the incentive granted¹.

In this context an investment incentive policy framework should factor in the administrative and management costs of policy implementation. It is because of these considerations that a careful assessment of the benefits resulting from an incentive policy framework at the country level needs to be undertaken. The UNIDO Viet Nam Industry Investor Survey 2011² contains important information on the different types of fiscal incentives received by foreign direct investors in the country. The Survey offers enterprise-level evidence of the relative perception of incentive importance in the light of Viet Nam's prevailing location-specific factors. Since the Survey provides empirical evidence of enterprise performance and investment activity, the data-set provides an opportunity to analyze enterprise level activity in the context of receipt or non-receipt of fiscal incentives. The latter analysis is also undertaken at the level of selected Provinces in Viet Nam to determine the extent of variations in enterprise performance results.

This paper is structured as follows. Section 2 provides a background of the investment incentives policy framework and briefly describes the Viet Nam Industry Investor Survey sample together with making reference to the role of incentives in the investment decisions of foreign enterprises. Section 3 delves deeper in the analysis of the impact of incentives by attempting to link performance and investment indicators of foreign and domestic companies through descriptive and regression analysis. The last part presents the main conclusions from the analysis.

1 For example, a fiscal incentive is beneficial if the lost revenue and indirect costs are compensated for and/or offset by ensuing economic benefits from the investment generated. It is not easy to determine where, when and how spillovers occur and, in particular, to calculate the value of externalities to assess if the investment incentive is smaller than the value of externality.

2 The UNIDO Viet Nam Industry Investor Survey was conducted in 2011 among 1,493 enterprises from the manufacturing, construction and utilities sectors from nine Provinces, namely Ba Ria-Vung Tau, Bac Ninh, Binh Duong, Dong Nai, Vinh Phuc, Da Nang, Ha Noi, Hai Phong, Ho Chi Minh City. In order to ensure that the interviewed firms accurately represent the country's economy, the sample was drawn from a sampling frame which was compiled from the Business Register maintained by the General Statistical Office (GSO). Furthermore, the sample was drawn by stratifying the sampling frames along the dimensions of size, ownership (private domestic enterprises, state owned enterprises, and foreign directed invested enterprises) and sector (based on VISIC 2 digit level). Systematic sampling was used in the selection of companies within each stratum from an ordered sampling frame. It has to be highlighted that the analysis contained in this paper refers to all types of investment incentives as provided by the various investment promotion institutions in the country, both at the national and provincial level.

2. ANALYTICAL BACKGROUND

THE INVESTMENT INCENTIVE POLICY FRAMEWORK IN VIET NAM

In order to attract foreign direct investment to its economy, investment incentives have been designed and applied in Viet Nam since the first Law on Foreign Direct Investment enacted in 2007. Investment incentives comprise different types of incentives, including tax incentives (corporate income tax, import and export tax, taxes on return for profit), land incentives, credit incentives, and other form of local financial support. Over time, the main focus of the investment incentives framework in Viet Nam has shifted from one aimed to attract foreign direct investment (FDI) flows to one supporting FDI in generating high value added, in enhancing the use of high technology, industrial capacity and capital. In the late 1980's and early 1990's, Viet Nam faced a severe lack of capital, and the incentive framework was implemented to steer the economy on course for industrial development (V. Huyen, 2014). In recent years, a main critique to the investment incentive framework was that it extensively favoured FIEs at the expense of domestic enterprises (Pham Chi Lan, 2014). As a result, investment incentives to FIEs have been gradually reduced. Investment incentives continue to be designed and implemented by the Minister of the Ministry of Planning and Investment and the extent of foreign invested enterprises (FIEs) benefitting from investment incentives is more limited today than in the recent past with a more focused attention and governance that these FIEs contribute positively to economic growth and socio development of the country (Dang Linh, 2013). More specific details of Viet Nam's incentive policy framework is included in Annex I.

SAMPLE DESCRIPTION

The following section describes the sample used for the analysis in the subsequent sections of this paper. The analysis contained in this paper is restricted to a sub-sample of 1,426 manufacturing firms³. Of these, 58.6 percent (836 firms) are foreign-owned firms, 32.4 percent (462 firms) are private domestic firms and 9.0 (128 firms) percent are state-owned enterprises. Companies are mainly located in four main Provinces, namely Ho Chi Minh City (390 firms), Binh Duong (375 firms), Dong Nai (233 firms), and Hanoi (290 firms). Other Provinces included refer to Vinh Phuc (23 firms), Bac Ninh (31 firms), Da Nang (31 firms), and Ba Ria Vung Tau (33 firms). Regarding the distribution across manufacturing sectors, the largest sub-sectors consist of the fabricated metal production, wearing apparel, rubber and plastic products (Table 1). In terms of firm size, some 453 respondents have less than 200 employees; 299 have between 200 and 300 employees and 674 have more than 300 employees. In terms of total assets, almost 60 percent of surveyed companies have more than around 4.7 USD million in total assets (Table 2).

Table 1. Sample distribution by manufacturing sub-sector

	No. of firms	% share in sample
Food products	77	5.4
Beverages	31	2.2
Tobacco products	8	0.6
Textiles	84	5.9
Wearing apparel	110	7.7
Leather and related products	61	4.3
Wood and products of wood and cork, except furniture	57	4.0
Paper and paper products	68	4.8

³ The overall sample of analysis was reduced to 1,426 companies so as to focus solely on the manufacturing sector.

	No. of firms	% share in sample
Printing and reproduction of recorded media	35	2.5
Coke and refined petroleum products	2	0.1
Chemicals and chemical products	55	3.9
Pharmaceuticals, medicinal chemical and botanical products	38	2.7
Rubber and plastics products	104	7.3
Other non-metallic mineral products	65	4.6
Basic metals	44	3.1
Fabricated metal products, except machinery and equipment	121	8.5
Computer, electronic and optical products	65	4.6
Electrical equipment	72	5.0
Machinery and equipment	55	3.9
Motor vehicles; trailers and semi-trailers	37	2.6
Other transport equipment	61	4.3
Furniture	92	6.5
Other manufacturing	67	4.7
Repair and installation of machinery and equipment	17	1.2
Total	1,426	100.0

Table 2. Sample characteristics

	No. of firms	% share in sample
Ownership structure		
Domestic	462	32.4
Foreign	836	58.6
SOE	128	9.0
Total	1,426	100.0
Size		
Small	453	31.8
Medium	299	21.0
Large	674	47.3
Total	1,426	100.0
Fixed assets group		
Less than USD 951,931	157	11.0
USD 951,931- USD 4,759,655	429	30.1
Over USD 4,759,655	840	58.9
Total	1,426	100.0

Table 3 illustrates some characteristics of the interviewed private companies by ownership type. Foreign enterprises are mainly large in size. Foreign and domestic enterprises mainly differ in terms of market orientation, with 76.6 percent of domestic companies not exporting and focused on the domestic market, whereas 67.6 percent of foreign companies are global-market seeking. Foreign enterprises are also analyzed in terms of their

motive to invest in Viet Nam. Foreign companies seem to have invested in Viet Nam mainly for market-seeking (44 per cent) and efficiency seeking motives (50 per cent). In particular, the great majority of foreign companies surveyed indicated that their main motives were to access the Vietnamese market and to lower production costs. Regarding the FDI origin most of the surveyed investors are of Asian origin and predominately originate from three countries: China (Taiwan province) (163), Japan (150), and Republic of Korea (113).

Table 3. Firm characteristics by ownership

	Foreign-owned		Private domestic-owned	
	No. of firms	% share	No. of firms	% share
Size				
Small	229	27.4	194	42
Medium	170	20.3	105	22.7
Large	437	52.3	163	35.3
Total	836	100.0	462	100.0
Fixed assets group				
Less than USD 951,931	79	9.4	72	15.6
USD 951,931 - USD 4,759,655	229	27.4	168	36.4
Over USD 4,759,655	528	63.2	222	48.0
Total	836	100.0	462	100.0
Motive to invest of FDI				
Resource seeking	19	2.3	NA	NA
Market seeking	365	43.8	NA	NA
Efficiency seeking	420	50.4	NA	NA
Other	30	3.6	NA	NA
Total	834	100.0		
Market orientation of FDI				
Local market-seeking	209	25.0	313	67.7
Regional market-seeking	62	7.4	12	2.6
Global market-seeking	565	67.6	137	29.7
Total	836	100.0	462	100.0

THE ROLE OF FISCAL INCENTIVES IN INVESTMENT DECISIONS

Empirical research seems to suggest that international investment incentives play only a limited role in determining the international pattern of foreign direct investment (Blomström, et al., 2000; OECD 2002; James, 2009). Factors related to the investment climate, such as ease of import and export, availability of local suppliers, regulatory framework, production costs, adequate infrastructure and the country's geographic location explain most of the cross-country variations in FDI inflows. The effectiveness of investment incentives is thus linked to the political, economic, social environment from where these are offered and therefore incentives can never fully compensate and offset the challenges posed by otherwise weak or unfavourable investment climate conditions. On the other hand, the economic impact of investment incentives can be reinforced by other location-specific factors. As highlighted in Chart 1, Survey evidence shows that foreign companies' investment decisions are mainly influenced by strong economic fundamentals in the host economies, thereafter the incentive framework.

