



## THE FACTORS EFFECT TO THE FINANCIAL EFFICIENCY OF FDI (FOREIGN DIRECT INVESTMENT) ENTERPRISES LOCATED IN HO CHI MINH CITY-VIET NAM

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### ABSTRACT

*This paper is to examine and evaluate the operational efficiency at the enterprises that have foreign investment at HCMC in the stage 2007-2011. The research also evaluates the factors that effect to financial effect, especially for using BEP ratios-Basis Earning Power (EBIT to the total assets) to measure the financial effect, because FDI enterprises normal get the incentive for differently corporate income tax in Viet Nam. The research results show that there are six factors affecting to financial performance including in: turnover, capital owners (Equity), long term debt to total asset, tangible assets to turnover, sales expensive to turnover and the management expensive to turnover. From that point, the authors also have petitioned that is to enhance performance and management enterprises as well as improvement the investment policy of Ho Chi Minh City (HCMC)*

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**Keywords:** Performance, FDI, panel data, enhance financial

### INTRODUCTION

Since Viet Nam has opened the economy (year-1990), the numerous enterprises have been more and more FDI into Vietnam. The sectors for FDI enterprises contribute considerably for growing economy, settle employment, import-export turnover, however, there are still enterprises that make a report to annual financial statements in which are accumulated losses. So many enterprises do business with inefficient (according to the tax office, there are over 50% of FDI enterprises loss). Therefore, we also acknowledge performance, with more specifically for how are financial performance of these enterprises in the past which factors effect to their performance, what the



enterprises do business which are most effective,... From this point, the petition for suitable policy is to impulse to use the capital, there are policies for using capital and investment suitably. At the same time, the management organs of State also admit that the structure of employment that need to draw and draw investment in which contribute to improve the quality investment in the future.

### Objectives of the study

The study implements the following objectives:

- (1) Examine and evaluate the FDI enterprises' financial performance located in HCMC in the stage 2007-2011
- (2) Evaluates the factors effecting to operational efficiency
- (3) To enhance performance and management enterprises as well as improvement the investment policy of Ho Chi Minh City (HCMC)

### LITERATURE REVIEW

- [Modigliani and Miller \(1958\)](#), they suggested capital structure has generated great interest among financial researchers. They argued that in efficient markets the debt-equity choice is irrelevant to the value of the firm and benefits of using debts will compensate with decrease of companies stock. Prior to MM theory, conventional perspective believed that using financial leverage increases company's value

- [Rajan and Zingales \(1995\)](#) discuss various accounting based measures of leverage and their informational content. They suggest that the choice of measure should be based on the objective of the analysis.

- [Donal and Fatma \(2002\)](#), they find that this broader more encompassing measure of firms' relative operational efficiency yields stronger results than comparable accounting ratios (ROA and ROE). These results indicate that analysts behave as if they factor into their forecasts an understanding of the underlying economics of a business of an industry.

- [Abor \(2005\)](#) seeks to investigate the relationship between capital structure and profitability of listed firms on the Ghana Stock Exchange (GSE) during a five-year period. He measures the performance by ROE and performance depends on capital structure. The research suggests that profitable firms depend more on debt as their main financing option. In the Ghanaian case, a high proportion (85 percent) of the debt is represented in short-term debt.

- [Zuraidah et al. \(2012\)](#), This study find that investigate the impact of capital structure on firm performance by analyzing the relationship between operating performance of Malaysian firms, measured by return on asset (ROA) and return on equity (ROE) with short-term debt (STD), long term debt (LTD) and total debt (TD). Four variables found by most literature to have an influence on firm operating performance, namely, size, asset grow, sales grow and efficiency, are used as control variables.



- Nguyen and Nguyen (2010) measures performance by ROE, the result shows some varies influence on operational efficiency: capital structure, turnover, equity, capacity for management costs, business lines.

