An Empirical Proposal on Power, Knowledge and Truth of Correlations among the Minimum Wage, Foreign Direct Investment in the Industrial Sector and Export*

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ABSTRACT

This research has an objective to demonstrate the correlations among the minimum wage, foreign direct investment in the industrial sector, and export, which has been criticized severely by the authorities, especially since the Pua Thai Party's policy announcement on the guarantee of labors' minimum wage at 300 baht per day. The research employs an advanced quantitative methodology, analyzing time-series data of the minimum wage, foreign direct investment in the industrial sector, and export by regression, the Johansen Cointegration Test, and the Pairwise Granger Causality Test. The regression analysis reveals that the minimum wage correlates in the same direction with both foreign direct investment in the industrial sector and export, whereas when applied the Johansen Cointegration Test, the minimum wage has no cointegration with foreign direct investment in the industrial sector but has a causal relationship with export according to the Pairwise Granger Causality Test. This indicates that the claim that the minimum wage increase will affect the competitiveness of the country with regard to foreign direct investment in the industrial sector and export, has been reinforced by the authorities using their superior status to dominate the process of building a body of knowledge as well as to distort the truth so as to possess a control over the society. This is thus not a good-faith mistake but an effort of discourse fights on the economic unfairness and social-class discrimination, which is the root of Thailand's important structural problems.

Keywords: Empirical Discourse Analysis, Export, Foreign Direct Investment in Industrial Sector, Johansen Cointegration Test, Minimum Wages

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Introduction

On "Discourse"

The concept of "discourse" (beyond the definitions in general dictionaries) is a masterpiece of Michel Foucault, which has been so widely popular among academics in the fields of social science and humanities that the concept managed to capture critical analysis methods of every academic field only after two decades after his death. (Vighi and Feldner, 2007: 141)

The understandings about the "social text" (remarks or articles in the operational social context) and the "social reality", constructed and maintained through languages, (Alvesson and Karreman, 2000: 1126) according to the scattering concepts in Michel Foucault's works, was finally reproduced in Thai by Somkiat Wantana. (Mektrairat, 1989: 15)

Later, Chairat Charoensin-o-larn (2006: 19-20) concluded and extensively published his work on "discourse" as a system and procedure in the creation/production of a symbol and definition for the society which wraps us in terms of knowledge, truth, power, or our own self. It also includes making what we create to last and to be broadly accepted in the society until it becomes "dominant discourse".

By using the "power", polished and purely cleaned in the pattern of "specialized knowledge/expertise" such as in science, medicine, and economics, through disciplines and customaries of various "experts" in the "academic discourse" on those relevant matters, "discourse" has been used as a sign or label for "a complex strategical situation in a particular society" (Charoensin-o-larn, 2006: 25-26) in order to indoctrinate/cause a viewpoint, which is not truth, to eventually become "knowledge" and "truth."

Discourse on "Minimum Wage"

The labor's minimum wage at 300 baht per day was announced a main policy by the Pua Thai Party in its general election campaign on 3 July 2011 and later contained in the Policy Statement of the Yingluck Shinawatra administration to the parliament on 23 August 2011 as the urgent policy to be implemented in the first year.

In the "labor" circle, the "minimum wage" issue has been raised in arguments of the opponents consisting two main reasons: (1) "foreign direct investment in the industrial sector" argued by Arthit Wuthikaro, Director General of the Department of Industrial Works (Second-Half Slowdown of Investment in Factories, Effects of 300 Baht Wage in Cost Increase, Many Risking Close of Business in 2012, 2011, 15 July), Nantawan Sakultanak, Director General of the Department of Export Promotion, (Commerce Queuing up to Talk to the Pua Thai's Economic Team to Report Performance-Obstacles-Recommendations, 2011, 29 July: 17) Dusit Nontanakorn, ex-Chairman of both the Thai Chamber of Commerce and the Board of Trade of Thailand, (The Joint Standing Committee on Commerce, Industry and Banking Opposed 300 Baht Wage-Investment to Plummet Hundred Billion, 2011, 20 July) and Tanit Sorat (2011: 4) Vice Chairman of the Federation of Thai Industries. (Industry Federation Points 5 Risk Factors, Japan Requested Slowdown 300 Baht Wage, 2011, 27 July: 2) All of them argue that Thailand will lose its competitiveness in attracting investment money from abroad and the investment will stagger

so much that investors, especially Japanese ones, will move their production bases to neighboring countries. The effect calculated is high at approximately one hundred billion baht per year.