Chart 1. Ranking of location factor importance by foreign investors (5 being highest, 1 being lowest)



Chart 2. Importance of incentives and taxation, by selected indicators













Survey responses suggest that the most important location-specific factors foreign investors refer to are the political and economic stability, labour costs, taxation, the country's legal framework and the quality of infrastructure. The impact of incentives and taxation policies on foreign companies' investment decisions vary according to the investor type. Chart 2 illustrates the importance of incentives and taxation by investor characteristic⁴. Responses indicate that exporting companies rank taxation higher than non-exporting companies, whereas they consider incentives less important than do non-exporting companies⁵. Transnational Corporations (TNCs) seem to be more influenced by both policies than are Foreign Entrepreneurs (FEs)⁶. Incentives are ranked higher by companies of small size than by medium and large companies. Differently, taxation appears to be more important for medium and large companies than is for small companies. Regarding company's age, companies over 21 years old are the least influenced by incentives and taxation policies. Chart 3 refers to the overall receipt and perception of criticality of incentives by type of incentive. This analysis illustrates that all types of incentives were indicated as crucial by at least one foreign firm, however almost all surveyed companies referring to have received fiscal incentives (437 enterprises) highlighted their criticality to the investment decision.

⁴ This new variable is created by combining hitherto single variables "taxation" and "incentives" into one new variable by giving both equal weights.

⁵ The term 'exporting companies' refers to both regional and global market seeking enterprises.

⁶ An enterprise is considered to be part of a transnational corporation (TNC) if it is the wholly-owned subsidiary or the joint venture of a parent enterprise with headquarters in another country. If the foreign investor is a foreign national or family that has invested in the enterprise alone or as a joint venture partner and is not a subsidiary of an enterprise based in another country, it is considered to be a foreign entrepreneur (FE) enterprise.

Chart 3. Receipt and perception of criticality of incentives, by type

Capital grants	Received		5
	Of which crucial		2 (40%)
Tax exemption	Received		437
	Of which crucial		412 (94%)
Grants for hiring/training employees	Received		3
	Of which crucial		1 (33%)
Infrastructure	Received		14
	Of which crucial		4 (29%)
Other	Received		13
	Of which crucial		9 (69%)

In line with the specific targeting of the incentive policy regime in Viet Nam, responses suggest that FIEs receiving incentives come from sectors associated with high and medium technology manufacturing operations (on aggregate some 56.4 per cent of FIE incentive recipient respondents operate in the high and medium technology sectors) and from low technology manufacturing activity (43.6 per cent) partly reflecting the importance of certain industries in terms of job creation. Overall, the goals and criteria of the investment incentive framework fully reflect the incentive recipient FIE respondents in the Survey. It is noteworthy that some 72.0 per cent of FIE incentive receiving respondents are subsidiaries of TNCs, partly reflecting the implicit goal of attracting the most traditional of FDI modes in the country through targeted incentive granting.

Summarizing, Survey evidence suggests that the main type of investment incentives are represented by those of a fiscal type, primarily tax exemptions: hence the emphasis in this paper on fiscal incentives. Given the close correlation between receipt and criticality of fiscal incentives, the paper will proceed by analyzing the link between enterprise performance and receipt or non-receipt of incentives through a general descriptive and regression analysis⁷.

⁷ The subsequent analysis compares characteristics of private foreign and domestic enterprises as well as performance comparisons between private foreign, domestic and state-owned enterprises.

3. ENTERPRISE PERFORMANCE AND FISCAL INCENTIVES

GENERAL DESCRIPTIVE ANALYSIS

Any study on fiscal incentives has to consider their effectiveness and impact in the local economy (Nathan-MSI Group, 2004). Effectiveness refers to the extent to which investment tax incentives stimulate investment and this implies that the quality of investment is as important as the quantity. Incentives that foster unsound and unsustainable investment impede economic development and should not be considered effective. In addition to the type and amount of investment generated, an incentives analysis must also take into account the associated costs. The first and most direct costs of tax incentives are those associated with the potential loss of revenues for the host government. The argument here is to determine if the new foreign investment would have come to the country if no or lower incentives were offered. Incentives costs also include indirect costs such as economic distortions and administrative and leakage costs. Incentives include higher revenue from possibly increased investment and economic benefits such as job creation, and other positive externalities. The argument for the efficacy of incentives presupposes that the incentive providing authorities in the host country are capable to estimate the level of benefits generated by the proposed new investment for which an incentive is to be granted, are able to determine the costs and choose the exact level of incentives requested. The first and most direct costs are those associated with the potential loss of revenue (if tax incentives are concerned) or opportunity cost of funds diverted to other alternative public policy uses. In this context it is important to seek to determine if the new foreign investment would have been generated if incentives were not deemed critical by investors. In order to delve deeper into the above mentioned aspects and attempt to analyze the effect of fiscal incentives in Viet Nam, the following section focuses on the comparison of key enterprise characteristics among incentive receiving and non-receiving firms.

Selected enterprise characteristic comparisons refer to planned investment and employment and these are analyzed for those enterprises which identified tax incentives, as critical (Group A), and for those firms which identified the same incentives as “not critical” (Group B)⁸. Table 4 shows that Group A includes 3 out of the 4 largest companies in terms of planned investment, and 45 out of 73 companies that anticipated creating at least 200 jobs. Differently, companies in Group B have smaller plans in terms of investment and employment. Mean planned investment of Group A is more than double the mean planned investment of Group B. Furthermore, mean planned employment of Group A is almost twice the mean planned employment of Group B.

Table 4. Planned investment and employment by foreign investor type based on the criticality of tax incentives

	Total	Group A Firms considering tax incentives critical	Group B Firms considering tax incentives not critical
Planned investment (in USD)	No. of foreign firms		
0-500,000	663	307	10
500,000-1,000,000	14	8	1
1,000,000-10,000,000	130	74	3
10,000,000-50,000,000	22	15	0
50,000,000-100,000,000	3		1
Over 100,000,000	4	3	0
Total	836	407	15
Total planned investment (USD)	2,450,000,000	1,836,000,000	25,494,583
Mean planned investment (USD)	2,930,743	4,511,327	1,699,639

⁸ This method of analysis follows the approach adopted by Bruce R. Bolnik for the Mozambique case (2009).

	Total	Group A Firms considering tax incentives critical	Group B Firms considering tax incentives not critical
Planned employment (No. of employees)	No. of foreign firms		
Under 11	101	44	2
20-11	61	34	2
21-50	117	67	2
51-100	84	45	2
101-200	58	28	2
Over 200	73	45	1
Total	494	263	11
Total planned employment	74,426	35,639	834
Mean planned employment	151	136	76
Median planned employment	39	40	37

One of the objectives of any investment incentives policy is represented by the derived technology and productivity externalities resulting from FDI activity the incentives help to attract in the first place. In order for these spillovers to be realized, there has to be some technology gap between the foreign and domestic companies which creates the potential for spillovers to occur. In general, it is expected that foreign companies are more productive than domestic companies. Incentives can only be justified if the foreign firms differ from local companies in that they possess some firm specific intangible asset that tend to potentially spill-over to local firms. In order to examine if there exists the potential of spillovers or whether incentives are actually received by those foreign companies that do not differ in terms of performance from local companies, a two-step analysis is undertaken. First, companies' characteristics in terms of performance, growth, trade, and innovation are compared by splitting the sample among three groups: foreign companies receiving incentives, foreign companies not receiving incentives and domestic companies (Table 5). A t-test on the equality of means and non-parametric equality of medians test is performed to check whether the differences across types of investors are significant. Given the importance of Export Processing Zones (EPZs) and Industrial Zones (IZs) in Viet Nam, a further analysis takes into consideration only the foreign companies operating from such zones (Refer to Table 6.)⁹. In this case, foreign companies in IZs/EPZs receiving incentives are compared with foreign companies in EPZs/IZs not receiving incentives, and also with the domestic companies.