## METHODOLOGY

### Theory for financial performance and factors that effect to financial performance of enterprises

a. *The ratios measure financial performance, operation performance of enterprises including in effect for financial, social economy... however, the effect that is referred to effect for financial that is measured in this research by the author wrote down with the ratios following as:*

**Return on equity (ROE):** ROE is profitable ratio after tax to equity. This is the index shows the use for equity utilization. This index is percentage to show expected profitability on investment for owner, therefore, if this index is higher that means business performance has been utilization, using of input resources suitably

$$ROE = \frac{\text{Profit after tax}}{\text{Equity}}$$

◆ **Return on assets (ROA):** ROA is the measurement ratio by profit after tax to total assets. This index shows using for capital utilization under two kinds: fixed capital shows through fixed assets and working capital through working assets. In the case, the companies have good management; there is policy for investment, sale policy, a reasonable return on capital, will create the high profit, improve the capacity for using enterprises' assets.

$$ROA = \frac{\text{Profit after tax}}{\text{Total asset}}$$

◆ **Basis Earning Power (BEP):** this ratio measures gross profit margin (the earning before interest and tax-EBIT) to total assets of enterprise.

This ratio is calculated following equation:

$$BEP = \frac{\text{EBIT}}{\text{Total asset}}$$

This index measures the profitable utilizing on total assets of enterprises when not referring to paying the corporate income tax, they have high affectedness when applying for FDI enterprises more than using the index for ROE or ROA from these enterprises that have been difference about



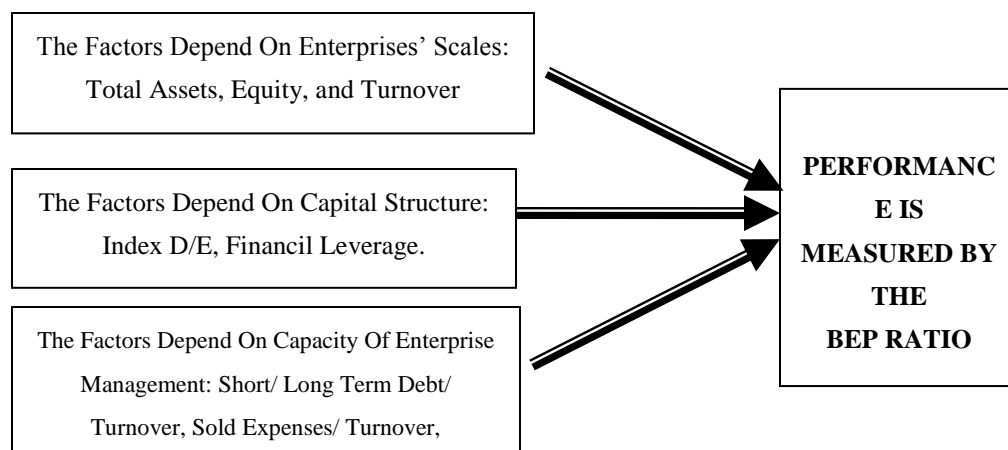
the tax for income enterprise. (Particular for difference about the tax ratio and tax incentive for the remission of tax about income differently.)

**b. The factors impact to financial performances:**

Because financial performance is measured through interaction between input and output factors, therefore, there is lots of factors impact to financial performance. Firstly is capital structure, using debts and policy for using debts of enterprises. Following to this resource is used in where to create the largest profit. Under impacting the capital structure and the using for target of investment into enterprises that carry out into manufacturing and operating and getting the income after tax after deducting the relevant expenses. So, there is lots of factors that impact to operation utilization in general and financial performance in particular.

**Research models and data resources**

**a. Research models:** Because FDI enterprises have tax rate popularly and advantage of remission income tax differently in Viet Nam, if we use the index ROA or ROE to measure unsuitably, so the author uses the index BEP replace for ROA and ROE. We can describe the factors that effect to financial performance of enterprises as diagram follows:



From the practical results, from theory model and depending on resources of practical data that collected, the author proposes the researched model as follows:

$$BEP_{it} = \beta_0 + \beta_1 \ln(S_{it}) + \beta_2 \ln(TA_{it}) + \beta_3 \ln(E_{it}) + \beta_4 * (D/E_{it}) + \beta_5 * (LD_{it}/TA_{it}) + \beta_6 * (Tag/S_{it}) + \beta_7 * (Adv_{it}/S_{it}) + \beta_8 * (Mag_{it}/S_{it}) + \epsilon_i$$

where:

$BEP_{it}$ : EBIT to total assets (%) of enterprises i in the year of t

$S_{it}$ : (Sales) Turnover of enterprises i in the year of t (by million vnd)