In addition, the Department of Export Promotion (Commerce Queuing up to Talk to the Pua Thai's Economic Team to Report Performance-Obstacles-Recommendations, 2011, 29 July: 17) and Sorat (2011: 3) also point that such policy will obstruct Thai export in the fourth quarter and in the long run and cause the nation's export competitiveness to decrease, referring to the studies of University of the Thai Chamber of Commerce stating that the minimum wage adjustment may increase the labor cost of Thai export for 28 percent on average.

In the mean time, the proponents of the policy include Charlie Loysoong, Chair of the Thai Labor Relations Committee, Sakdina Chatrakul Na Ayudhya, an academic specialized in labor, (Economist Proposed Destroy Minimum Wage Structure and Build Central Organ to Raise "Wage", 2011, 1 August) Yongyuth Chalamwong, Director of Labor Development Research, Thailand Development Research Institute, (TDRI Supports 300 Baht Wage Raise, 2011, 4 September: 1) and Narong Petchprasert, Associate Professor of the Faculty of Economics, Chulalongkorn University. (Asking for Pua Thai's Promise to Raise 300 Baht Wage-Threatening to Sue of Breaching, 2011, 25 July) They emphasize that during the period of ten years, the inflation rate and minimum wage rate have compiled around 1.9 percent, resulting in the current minimum wage rate being lower than the wage rate sufficient to the living cost.

Also, Lae Dilokwittayarat, Distinguished Scholar of the same institution as Petchprasert, and Direk Patamasiriwat, Professor of the School of Development Economics, National Institute of Development Administration (Asking for Pua Thai's Promise to Raise 300B Wage-Threatening to Sue of Breaching, 2011, 25 July) observe that the production cost comes from minimum wage on average not more than 10 percent, and the remaining 90 percent derives from other costs. All these reactions are currently gaming negotiations.

Objectives

Whereas the discourse on "the minimum wage rate" which has been created by the authorities in order to oppose the policy change, is based on the assumption of possible decrease of foreign direct investment in the industrial sector and export, the expert proponents avoid arguing to refute such assumption. Instead, the proponents simply maintained the claim of inequality, economic injustice, as well as the labor's distress in living.

As a result, the research on "An Empirical Proposal on Power, Knowledge and Truth of Correlations among the Minimum Wages, Foreign Direct Investment in the Industrial Sector and Export" was conducted in order to analyze the relationships between the minimum wage rate and foreign direct investment and export. This will reveal later whether the discourse created by the authorities from the public and private sectors, is actually the truth or just a suspicious viewpoint with a hidden agenda to make it a higher improper status of knowledge and truth.

Research Methodology

Data and Variables

The researchers chose to use the time series data collected from the relevant agencies covering the period of 136 months from January 2000 to April 2011 as the following variables:

- 1. Minimum wage rate (WAGE), by using the minimum wage rate in Bangkok from the Ministry of Labor (2011). This is assigned an independent variable of the foreign direct investment in the industrial sector and export.
- 2. Foreign direct investment in the industrial sector (INDUSTRY) from the Bank of Thailand (2011a). This is assigned as a dependent variable of the minimum wage rate.
- 3. Export (EXPORT) from the Bank of Thailand (2011b). This is assigned as a dependent of the minimum wage rate.

Data Analysis

The "discourse analysis" is analyzed under a quantitative methodology instead of the currently popular qualitative criticism (Hodge, Kuper and Reeves, 2008) so as to reduce the subjectivity as well as raise the scientific reasonableness, which are presently under wide critiques. (Freshwater, Cahill, Walsh and Muncey, 2010: 502) The analysis employs the high-level statistics, regression analysis to test the relationships between variables and the Johansen Cointegration Test (Johansen, 1988, 1991) to reprove the relationships whether they are real or falsified relationships. Later, the relationships are analyzed their patterns using the Pairwise Granger Causality Test (Granger, 1969) in a built-in computer software.

Conclusion

Minimum Wage Rate

The minimum wage rate from January 2000 started at 162 baht per day and continuously increased averaging at 0.40 baht per month. It has reached its maximum at 215 baht per day since January 2011.

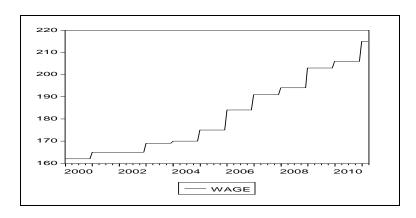


Figure 1: Minimum Wage Rate

Foreign Direct Investment in the Industrial Sector

Foreign direct investment in the industrial sector in January 2003 started at 32.79 million US dollars and has increased and decreased in different intervals. Considered in a big picture, the value of foreign direct investment has had a trend to increase on average at 1.53 million US dollars per month. The lowest value was at -21.45 million US dollars in December 2002 and the highest was at 1,003.57 million US dollars in February 2008.