As highlighted in Table 5, overall, foreign companies receiving incentives seem to outperform domestic companies. Foreign firms tend to employ more people, although more of the unskilled type. Foreign companies receiving incentives are also more labour productive and more capital intensive than are domestic companies. In addition, they also seem to be less involved in the local market than are domestic companies. Results show that foreign companies receiving incentives import and export a higher share of their inputs and sales, respectively. Overall, there does not seem to be much difference in the performance of foreign firms receiving incentives and those not receiving incentives. There is only weak evidence showing that foreign companies that have received incentives employ more people, are more labour productive and capital intensive than foreign companies that have not received any incentives.

⁹ It is not the scope of this paper to dwell deeper on enterprise performance in such zones. For a more in-depth analysis, please refer to the Viet Nam Industrial Investment Report 2011 (UNIDO). The analysis contained in Tables 5 and 6 is based on a sample of 438 foreign firms receiving incentives, 398 foreign firms not receiving incentives, 452 foreign firms operating in industrial zones/export processing zones and 462 domestic firms.

Table 5. Selected performance indicators for enterprises based on receipt of incentives

	Foreign firms in receipt of incentives		Foreign firms not in receipt of incentives		Domestic private firms		Difference (Foreign Incentives - Domestic)		Difference (Foreign Incentives - Foreign No Incentives)	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Planned investment (in USD)										
Total number of employees	839.7	342.0	586.8	300.0	363.2	237.0	476.5*	105.0*	252.9*	42.0
Employment growth	7.5	4.2	4.5	0.0	2.2	0.5	5.3*	3.7*	3.1	4.2*
Training expenditure over sales (%)	1.5	0.0	6.9	0.0	0.1	0.0	1.5	0.0	(5.4)	0.0
Skill ratio (%)	19.5	14.9	18.1	14.3	22.0	19.0	(2.4)*	(4.1)*	1.5	0.6
Performance										
Sales growth (%)	21.6	3.6	14.0	0.0	16.7	2.4	4.9	1.2	7.6	3.6
Value added per worker (USD)	62,451	6,452	33,688	3,893	10,209	4,012	52,243	2,439*	28,763	2,558*
Capital-labor ratio	230,171	11,871	422,966	8,861	13,463	7,002.7	216,708	4,868*	(192,795)	3,009*
Trade										
Export share (%)	61.9	82.5	67.2	89.5	31.1	4.2	30.8*	78.3*	(5.3)	(7.0)
Exports growth (%)	24.5	0.0	20.3	0.0	6.1	(6.2)	18.4*	6.2	4.2	0.0
Imports share (%)	66.6	75.0	57.8	70.0	33.3	15.0	33.3*	60*	8.8*	5.0
Investment										
Age	10	9	10	10	16	11	(6)*	(2)*	(0.2)	(1)
Last major investment (USD)	6,525,263	0	2,982,628	0	1,900,083	119,604	4,625,180	(119,604)*	3,542,635	0
New planned investment (USD)	4,320,110	0	1,446,204	0	1,415,781	0	2,904,329	0	2,873,906	0

Note: * T test significant at the 0.05 level

Table 6 refers to selected performance indicators for enterprises based on receipt of incentives with specific reference to EPZ/IZs locations. Similar results to the previous analysis are obtained when only foreign companies within the zones are considered. Survey evidence shows that foreign companies receiving incentives within the industrial zones outperform domestic companies, whereas their performance does not particularly differ from that of foreign companies operating in the same zones but that have not received any incentives. In other words, incentive granting does not seem to be a determinant factor in edging up performance trajectories. The mere operational presence in industrial zones seems to outweigh the productivity performance and technical efficiencies triggered by incentive receipt¹⁰. This result has some important implications due to the fact that almost all FIE respondents operating in IZs are also recipients of investment incentives, potentially raising some questions on the efficacy and impact of incentive provision to firm operating in such zones. Clearly more analysis is required to determine the nature and extent of complementarity between incentives and industrial zone location advantages and to help identify those policy mechanisms and triggers that could serve to improve policy efficacy.

10 Access to potential advantages from operating in industrial zones such as superior infrastructure, subsidized factory space and land, cluster effects may in part explain productivity performance and technical efficiency of firms. Results from the 2011 UNIDO Viet Nam Industrial Investment Report suggest that operating from industrial zones seems to translate in differences in productivity and technical efficiency and this invariably leads to industrial performance differentials among Provinces.

Table 6. Selected performance indicators for enterprises based on receipt of incentives, reference to EPZs/lzs

	Foreign firms in receipt of incentives operating in EPZs/lzs		Foreign firms not in receipt of incentives operating in EPZs/lzs		Domestic private firms		Difference (Foreign Incentives in EPZs/lzs - Domestic)		Difference (Foreign Incentives - Foreign No Incentives in EPZs/lzs)	
	(1) Mean	(2) Median	(3) Mean	(4) Median	(5) Mean	(6) Median	(7) Mean	(8) Median	(9) Mean	(10) Median
Planned investment (in USD)										
Total number of employees	697.1	333.5	658.8	338.0	363.2	237.0	333.8*	96.5*	38.3	(4.5)
Employment growth	7.7	4.9	9.4	0.8	2.2	0.5	5.4*	4.4*	(1.7)	4.1*
Training expenditure over sales (%)	1.7	0.0	14.7	0.0	0.1	0.0	1.6	0.0	(13.1)	0.0
Skill ratio (%)	18.9	15.1	17.9	14.3	22.0	19.0	(3.0)*	(3.9)*	1.0	0.8
Performance										
Sales growth (%)	24.1	2.1	19.2	2.0	16.7	2.4	7.4	(0.3)	4.9	0.1
Value added per worker (USD)	13,617.9	6,479.6	14,093.2	4,364.1	10,208.7	4,012.0	3409.1*	2467.6*	(475.3)	2,115.5*
Capital-labor ratio	177,430.7	13,513.5	754,707.6	11,362.5	13,462.9	7,002.7	163,967.9	6,510.8*	(577,276.8)	2,151.0
Trade										
Export share (%)	64.9	90.0	70.6	95.0	31.1	4.2	33.8*	85.8*	(5.6)	(5.0)
Exports growth (%)	31.5	0.0	25.1	0.0	6.1	(6.2)	25.4*	6.2*	6.4	0.0
Imports share (%)	69.9	80.0	63.3	73.0	33.3	15.0	36.5*	65.0*	6.6*	7.0
Investment										
Age	9.6	9	8.8	8	15.7	11	(6.1)*	(2)*	0.7	1
Last major investment (USD)	2,667,210	0	2,822,185	0	1,900,083	119,604	767,127	(119,604)*	(154,975)	0
New planned investment (USD)	2,011,247	0	1,735,303	0	1,415,781	0.0	595,467	0	275,943	0

Note: * T test significant at the 0.05 level

EXAMINING THE IMPACT OF FISCAL INCENTIVES WITH REFERENCE TO PROVINCES

It is important to analyze the impact of fiscal incentives also at the level of Provinces since there may be substantial differences in incentives policy frameworks across the country. An important underlying factor of a spatial analysis of fiscal incentives has to take into consideration prevailing incentive schemes for investors inside IZs/EPZs¹¹. Although such analysis requires extensive time series enterprise level data, available Survey evidence permits a preliminary, cursory assessment of the relative economic 'effect' of incentives granted at the Provincial level attempting to attest whether incentive policy frameworks lead to performance differentials among firms operating in different Provinces. Table 7 refers to the number of firms by surveyed Province. Over 73 per cent and 65 per cent of domestic and foreign enterprises are located in Hanoi, HCMC and Bin Duong, respectively. In general, with the exception of three Provinces, the greater majority of responding firms have indicated receiving fiscal incentives (Refer to Table 8).

11 For example, incentives inside IZs/EPZs for newly established enterprises in industrial and export processing zones are subject to a 10 per cent preferential rate of corporate income tax for a period of 15 years from the time these register revenue. Besides, the new enterprises are exempted from corporate income tax for a maximum period of 4 years from the time these record profit, and subject to a reduction of 50% of corporate income tax for the successive 9 years afterwards. Hence incentives granted to enterprises in IZs/EPZs go beyond those provided to general investors in the country.