$TA_{it}$  (Total Asset): Total assets of enterprises i in the year of t (by million vnd)



$E_{it}$  (Equity): Equity of enterprises  $i$  in the year of  $t$  (by million VND)

$D/E_{it}$  (Debt/Equity): Debt to equity of enterprises  $i$  in the year of  $t$

$LD_{it}/TA_{it}$  (Long terms Debt/Total Asset): Long term debt to total assets of enterprises  $i$  in the year of  $t$

$TgA_{it}/S_{it}$  (Tangible Asset/Sales): Tangible Asset to Sales of enterprises  $i$  in the year of  $t$

$Adv_{it}/S_{it}$  (Advertisement fee/Sales): Advertisement fee to Sales of enterprises  $i$  in the year of  $t$

$Mag_{it}/S_{it}$  (Management fee/Sales): Management fee to Sales of enterprises  $i$  in the year of  $t$

$\varepsilon_i$ : random error

**b. Data:** The author collects the data from financial statement is audited, the enterprise run continuously around 5 years: from 2007-2011. Total: there are 204 enterprises in the research model, the time for research that is 5 years continuously from 2007 to 2011, therefore, there are 1.020 obs.

**Table-1.** Describes data research

	Obs	ROA	ROE	BEP	Sale	Asset	Equity	LD/A	D/E	Avd/ Sale	Mag/ Sale
Min	1020	-101.67	-265.64	-100.12	471.37	894.59	416.56	1.35	23.79	0	0
Max	1020	101.94	970.84	130.39	5,837,691.26	4,579,188.27	1,457,792.39	18.10	256.65	0.26	8.40
Average	1020	2.68	15.84	2.96	155,070.29	139,185.13	68,356.42	0.45	1.97	0.03	0.13
S.D	1020	13.35	68.47	13.83	360,423.87	279,440.91	138,992.65	1.08	12.41	0.04	0.41

Variables: ROA, ROE, BEP, LD/A, D/E, Avd/Sale và Mag/Sale are calculated by %; Variables as Sale, Asset and Equity are calculated by million VND

**Table 1** Showing the data rank that has the different largely about the index of ROE, while two Variables ROA and BEP have been differential lower level. Considering the criteria deviation, the Variables of ROA and BEP are lower at levels of 13.35% and 13.83%, while the criteria deviation of Variables of ROE is 68.47%. This result also shows in quantity model so selecting the Variables of ROA or BEP will be better. The Variables show the scales that have the differential highly, considering the average of turnover exceeds 155 billion VND/year, total assets are on 139 billion VND and the equity exceeds 68 billion VND. The FDI enterprise in the research group that rarely uses debts, average of LD/A shows 0.45% and D/E shows 1.97%. Target group about the management performance is at the index of management costs including in Advertisement fee in comparison with Sale (Avd/Sale) and Management fee on sales (Mag/Sale) are rarely low, average ratios is 1.72%, 0.03% and 0.13%.

## MAJOR FINDINGS AND DISCUSSION

### *a. Considering the index for measuring the financial performance from the industries group*

**Table-2.** The index for financial performance averagely industries group

	2007			2008			2009			2010			2011		
Industries	ROA	ROE	BEP	ROA	ROE	BEP	ROA	ROE	BEP	ROA	ROE	BEP	ROA	ROE	BEP
Packing	0.23	9.07	0.26	5.56	10.56	6.17	5.16	10.36	5.77	-0.53	-5.83	-0.60	5.09	12.37	5.80
mechanic	3.11	12.42	3.42	0.16	0.38	0.18	-0.04	4.43	-0.04	3.54	14.45	4.00	3.82	16.59	4.36
leather	-1.98	-4.14	-2.18	-2.77	-2.13	3.07	-1.85	-6.58	-2.07	-7.04	12.75	-7.95	-3.67	-11.91	-4.19
Textile	8.09	25.46	8.90	5.78	18.62	6.42	10.78	71.62	12.07	5.13	9.04	5.80	3.03	6.89	3.46
Electronic	5.21	28.61	5.73	4.55	29.59	5.05	1.34	15.08	1.50	7.69	45.65	8.68	7.05	39.29	8.04
Plastic	1.81	10.78	1.99	1.32	1.99	1.46	3.61	7.08	4.05	5.52	26.73	6.23	5.20	24.66	5.93
Garment	0.10	14.09	0.11	-3.01	-7.41	3.34	0.40	9.21	0.45	-1.10	-0.07	-1.24	0.67	0.75	0.76
Food	4.41	42.31	4.85	7.65	67.00	8.49	12.06	81.22	13.51	13.21	80.34	14.92	9.33	126.83	10.64
Building material	2.40	2.21	2.64	2.58	6.29	2.87	7.43	5.27	8.33	3.41	11.24	3.85	4.70	20.54	5.36
Interior decorating	-9.36	33.72	10.30	7.85	15.28	8.72	10.76	19.99	12.05	5.51	6.70	6.23	5.64	12.62	6.43