Table 7. Number of surveyed firms by Province

	Domestic	Foreign	Total
Hanoi	131	79	210
Vinh Phuc	8	15	23
Bac Ninh	14	17	31
Hai Phong	63	47	110
Da Nang	17	14	31
Binh Duong	92	283	375
Dong Nai	39	184	223
Ba Ria Vung Tau	18	15	33
HCMC	208	182	390
Total	590	836	1426

Table 8. Receipt of fiscal incentives by foreign firms in selected Provinces

	N	Percentage share
Binh Duong	73	26%
Ba Ria Vung Tau	4	27%
Da Nang	5	36%
Hai Phong	24	51%
HCMC	107	59%
Bac Ninh	11	65%
Dong Nai	132	72%
Hanoi	62	79%
Vinh Phuc	14	93%

Table 9 refers to some indicative performance indicators of foreign companies that have received fiscal incentives. In terms of sales growth, Vin Phuc based firms rank first, with Hanoi and Bac Ninh following in second and third rank. In terms of Total Factor Productivity (TFP), firms located in Ba Ria Vung Tau rank as best performers, with Hai Phong and Hanoi following close. In terms of value added generated, foreign firms located in Ba Ria Vung Tau rank best performers with Vinh Phuc and Da Nang as second and third best. In general, Survey evidence suggests that a handful of foreign enterprises receiving fiscal incentives in Provinces such as Vin Phuc and Bac Ninh seem to be better performing than other foreign enterprises located in other Provinces. Table 10, 11 and 12 refer to performance indicator comparisons between foreign enterprises receiving incentives, foreign enterprises not receiving incentives and domestic firms for respondent firms located in Ho Chi Minh City, Binh Duong and Hanoi, respectively. These three Province (cities) were specifically selected on the basis of the large volume of firm respondents participating in the Survey.

Table 9. Performance of foreign firms in receipt of incentives, by selected province

	Sales growth (%)		TFP		Value added		Labour productivity		Capital/Labour Ratio	
	Median	Rank	Median	Rank	Median	Rank	Median	Rank	Median	Rank
Ba Ria Vung Tau	(5.6)	7	1,098.7	7	21.7	1	70.5	1	32.2	1
Bac Ninh	11.7	3	79.3	9	2.1	7	2.4	9	10.6	6
Da Nang	(2.3)	6	203.8	5	4.7	3	3.1	8	4.3	9
Dong Nai	1.5	4	197.6	6	3.0	6	8.4	3	17.8	3
Hanoi	11.9	2	288.1	2	3.0	5	8.0	4	16.5	4
HCMC	1.0	5	237.3	3	2.0	8	5.6	6	7.9	7
Vinh Phuc	17.5	1	221.3	4	6.2	2	19.4	2	14.7	5

Table 10. Selected firm performance indicators based on receipt of incentives in HCMC

	Foreign firms in receipt of incentives		Foreign firms not in receipt of incentives		Domestic private firms		Difference (foreign firms with incentives and domestic firms)		Difference (foreign firms with and without incentives)	
	(1) Mean	(2) Median	(3) Mean	(4) Median	(5) Mean	(6) Median	(1) over (5)	(2) over (6)	(1) over (3)	(2) over (4)
Employment										
Total number of employees	733	342	641	397	330	230	402.3*	112*	92	(55)
Employment growth	(1)	(0)	1	(2)	2	0	(3)	(0)	(1)	1
Training expenditure over sales (%)	3	0	0	0	0	0	3	0	3	0
Skill ratio (%)	20	15	20	12	25	22	(5.1)*	(6.4)*	(0.1)*	3.3*
Performance										
Sales growth (%)	14	1	7	0	6	(1)	8	2	8	1
Value added per worker (\$)	187,201	5,568	114,847	4,320	11,007	3,978	176,194	1590.0*	72,355	1,248
Capital-labor ratio	832,787	7,873	122,961	4,886	12,479	6,005	820,308	1867.4*	709,826	2,986
Trade										
Export share (%)	69	99	67	92	25	3	44.1*	96.1*	2	8
Exports growth (%)	14	(3)	13	0	8	(6)	7	3	2	(3)
Imports share (%)	70	79	65	80	35	24	34.8*	55.5*	5	(1)
Investment										
Age	12	12	14	15	16	13	(4.1)*	(1)	(2)	(3)
Last major investment (\$)	7,246,934	0	2,486,689	0	1,607,011	71,708	5,639,923	(7,1708)*	4,760,246	0
New planned investment (\$)	9,676,402	0	2,443,052	0	1,785,724	0	7,890,678	0	7,233,350	0

Note: * T test significant at the 0.05 level

Table 11. Selected firm performance indicators based on receipt of incentives in Binh Duong

	Foreign firms in receipt of incentives		Foreign firms not in receipt of incentives		Domestic private firms		Difference (foreign firms with incentives and domestic firms)		Difference (foreign firms with and without incentives)	
	(1) Mean	(2) Median	(3) Mean	(4) Median	(5) Mean	(6) Median	(1) over (5)	(2) over (6)	(1) over (3)	(2) over (4)
Employment										
Total number of employees	686	300	564	274	449	250	237	50	122	26
Employment growth	8	7	6	1	4	4	5	3	2	6.7*
Training expenditure over sales (%)	2	0	13	0	0	0	2	0	(11)	0
Skill ratio (%)	18	16	17	13	18	14	0	2	1	3
Performance										
Sales growth (%)	25	0	18	2	26	3	(1)	(3)	6	(2)
Value added per worker (\$)	9,717	3,719	13,822	3,512	9,621	3,379	96	340	(4,105)	208
Capital-labor ratio	12,552	6,720	746,470	7,646	8,860	5,211	3692*	1,508	(733,918)	(926)
Trade										
Export share (%)	71	96	70	90	54	70	17	26	1	6
Exports growth (%)	24	4	24	0	4	(2)	20	6	1	4
Imports share (%)	50	50	51	55	30	10	19.6*	40*	(1)	(5)
Investment										
Age	9	9	9	9	9	9	(0)	0	0	0
Last major investment (\$)	1,703,086	0	2,453,928	0	1,139,711	97,067	563,376	(97,067)	(750,841)	0
New planned investment (\$)	461,365	0	1,074,420	0	575,690	0	(114,325)	0	(613,054)	0

Note: * T test significant at the 0.05 level

As highlighted in Table 10, in HCMC, no major differences seem to exist between foreign enterprises who received incentives and those which did not. In either case, foreign firms outperform domestic enterprises in their employment creation potential. In terms of overall performance as measured by sales growth, value added per worker and the extent of capital-labour ratio, results indicate that foreign firms receiving incentives outpace both foreign and domestic firms. There are no major differences in terms of trade patterns, although those foreign firms receiving incentives planned to invest more in the future. In Binh Duong (Table 11), foreign firms receiving incentives seem to create more employment. Conversely, foreign firms not receiving incentives seem to be planning more investment in the future. In Hanoi the fiscal incentive policy framework seems to be working well since firms receiving incentives generally tend to outperform other firm types in all proxy indicators for performance (Table 12).

Table 12. Selected firm performance indicators based on receipt of incentives in Hanoi

	Foreign firms in receipt of incentives		Foreign firms not in receipt of incentives		Domestic private firms		Difference (foreign firms with incentives and domestic firms)		Difference (foreign firms with and without incentives)	
	(1) Mean	(2) Median	(3) Mean	(4) Median	(5) Mean	(6) Median	(1) over (5)	(2) over (6)	(1) over (3)	(2) over (4)
Employment										
Total number of employees	976.4	388.0	282.3	287.0	304.1	200.0	672.4	188*	694.1	101.0
Employment growth	16.4	10.6	5.7	2.5	2.7	0.0	13.7	10.6*	10.7	8.1
Training expenditure over sales (%)	3.6	0.0	0.1	0.0	0.1	0.0	3.5	(0.008)*	3.5	0.0
Skill ratio (%)	16.3	12.2	14.9	15.6	22.5	20.0	(6.2)*	(7.8)	1.4	(3.4)
Performance										
Sales growth (%)	24.0	11.9	(1.0)	6.0	13.4	(0.4)	10.5	12.3	25.0	5.8
Value added per worker (\$)	23,205.8	7,963.0	10,553.8	4,029.7	9,730.2	4,892.9	13,475.6	3,070.1*	12,652.1	3,933.3
Capital-labor ratio	22,474.1	16,455.1	14,114.8	11,535.4	10,460.2	6,276.8	12,013.9*	10,178.3*	8,359.3	4,919.7
Trade										
Export share (%)	55.1	60.0	39.4	19.0	29.3	2.7	25.8*	57.3*	15.7*	41.0
Exports growth (%)	19.5	10.5	(18.4)	(3.8)	21.8	(0.9)	(2.3)	11.4	37.9	14.4
Imports share (%)	74.2	80.0	61.7	85.0	39.9	34.0	34.3*	46*	12.5	(5.0)
Investment										
Age	9.5	8	11.4	11	21.8	16	(12.3)*	(8)*	(2)	(3)
Last major investment (\$)	2,400,901.6	0	1,648,544.9	0	1,649,365.4	121,333	751,536	(121,333)	752,357	0
New planned investment (\$)	1,890,462.0	0	1,151,086.1	0	1,058,537.3	104,564	831,925	(104,564)	739,376	0