ROA, ROE and BEP are calculated in percentage per year

The ratios ROE, ROA and BEP are highest at the groups as electronic, textile, food and building material, while the indexes are very low at the groups as leather and garment, shows that performance in two branches are less, in which, textile and garment occupies the largely ratio at enterprises and the number of labors that work the most, therefore, if not reforming the assets utilization to happen the lost lengthen to lead the stopping the performance or bankruptcy and the result about the social aspect is very big. The interest in here that is within 5 last years in most of branches of leathers and garments that are the performances indexes are ROA, ROE and BEP all < 0 and have a tendency to increase, showing is the assets utilization in general and financial performance in particular are all decrease.

### *b. Measurement the factors that effect to financial performance*

Aiming to the suitable suggestion to contribute to improve the financial performance of Enterprises, we need to quantify some factors that effect to financial performance.

The result for using by the OLS methods on the software SPSS11.5 with some samples to survey 1020Obs (n = 1020), the results as follows:

**Table-3.** Linear Regression results effect by factors

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.026	.039		-.661	.509		
	SALE	.067	.008	.716	8.301	.000	.119	8.379
	ASSET	-.028	.012	-.244	-2.365	.018	.083	12.000
	EQUITY	-.035	.007	-.312	-5.239	.000	.250	3.996
	LD/A	-.006	.004	-.048	-1.484	.138	.861	1.161
	D/E	.000	.000	.026	.860	.390	.986	1.014
	Tag SALE	.006	.002	.156	3.827	.000	.538	1.858
	Avd/Sale	-.316	.104	-.092	-3.054	.002	.973	1.028
	Mag SALE	-.034	.011	-.101	-3.179	.002	.875	1.143

a Dependent Variable: BEP

Table 3 show the linear regression results that have some factors affect to financial performance of FDI enterprises. Results show the variable of Total assets (Asset) with the index VIF=12>10 that shows if taking this variable into the samples that cause the multi-collinear, the variable of Debt to Equity (D/E) that has the index of Sig=0.39>0.1 no significant in statistics, therefore, variable will except for out of samples.

**Table-4.** Linear Regression Results effect by factors after excepting for out of variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.047	.038		-1.231	.219		
	SALE	.051	.004	.544	11.369	.000(*)	.390	2.566
	EQUITY	-.046	.005	-.402	-8.831	.000(*)	.431	2.321
	LD/A	-.007	.004	-.058	-1.818	.069(**)	.885	1.130
	Tag/Sale	.004	.001	.108	3.050	.002(*)	.716	1.397
	Adv/Sale	-.287	.103	-.084	-2.797	.005(*)	.993	1.007
	Mag/Sale	-.034	.011	-.101	-3.177	.002(*)	.875	1.142

A Dependent Variable: BEP

(\*) statistically significant level of 95%, (\*\*) statistically significant level of 90%

Results at table 4 that can write down the samples according to equation as follows:

$$BEP = -0.047 + 0.051 * \ln(\text{Sale}) - 0.046 * \ln E - 0.007 * (LD/A) + 0.004 * (\text{Tag/Sale}) - 0.287 * (\text{Adv/Sale}) - 0.034 * (\text{Mag/Sale}) + e$$

The sample has Adj.R<sup>2</sup>=0.408, that means the factors explained 40.8% the chance of the norms for financial performance by BEP. The sample shows 6 factors effect to the financial performance through the norm of BEP from FDI enterprises on the region of HCMC.