Note: * T test significant at the 0.05 level

EXAMINING THE IMPACT OF INCENTIVES: A REGRESSION ANALYSIS

The next level of analysis is through a regression approach. Since differences across various types of enterprises may reflect a number of other firms' characteristics, a regression analysis is undertaken to control for enterprise heterogeneity. The focus of the following analysis is to ascertain whether incentives matter for the investment decisions of foreign enterprises and to attempt to understand the 'effect' of the fiscal incentive policy framework. The 'effect' is here analyzed by examining the potential differences between foreign-owned and domestic companies. State-owned enterprises are included in the analysis as a comparator to domestic enterprise performance results. Companies' differences are analyzed in terms of labour productivity, wages per employee and capital intensity based on the following model specifications.

The first specification of the regression model takes the following form:

$$\ln X_c = \beta_0 + \beta_1 \text{ForeignOwnership}_c + \beta_2 \text{Small}_c + \beta_3 \text{Medium}_c + \beta_4 \ln \text{KL}_c + \beta_5 \text{Exporter}_c + \beta_6 \text{SOE}_c + \beta_7 \text{EPZ/IZ}_c + \beta_8 \text{Industry}_c + \varepsilon_c$$

where X_c refers to the performance indicators of the firms, **ForeignOwnership**_c is a dummy variable that takes value 1 if the firm is foreign owned, **Small**_c is a dummy variable that takes value 1 if the firm has less than 200 full-time employees, **Medium**_c is a dummy variable that takes value 1 if the firm has more than 200 and less than 300 full-time employees, **KL**_c refers to the capital intensity of the firms, and is measured as total fixed assets per employee, **Industry**_c are sector dummies, **Exporter**_c is a dummy, which takes value 1 if the firm exports, **SOE**_c is a dummy variable which takes value 1 if a company is a domestic state-owned enterprise, 0 otherwise, **EPZ/IZ**_c is a dummy variable that takes value 1 if a company is registered within an export processing zone or industrial zone, 0 otherwise, Parameter β_1 denotes the differences between the performance of foreign owned firms and domestic firms.

To shed more light on the performance differences across firms in the sample, a second specification is estimated, which differs from the first one in the way firms are classified. In this second specification, foreign firms are divided into two groups: firms that have received investment fiscal incentives (**ForeignOwnership_Incentives**_c) and firms that have not received any investment fiscal incentives (**ForeignOwnership_NoIncentives**_c). Domestic private companies act as reference group, meaning that each group of foreign firms is compared with their domestic counterparts. The last variation of the model – a third specification - is run by using a subset of the database, which only includes foreign companies. In this specification, only the dummy **ForeignOwnership_Incentives**_c is included in the model as variable of interest. The reference group is, in this case, represented by those foreign companies that have not received any investment fiscal incentive, and the focus is on the differences between the foreign companies that have received investment fiscal incentives and those that have not.

Differences across companies are analyzed in terms of labour productivity, wages paid to employees and capital intensity, which are measured as value added per employee, total wages per employee, and fixed assets per employee, respectively. The log of capital intensity is added as control variable only when the dependent variable is labour productivity. The three specifications are estimated by using Ordinary Least Squares (OLS). Results from the regression analysis are shown in Tables 13, 14 and 15. According to the expectations, foreign companies are in general more productive than domestic companies (Table 13). When foreign companies are divided into two groups on the basis of whether they have received incentives or not, results show that both category types are more labour productive than domestic companies. No significant differences are found in terms of labour productivity when foreign companies receiving incentives are compared to those not receiving incentives. Turning to average wages highlights two interesting conclusions (Table 14). Results suggest that foreign companies pay the highest wages. Among the foreign companies, only those receiving incentives pay higher wages than domestic companies. No differences are found in terms of wages paid to the employees between foreign companies not receiving incentives and domestic companies. On the contrary, foreign companies receiving incentives pay higher wages than foreign companies not receiving incentives¹². Interestingly, regression results also show that state-owned enterprises (SOEs) tend to pay the highest wages among all enterprise categories. Table 15 shows the results of capital intensity. Foreign companies, independently whether they have received incentives or not, are more capital intensive than domestic companies. There is no significant difference between foreign companies receiving incentives and those not receiving incentives in terms of capital intensity. On the other hand, companies operating in industrial zones tend to be more capital intensive than companies not operating in such zones.

¹² This could also be the results of longer hours of work performed in similar establishments.

Another important aspect of the incentives policy is its link with the companies' expansion plans. In order to investigate this aspect, the previous base model is revised as follows:

$$Y_c = \beta_0 + \beta_1 \text{ForeignOwnership}_c + \beta_2 \text{Small}_c + \beta_3 \text{Medium}_c + \beta_4 \text{lnSalesPrevious}_c + \beta_5 \text{Exporter}_c + \beta_6 \text{Age}_c + \beta_7 \text{SOE}_c + \beta_8 \text{EPZ/IZ}_c + \beta_9 \text{Industry}_c + \varepsilon_c$$

where Y_c refers to the company's expansion plans. Two indicators of expansion are used: the decision to employ new people in the next financial year and the decision to make an investment in the next three financial years. **Age**_c is the company's age and **SalesPrevious**_c refers to the total sales in the previous financial year. The company's propensity to invest or employ new people in the next three financial years is analyzed in a logit.

Results highlighted in Table 16 illustrate that foreign companies are less likely to invest in the future when compared to domestic companies. This result does not change if foreign companies are split in two groups on the basis of their receipt or non-receipt of incentives. Both types of firms are less likely to make an investment in the near future (as measured by reference to the next three financial years) when compared to domestic companies. However it is noteworthy that a foreign company that has received incentives shows higher propensity to invest in the future compared to a foreign company that has not received incentives. This result may be linked to certain level of obligations investors have to 'compensate' for the incentives received. Results change when companies' employment plans are considered (Table 17). No significant differences are found between foreign and domestic companies in their probability to create employment in the near future (as measured by reference the following financial year). However, regression results show that foreign companies that have received incentives are more likely to increase employment in the future when compared to foreign companies that have not received investment incentives.

Reference group:	OLS1 domestic private firms	OLS2 domestic private firms	OLS3 foreign firms, no incentives
ForeignOwnership	0.2994*** (2.91)		
ForeignOwnership_Incentives		0.3772*** (3.10)	0.1490 (1.44)
ForeignOwnership_NoIncentives		0.2261** (2.09)	
KL (in log)	0.3954*** (6.43)	0.3940*** (6.43)	0.4143*** (4.94)
Exporter	-0.1069 (-1.04)	-0.1029 (-1.00)	-0.0465 (-0.28)
Small	-0.1625* (-1.80)	-0.1513* (-1.69)	-0.1374 (-1.13)
Medium	-0.0312 (-0.31)	-0.0260 (-0.26)	-0.0523 (-0.41)
SOE	-0.0899 (-0.69)	-0.0843 (-0.64)	
EPZ_IZ	-0.1541 (-1.49)	-0.1642 (-1.57)	-0.1851 (-1.63)
Sector dummies	Yes	Yes	Yes
Sample	Foreign and domestic firms	Foreign and domestic firms	Foreign firms
	Total manufacturing	Total manufacturing	Total manufacturing
R ²	0.3335	0.3351	0.3543
N	995	995	603

Table 14. Dependent variable: Wages per employee (in log)

Reference group:	OLS1 domestic private firms	OLS2 domestic private firms	OLS3 foreign firms, no incentives
ForeignOwnership	0.1369*** (2.87)		
ForeignOwnership_Incentives		0.2078*** (4.05)	0.1307** (2.51)
ForeignOwnership_NoIncentives		0.0750 (1.34)	
Exporter	0.0203 (0.43)	0.0235 (0.50)	0.0103 (0.13)
Small	0.0219 (0.53)	0.0329 (0.78)	0.0894 (1.54)
Medium	0.0479 (1.02)	0.0533 (1.14)	0.1132* (1.79)
SOE	0.2195*** (3.42)	0.2237*** (3.49)	
EPZ_IJ	-0.0419 (-0.84)	-0.0544 (-1.09)	-0.0402 (-0.73)
Sector dummies	Yes	Yes	Yes
Sample	Foreign and domestic firms	Foreign and domestic firms	Foreign firms
	Total manufacturing	Total manufacturing	Total manufacturing
R ²	0.1469	0.1529	0.1613
N	1184	1184	730

Note: t statistics in parentheses. *, **, *** denote statistical significance at 10,5,1 percent level

Table 15. Dependent variable: Capital-labour ratio (in log)

Reference group:	OLS1 domestic private firms	OLS2 domestic private firms	OLS3 foreign firms, no incentives
ForeignOwnership	0.4668*** (4.27)		
ForeignOwnership_Incentives		0.5637*** (4.74)	0.1557 (1.24)
ForeignOwnership_NoIncentives		0.3823*** (2.92)	
Exporter	-0.1571 (-1.55)	-0.1541 (-1.52)	-0.0358 (-0.19)
Small	0.1615 (1.59)	0.1770* (1.73)	0.2153 (1.48)
Medium	0.1132 (0.99)	0.1174 (1.03)	0.1910 (1.18)
SOE	0.1203 (0.91)	0.1263 (0.96)	
EPZ_IJ	0.2644** (2.22)	0.2465** (2.07)	0.2549* (1.93)
Sector dummies	Yes	Yes	Yes
Sample	Foreign and domestic firms	Foreign and domestic firms	Foreign firms
	Total manufacturing	Total manufacturing	Total manufacturing
R ²	0.1873	0.1891	0.1471
N	1214	1214	760

Note: t statistics in parentheses. *, **, *** denote statistical significance at 10,5,1 percent level

Table 16. Dependent variable: Future investment decision

Reference group:	1 domestic firms	2 domestic firms	3 foreign firms, no incentives
ForeignOwnership	-0.902*** (-5.359)		
ForeignOwnership_Incentives		-0.753*** (-3.994)	0.287* (1.743)
ForeignOwnership_NoIncentives		-1.030*** (-5.561)	
Exporter	-0.076 (-0.445)	-0.071 (-0.415)	-0.260 (-0.938)
Small	-0.233 (-1.383)	-0.227 (-1.345)	-0.104 (-0.475)
Medium	-0.087 (-0.525)	-0.089 (-0.535)	0.010 (0.046)
SalesT_1 (in log)	0.079* (1.805)	0.072 (1.618)	0.080 (1.495)
Age	0.012* (1.778)	0.012* (1.817)	0.014 (0.791)
SOE	0.163 (0.634)	0.172 (0.667)	
EPZ/IZ	0.242 (1.534)	0.211 (1.328)	0.295* (1.679)
Constant	-0.894 (-1.118)	-0.791 (-0.984)	-1.860* (-1.859)
Sector dummies	Yes	Yes	Yes
Sample	Foreign and domestic firms	Foreign and domestic firms	Foreign firms
	Total manufacturing	Total manufacturing	Total manufacturing
N	1,236	1,236	774

Note: *t* statistics in parentheses. *, **, *** denote statistical significance at 10,5,1 percent level

Table 17. Dependent variable: Future employment decision

Reference group:	1 domestic firms	2 domestic firms	3 foreign firms, no incentives
ForeignOwnership	0.556 (1.481)		
ForeignOwnership_Incentives		1.056** (2.294)	0.916** (2.177)
ForeignOwnership_NoIncentives		0.239 (0.601)	
Exporter	-0.220 (-0.567)	-0.204 (-0.524)	-0.546 (-0.684)
Small	-1.400*** (-3.536)	-1.400*** (-3.545)	-1.304** (-2.410)
Medium	-1.359*** (-3.531)	-1.363*** (-3.515)	-1.659*** (-3.252)
SalesT_1 (in log)	-0.043 (-0.432)	-0.069 (-0.691)	0.038 (0.280)
Age	-0.013 (-1.040)	-0.013 (-0.973)	-0.059* (-1.776)

Reference group:	1 domestic firms	2 domestic firms	3 foreign firms, no incentives
SOE	0.918 (0.845)	0.944 (0.868)	
EPZ/IZ	-0.342 (-0.924)	-0.468 (-1.244)	-0.846* (-1.777)
Constant	3.851** (2.116)	4.215** (2.309)	4.313* (1.657)
Sector dummies	Yes	Yes	Yes
Sample	Foreign and domestic firms	Foreign and domestic firms	Foreign firms
	Total manufacturing	Total manufacturing	Total manufacturing
N	672	672	365

Note: t statistics in parentheses. *, **, *** denote statistical significance at 10,5,1 percent level

5. CONCLUSIONS

This paper attempted to shed light on whether fiscal incentives support private direct investment in Viet Nam. Based on the enterprise level data from the UNIDO Viet Nam Industry Investor Survey undertaken in 2011, the paper attempted to study the link between enterprise performance and receipt or non-receipt of incentives. This is an important topic for research and empirical policy analysis. The paper suggests that there is a certain correlation between the type of incentive received and the investor's perception of the criticality of the incentive vis-à-vis the investment decision. This is primarily so for fiscal incentives which represent the main prevalent type of incentive provided to foreign invested firms in Viet Nam. The paper specifically focused on the productivity differentials between foreign companies (categorized between receiving and on receiving incentives types) and domestic firms. Results suggest that overall, foreign companies receiving incentives seem to outperform domestic companies. Foreign firms tend to employ more people, are more labour productive and capital intensive than domestic companies. They also seem to be less engaged in the local market in terms of supply and sales than are domestic companies. Results show that foreign companies receiving incentives import and export a higher share of their inputs and sales, respectively. Overall, there does not seem to be much difference in the performance of foreign firms receiving incentives and those not receiving incentives. The paper finds only weak evidence that foreign companies that have received incentives employ more people, are more labour productive and capital intensive than foreign companies that have not received any incentives. A significant difference was found for the wage level per employee which is larger for foreign companies that have received incentives compared to those who have not. With respect to those enterprises operating within industrial zones, similar results are obtained when only foreign companies within the zones are considered. Findings suggest that foreign companies receiving incentives within the industrial zones outperform domestic companies, whereas their performance does not particularly differ from that of foreign companies operating in the same zones but that have not received any incentives. In that sense, the mere operational presence in industrial zones seems to outweigh the productivity performance and technical efficiencies triggered by incentive receipt.

Inferring at the performance levels in different Provinces, the paper finds that in HCMC, no major differences seem to exist between foreign enterprises which receive incentives and those who do not. In either case, foreign firms outperform domestic enterprises in their employment creation potential. In terms of overall performance, as measured by sales growth, value added per worker and the extent of capital-labour ratio, results indicate that foreign firms receiving incentives outpace both foreign firms not receiving incentives and domestic firms. In Binh Duong, foreign firms receiving incentives seem to create more employment. Conversely, foreign firms not receiving incentives seem to be planning more investment in the future. In Hanoi, the fiscal incentive policy framework seems to be working well since firms receiving incentives generally tend to outperform other firm categories in all indicators.

The focus of the regression analysis aimed to ascertain whether incentives matter for investment decision of foreign enterprises and understand if there is a link between performance variations and the receipt of incentives. Results suggest that no significant differences are found in terms of labor productivity when foreign companies receiving incentives are compared to those not receiving incentives. Among the foreign companies, only those receiving incentives pay higher wages when compared to domestic companies. Also, no differences are found in terms of wages paid to the employees between foreign companies not receiving incentives and domestic companies. On the other hand, foreign companies receiving incentives pay higher wages than do foreign companies not receiving incentives. Foreign companies, independently on whether they have received or not incentives, are more capital intensive than domestic companies. There is no significant difference between companies receiving incentives and those not receiving incentives in terms of capital intensity. Companies operating in an industrial zone are more capital intensive than companies outside the industrial/export processing zones. Irrespective of incentive receipt, overall foreign companies are less likely to invest in the future compared to domestic companies. However the probability of expanding business is higher for foreign

firms receiving incentives than for foreign firms not receiving incentives. Results change when companies' employment plans are considered. No significant differences are found between foreign and domestic companies in their probability to increase their employment levels. However, results suggest that when compared to companies that have not received investment incentives, foreign companies that have received incentives are more likely to create jobs in the near future.