(1) The first factor is the investment level of equity: this has correlate contrarily with BEP angular coefficient is -0.046 that show if increasing the investment capital of the equity to 1% that means BEP will down 0.046%, this shows more and more increasing investment capital will lead performance. Practical result shows that the enterprises run mainly at the form of processing, the

enterprises run loss such as the branches for textile, leather,... the head office supports supplementary capital for running, the facts are taking capital to assist the loss to exist running (it is not assistant for aiming to expand running about manufacturing). The other side, this result also shows almost enterprises increase the capital while the gross profit that comes back unsuitable, that means the investment unaffectedness.

(2) The second factor is the turnover variable that has been suitable correlate in comparison with BEP, angular coefficient is 0.051 that shows if turnover is up to 1% to make BEP will be up 0.051%. This result is suit for theory because turnover is the important output of enterprise, if increasing the performance in which the necessary is increasing the output that means increasing turnover for selling goods and service.

(3) Third is long terms debt to total assets (LD/A): This index is correlate contrarily with BEP, the sample shows if increasing the index LD/A 1% to make BEP down 0.007%. This result show that enterprises use the long terms debt ineffective, using the debt for investment loan into the profitable assets is very low or support the lack which has not been the strategy for using suitable debt loan.

(4) Fourth is tangible asset to Sale (Tag/Sale): This index is correlate contrarily with BEP, the sample shows if increasing the index Tag/Sale 1% to make BEP up 0.004%. its meaning is if enterprises invest into suitable investment, the structure for suitable assets, the management for suitable tangible assets will distribute for merging into produce and business, to distribute to make turnover and come back the performance.

(5) Fifth is the index for management fee in comparison with sales (Mag/Sale): This index is correlate contrarily with BEP, showing if this index up 1% to make BEP down 0.034%. The index Mag/S increases when management costs are increase more than level of turnover. This shows management capacity presently of enterprises ineffectiveness, showing the costs increase similarly.

(6) Sixth is the index for sale expenses in comparison with sale (Avd/Sale): This index is correlate contrarily with BEP, the result shows if (Avd/Sale) up 1% to make the index BEP down 0.287%. Coefficient is rarely high, showing the factors effect strongly to effectiveness of enterprises. This result shows enterprises presently using the selling expense ineffectiveness, the expense that gets out but can not come back the similar turnover.

## RESULTS AND SUGGESTION

### *a. Considering to evaluating the real effectiveness when expanding for capital investment*

In the analysis result show the level for investment about capital of equity inversely proportional with the level of financial performance. This shows enterprise before expanding operations, increasing the capital investment that need the calculating carefully before to get out the decision for investment, because enterprises presently invest expanding or increasing capital that has been coming back the performance.





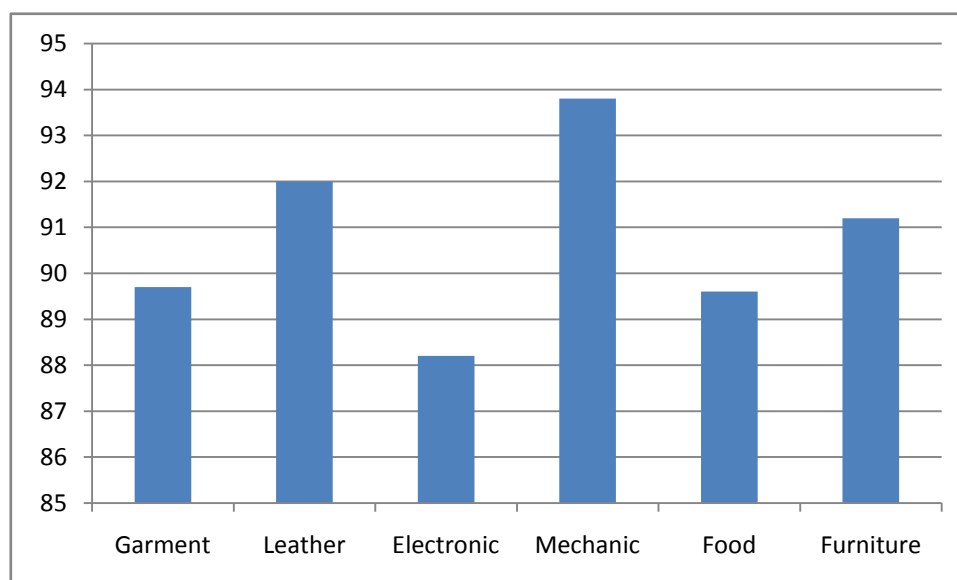
**Table-5.** Capital investment and average profit from 2 branches that have been less performance