Overall, this paper has highlighted that incentives may have played/still play an important role in the attraction of FDI in the Vietnamese economy. However, it is acknowledged that fiscal incentives tend to act more as an additional rather than as the necessary factor in the investment attraction process. Empirical evidence, including that emerging from the UNIDO Investor Survey and the basis of the analysis contained in this paper, highlights that fiscal incentives may not be necessarily the most determinant factor for investors when deciding on their direct investment locations. All other factors being equal, tax incentives can assume a decisive role in the final location decision of foreign investors when the investment location choice gets narrowed down to a handful of sites with similar characteristics. In this regard, tax incentives tend to enhance the competitiveness of the host country in its efforts to attract direct investment. Evidence from Viet Nam seem to suggest that the granting of investment incentives has to become more selective since this is a very expensive policy to implement in terms of the distortions created in the national tax system and the implied budgetary constraints to the host country. Any measures undertaken to retain existing incentives or to grant any new incentives, should strongly depend on the ability and the capacity of the host country to carefully administer its investment promotion and targeting activities. Incentives need to be constantly reviewed to assess their effectiveness, more so in terms of enterprise performance impact. It is therefore ideal that a host country would have in place a monitoring and enforcement mechanism with which to determine whether incentives do actually trigger the desired investment outcome in terms of productivity performance and value added generation.

Annex I: Fiscal investment incentives in Viet Nam from 2007 to date ¹

CORPORATE INCOME TAX

Over the years, corporate income tax rate has progressively been reduced: from 32 per cent in 1997 to 28 per cent in 2003, to 25 per cent in 2009, to 22 per cent (effective since January 1, 2014) and to 20 per cent (planned effective date January 1st 2016). During the 1988-2004 period, in line with the aggressive FDI attraction policy, pursued by the Government of Viet Nam, FIEs benefitted from various preferential treatments in the tax rate and the duration of tax redemption when compared with their domestic counterparts. Tax incentives were provided on the basis of the sector of operation as well as the location of the investment being set up. Normally, in addition to preferential tax rates, tax exemption or ‘tax holiday’ was granted for a period of up to four (4) years.² The Law on Corporate Income Tax issued in June 17th, 2003 also abandoned tax on profit return (previously at the rate of 3%) and there is now no difference in corporate income tax rate between foreign and Vietnamese enterprises. Ultimately, these measures were aimed to support Vietnam’s membership in the World Trade Organization in 2007.

The Law on Corporate Income Tax issued in 2008 and effective since January 1st 2009, narrows the scope of tax payers subject to tax preferences. Tax incentives are provided to investment in areas with especially difficult economic-socio conditions, and specific to investment in high technology sectors, in scientific research and technology development sectors, in infrastructure that is of special importance to the State and in the manufacture of software. According to the 2008 Law, investment incentives previously provided to manufacturing projects that are engaged in the production of industrial and agricultural products were to be repealed. On the other hand, the investment incentives that were retained remain unclearly linked to economic impact and were somewhat inflexible in their implementation since there was no ability to discriminate among different FDI projects distinguishing between significant and insignificant spillover impacts, significant and insignificant effects on local development etc. In addition, the 2008 Law also dropped corporate income tax incentives granted to re-invested capital. In this sense, only new business entities (and not new investment projects of existing entities) can benefit from corporate income tax incentives. Newly established enterprises in industrial and export processing zones are subject to a 10 per cent preferential rate of corporate income tax for a period of 15 years from the time these register revenue. Besides, the new enterprises are exempted from corporate income tax for a maximum period of 4 years from the time these record profit, and subject to a reduction of 50% of corporate income tax for the successive 9 years afterwards.

IMPORT AND EXPORT TAX

The Law on Import and Export Tax was established and issued in 2005. Tax preferences granted to FIEs include a number of incentives. Import tax redemption is applied for commodities imported for processing and the same are exempted from export tax when re-exported. Vietnamese commodities exported for processing are exempted from export tax, whereas when re-imported, items are exempted from import tax based on export value. Import tax exemptions are granted for investment in fixed assets of investment

¹ This list is based on information collated from various sources listed in the references section.

² Most notably before 2004, FIEs were subject to higher utility charges (including electricity, telephone and water charges) when compared to domestic enterprises but this utility payment regime was revised in 2004 to make maintain same level utility charges.

projects in areas that are subject to especial investment support framework as in for example, areas with especially difficult economic-socio conditions. Raw materials, spare parts that cannot be produced domestically and are imported for manufacturing purposes of investment projects in areas with especially difficult economic-socio conditions and areas of especial investment encouragement are exempted from import tax for a period of 5 years from the time projects start operating. Export tax exemption is applied for commodities produced totally by imported materials. Import tax of such imported materials is returned. Currently, there is no longer tax preferential treatment between domestic and foreign investors.

FINANCIAL POLICY ABOUT LAND

The Land Law issued in 2003 allows foreign investors to select either (i) paying the rent as lump sum or (ii) paying the rent every year during their operation. Article 67 of the Land Law stipulates that the maximum time of renting land is 50 years. For investment projects in areas with difficult economic-socio conditions and especially difficult economic-socio conditions, the maximum time for renting land is 70 years. Investors benefit also from exemptions on land and water surface for projects both in (i) building time of projects approved by authorities and in (ii) fields that are subject to special encouragement and invested in especially difficult economic-socio locations. Since the time investment projects come into operations, exemption from rent on land and water surface is granted for: (i) a period of 3 years for projects that are subject to investment encouragement, for projects that change locations due to planning or environmental pollution, (ii) a period of 7 years for investment projects in areas with difficult economic-socio conditions, (iii) a period of 11 years for investment projects in areas with especially difficult economic-socio conditions, investment projects in fields that are especially encouraged, projects conducted in fields that are encouraged and located in areas with difficult economic-socio conditions, (iv) a period of 15 years for investment projects in fields that are encouraged and are located in areas with especially difficult economic-socio conditions; and for investment projects in fields that are especially encouraged and are located in areas with difficult economic-socio conditions. More recently in 2008, to support enterprises in overcoming problems of economic recession, in May 2012 the Government issued Decree No. 13/2012/, stipulating a reduction of 50 per cent of rent for land in 2012 applied for trading and service organizations. Investors facing financial difficulties were granted an extension of maximum 12 months for rent submission. The rent pertaining to the 2005-2010 period was stipulated in Decree 142/2005/ND-CP issued in 2005. The rent payment every year is 0.5 per cent of the value of rented land. The percentage is adjusted every 5 years. Decree 121/2010/ND-CP issued for the 2010-2015 period increased the percentage from 0.5 per cent to 1.5 per cent. Provincial authorities specify the value of rented land.

CREDIT POLICY

FIEs borrow from Vietnamese banks has been greatly facilitated. The preferential interest rate of maximal 9 per cent for short-term loans in Vietnam Dong is stipulated by the State Bank for investment projects conducted in five specific sectors, namely agricultural and rural development, export, supporting industries, small and medium enterprises, and high technology industries.

INCENTIVES PROVIDED BY LOCAL AUTHORITIES

Beside the aforementioned fiscal incentives provided by the Vietnamese government for FIEs, there are specific incentives granted by local authorities. Provinces specify their investment incentives in various forms from assisting in clearing land for investment projects, advertisement expenses, support to the training of employees, giving bonus to foreign investors who work as investment brokerage.

A full list of sectors which qualify for special investment incentives and investment incentives is listed hereunder.

A. List of sectors which qualify for special investment incentives

I. Production of new materials, new energy; production of high-tech products, bio-technology products, info-technology products; production of manufactured mechanical products

1. Production of composite materials, light construction materials, rare and precious materials;
2. Production of high quality steel, alloy, special metals, sponge iron; steel billets;
3. Production of new energy: Construction of plants using solar energy, wind energy, bio-gas, geothermal energy, tides;
4. Production of medical equipment for analytical and extractive technologies in medical sector; orthopaedic instruments, wheelchairs, specialized instruments for the disabled;
5. Projects applying advanced technology, biotechnology to produce medicines meeting international GMP standards; production of drug materials for antibiotics;
6. Production of computers; information, telecommunications and internet equipment; pivotal ICT products;
7. Production of semiconductors and high-tech electronic components; production of software products, website applications; provision of software services; research on information technology; training human resources in the field of info-technology;
8. Production and manufacture of precision mechanical equipment; equipment and machinery for examination and control of safety during the process of industrial production; industrial robots.

II. Cultivation and processing of agricultural, forestry and aquatic products; making salt; production of man-made strains, new seeds and breeds of animals

1. Afforestation and taking care of forests;
2. Cultivation of agricultural, forestry and aquatic products in uncultivated land, unexploited waters;
3. Catching of marine products at offshore sea;
4. Production of new strains; propagation and hybridization of seeds and breeds of animals with high economic efficiency;
5. Production, exploitation and refining of salt.

III. Use of high-technology; modern technology; protection of ecological environment; research on, development and fostering of high-technology

1. Application of high-technology; application of new technologies which have not been applied in Vietnam; application of biotechnology;
2. Pollution treatment and environmental protection; manufacture of equipment for treatment of environmental pollution, equipment for observation and analysis of environment;
3. Collection and treatment of liquid waste, gaseous waste, solid waste; recycling and reuse of waste;
4. Research on, development and fostering of high-technology.

IV. Employment of large number of employees

1. Projects regularly employing 5,000 or more employees.

V. Construction and development of infrastructure and important projects

1. Construction and operation of infrastructure facilities in industrial zones, export processing zones, high-tech zones and economic zones, and of important projects established under a decision of the Prime Minister.

VI. Development of facilities in educational, training, medical, gymnastic and sports sectors

1. Construction of drug detoxification centres or tobacco detoxification centres.
2. Setting up establishments providing sanitation services to prevent and fight against epidemics;
3. Establishment of geriatric centres, and relief centres concentrating on care for the disabled and orphans;
4. Construction of sports centres for training and coaching athletes with high performance; sports centres for the disabled; sports centres with equipment and facilities for exercises and contests, meeting requirements of international sporting events;

VII. Other sectors of production and service

1. Investment in research and development (R&D) accounting for 25% or more of turnover; Services of salvage in the sea;
2. Construction of tenements for employees working in industrial zones, export processing zones, high-tech zones, economic zones; construction of dormitories for college students and construction of housing for people entitled to social benefits.

B. List of sectors which qualify for investment incentives:

I. Production of new materials, new energy; production of high-tech products, bio-technology products, info-technology products, manufactured mechanical products

1. Production of sonic, electric and thermal highly-insulating materials; wood-substitute synthetic materials; fire-proof materials, construction plastics, fibreglass, special cement;
2. Production of non-ferrous metals; cast-iron refining;
3. Production of moulds for metal and non-metal products;
4. Construction of new power plants, electricity transmission and distribution networks;
5. Production of medical equipment; building storage for preservation of pharmaceutical products and for storing human medicaments for prevention of and fighting against natural disasters, calamities, dangerous epidemics;
6. Production of equipment for testing toxic substances in foodstuffs;
7. Development of petrochemical industry;
8. Production of coke, activated carbon;
9. Production of crops protection drugs, insecticides, preventive and curative drugs for animals and aquatic creatures, veterinary drugs;
10. Materials for production of drugs, preventive and curative drugs for social diseases; vaccines, medical bio-products, medicines from pharmaceutical materials, oriental medicines;
11. Construction of establishments for biological testing, and for evaluating effects of drugs; construction of establishments meeting criteria for production, preservation and testing of drugs; cultivation, reaping and processing of pharmaceutical materials;
12. Development of resources of pharmaceutical materials and production of drugs from pharmaceutical materials; projects for researching on and proving the scientific basis of oriental medicine prescriptions, and formulating testing criteria in respect of oriental medicine pre-

- scriptions; conducting a survey of and compiling statistics on various types of pharmaceutical materials used for production of drugs; collection, inheritance and application of oriental medicine prescriptions; search for, exploitation and utilization of new pharmaceutical materials;
13. Production of electronic products;
 14. Production of machinery, equipment and components packs in the fields of exploitation of petroleum, mining, and energy; manufacture of large-size lifting and lowering equipment; manufacture of machine tools for metal processing; metallurgy equipment;
 15. Production of high and medium voltage electric devices; large-size generators;
 16. Production of diesel engines; production and building of, and repair to ships; production of equipment and spare parts for cargo ships, fishing boats; manufacture of dynamic and hydraulic machinery and parts, and compressing machines;
 17. Production of equipment, vehicles and machinery for construction; production of technical equipment for the transportation industry; production of locomotives and carriages;
 18. Production of machine tools, machinery, equipment, spare parts serving agricultural and forestry production; food processors; equipment used in irrigation;
 19. Production of equipment and machinery for the textile and garment industry; production of machinery for the leather industry.

II. Cultivation and processing of agricultural, forestry and aquatic products, making salt; production of man-made strains, seeds and breeds of animals

1. Cultivation of medicinal plants;
2. Preservation of post-harvest agricultural products; preservation of agricultural and aquatic products and foodstuffs;
3. Production of bottled or canned juice from fruits;
4. Production and refining of feed for cattle, poultry, aquatic creatures;
5. Technical services in support of cultivation of industrial plants and forestry plants, animal husbandry, aquaculture, protection of plants and domestic animals;
6. Production, propagation and hybridization of seeds and breeds of animal;

III. Use of high technology, modern technologies; protection of ecological environment; research on, development and fostering of high technology

1. Production of equipment for dealing with oil-overflow;
2. Production of equipment for waste treatment;
3. Construction of technical establishments and facilities: laboratories, experimental stations for application of new technologies to production; establishment of research institutes.

IV. Employment

1. Projects regularly employing 500 to 5,000 employees.

V. Construction and development of infrastructure facilities

1. Construction of infrastructure facilities in service of production and operation of cooperatives and community life in rural areas;
2. Projects for operation of infrastructure facilities and production in complexes of industries and trades in rural areas;
3. Construction of water plants or water supply systems in service of living needs or industries; construction of drainage systems;

4. Construction and improvement of bridges, roads, airports, ports, railroad stations, bus stations, parking lots; opening of more railroad routes;
5. Construction of technical infrastructures for densely-populated areas in localities provided in Appendix B issued together with this Decree.

VI. Development of facilities in educational, training, medical, gymnastic, sports and national cultural sectors

1. Construction of infrastructure facilities of educational and training establishments. Construction of private and people-founded schools and educational and training establishments at all levels: pre-schools; popular schools; secondary vocational schools; colleges and universities;
2. Establishment of people-founded hospitals and private hospitals;
3. Construction of gymnastic and sports centres, exercising clubs, gymnastic and sports clubs; establishments for production and manufacture of or for repair to equipment and devices used for gymnastic and sports exercises;
4. Establishment of national cultural houses, groups of singers and dancers performing national music and dance; theatres, film studios, film printing and developing establishments, cinemas; production and manufacture of, and repair to national musical instruments; renovation and conservation of museums, national cultural houses and cultural and artistic schools;
5. Construction of national tourism areas, eco-tourism areas; construction of cultural parks including sports areas and entertainment areas.

VII. Development of traditional trades

1. Formulation and development of traditional trades in relation to production of fine-art and hand-craft products; processing of agricultural products and food; production of cultural products.

VIII. Other production or service sectors

1. Provision of the Internet connection, access and application services, and establishment of telephone booths in regions included in Appendix B issued together with this Decree;
2. Development of means of public transportation including: development of ships and airplanes, means of railroad transportation, automobiles of 24 seats or more for transportation of passengers by land; modern and high-speed boats for transportation of passengers by river; container ships, ocean-going vessels;
3. Projects for relocation of production establishments out of inner cities;
4. Construction of type-I markets and exhibition areas;
5. Production of children toys;
6. Projects for raising capital and lending capital by People's credit funds;
7. Legal consultancy; consultancy on intellectual property and technology transfer;
8. Production of various types of materials for pesticides;
9. Production of basic chemicals, purified chemicals, specialized chemicals and dyes;
10. Production of materials for cleansers, and additives for the chemical industry;
11. Production of paper, cardboard, artificial planks directly from sources of agricultural and forestry materials at home; production of paper-pulp;
12. Weaving fabric, completing textile products; producing silk and fibres of various kinds; tanning and semi-processing of hides;
13. Investment projects in industrial zones, established under a decision of the Prime Minister.

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