Target	2007	2008	2009	2010	2011
Garment					
Average Profit (billion VND)	1.12	0.29	0.68	2.08	2.03
Average Equity (billion VND)	97.33	97.65	97.94	98.23	98.57
Leather					
Average Profit (billion VND)	-1.13	-0.54	-2.19	-4.2	-11.21
Average Equity (billion VND)	208.37	253.01	300.72	351.09	406.54

Most the researcher branches show that increasing capital investment while the level for profit that comes back down and down, this is the sign for less performance in using the capital investment, especially for textile and leather. This result gets out 2 implying: First is up to the financial managers, second is up to manager that consider to draw and draw capital investment in the braches that have been less performance and suit for general policy: that need the limit interest for investment at the enterprise that have been deficit but presently operation has been less performance, especially for Textile and leather.

**c. There is better management expense**

**Graph 1.** The ratios for cost of goods sold in comparison with average turnover in some industries (branches):



The result shows the enterprises manage expense that has been not reality ineffectiveness, the expenses in entering the account about the results for business that depends on into 3 kinds of expenses. The results from the above graph that shows the present expenses at enterprises are till high in comparison with turnover, the braches in which the author considers that the ratios are at the level rarely high, all over 80%, particularly is leather over 90%. The results show the expenses for manufacture input is till high, that means the management for expenses input is less performance, or in the process of manufacturing to lose, damage, consume the material to much, cause the lost, wastes (or existing the matter for transferring the price)

**c. Actively use the debt loan in the business branch that has been profit or yearly financial profit:** the analysis result shows that the business in years have been profit at enterprises and decrease financial leverage and therefore, the norm for performance is  $LD/A$  correlates contrarily with the norm of performance is BEP. The reason for using the long terms debt ineffectiveness, loan for investment with the illegal assets, loan in doing business is still not good. Therefore, the author suggests that business is profit in the years, the enterprises need to improve the role of financial leverage to improve the effectiveness.

**d. Suggestion for the management in Government(State):** The strategy is interested the capital of FDI in the past time that is the important for quantity that forget to evaluate the financial performance in interested policy. Analysis from the practical results shows that enterprises work in the garment and leather that are less effectiveness, the data analysis in 5 years from 2007 to 2011 show most of enterprises carry out in the lost, the result for business is lost that enterprises still run to get back 2 issues to notice: firstly, if the enterprise reality have been unprofitable that means for the long times will impact to largely about the life of labor that works in here, because enterprises work in this branch that draws and draws the most labors. Secondly, this activity is been unprofitable that is real or fake: the real data shows almost enterprises run non profit, is supported the capital investment or increase capital investment. The increasing capital investment is to assist for the lost from the business operation, normally enterprises run that depend on the head office from foreigner, input expenses and output turnover are the decision from head office, therefore, the fake lost is the capacity that will happen, that means the issue for transferring the prices from foreign head office and the subsidiary company in domestic. If the issues happens that causes the large lost for state budget. Through this essay, the author would like to refer to the issue that anti-transferring the price in the investment activities, though it has presently the documents require about the anti dumping, anti supporting prices but this decision has not improved the utilizable role. The other side, the state has not been resolute in this issue; therefore, we are not the experienced staffs to screen. This will impact not goof for the economic background, firstly for transferring the prices will affect to the supplement to foreign exchange because the head office sells raw material machine for subsidiary company in Vietnam with the price that is higher in its reality. In fact, this



is form to withdraw the capital under nominal is selling, effecting to the supply for foreign exchange in domestic. Secondly, due to issues for transferring the price because for lost frequently, the Vietnam state will disappear the source for collecting budget largely, because investment will be gotten the preferential policy about tax that run ineffectiveness that means the state will be lost the large source in income enterprise tax, import tax, tax for anti support price.

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