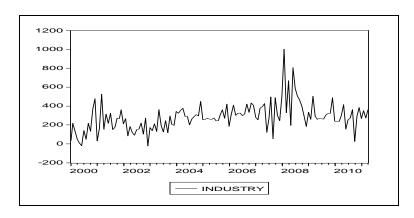


Figure 2: Foreign Direct Investment in the Industrial Sector

Export

Export in January 2000 started at 5,390 million US dollars and has increased and decreased in different intervals. Considered in a big picture, the value of export has had a trend to increase on average at 97.38 million US dollars per month. The lowest value was at 4,856.7 million US dollars in January 2002 and the highest was at 21,260.61 million US dollars in March 2011.

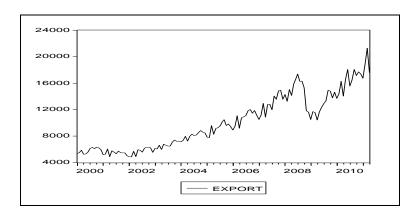


Figure 3: Export

Relationship between the Minimum Wage Rate and Foreign Direct Investment in the Industrial Sector

At the beginning, the regression analysis shows that the minimum wage rate and foreign direction investment in the industrial sector have a relationship in the same direction with a statistical significance at .01. Any change of the minimum wage rate at every one baht will cause the foreign direct investment in the industrial sector to change in the same direction for 3.32 million US dollars. However, the minimum wage rate can only explain the foreign direct investment in the industrial sector at only 13.49 percent.

Table 1: Regression Analysis on Minimum Wage Rate and Foreign Direct Investment in the Industrial Sector

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-321.2078	181.4937	-1.769802	0.0790
WAGE	3.323242	1.021535	3.253185	0.0014
R-squared	0.134931	Prob(F-statist	tic)	0.000011

Newey-West HAC Standard Errors & Covariance (lag truncation=4)

Relationship between the Minimum Wage Rate and Export

Table 2 demonstrates that the minimum wage rate and export have a relationship in the same direction with a statistical significance at .01. Any change of the minimum wage rate at every one baht will cause export to change in the same direction for 235.84 million US dollars. The minimum wage rate can highly explain export at 86.65 percent.

Table 2: Regression Analysis on Minimum Wage Rate and Export

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-32673.77	2785.051	-11.73184	0.0000
WAGE	235.8428	16.28472	14.48246	0.0000
R-squared	0.866543	Prob(F-statis	tic)	0.000000

Newey-West HAC Standard Errors & Covariance (lag truncation=4)

At this stage, the research can conclude that the discourse on "minimum wage rate" by the opponents have the status of truth. Therefore, the implementation of Pua Thai's policy of guaranteeing labor's minimum wage rate at 300 baht per day will affect the country's competitiveness both in foreign direct investment in the industrial sector and export.

Nevertheless, these relationships which seem to go along with a common sense might come from using non-stationary series in the regression analysis and could be only falsified relationships. (Box and Jenkins, 1976) Consequently, the Johansen Cointegration Test is used to double-check the relationships.

Cointegration between Minimum Wage Rate and Foreign Direct Investment in the Industrial Sector

The Johansen Cointegration Test shows that the minimum wage rate and foreign direct investment in the industrial sector do not have any cointegration at the significance of .05, implying the relationship in the above regression analysis of the two variables is only falsified.

Table 3: Johansen Cointegration Test on Minimum Wage Rate and Foreign Direct Investment in the Industrial Sector

Hypothesized		Trace	5 Percent	1 Percent
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Critical Value
None	0.083483	11.41990	14.07	18.63
At most 1	0.009018	1.186730	3.76	6.65

^{*(**)} denotes rejection of the hypothesis at the 5%(1%) level

Trace test indicates no cointegration at both 5% and 1% levels

Cointegration between Minimum Wage Rate and Export

Table 4 shows that the minimum wage rate and export have cointegration at the significance of .01, meaning the relationship found in the above regression analysis of the two variables is real.

Table 4: Johansen Cointegration Test between Minimum Wage Rate and Export

Hypothesized		Trace	5 Percent	1 Percent
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Critical Value
None **	0.145827	20.64847	14.07	18.63
At most 1 *	0.043004	5.758184	3.76	6.65

^{*(**)} denotes rejection of the hypothesis at the 5%(1%) level

Max-eigenvalue test indicates 2 cointegrating equation(s) at the 5% level

Max-eigenvalue test indicates 1 cointegrating equation(s) at the 1% level

While the tests at this stage refuse the relationship between the minimum wage rate and foreign direct investment in the industrial sector and confirm only the same-direction relationship between the minimum wage rate and export with the proportion of one baht to 235.84 million US dollars. However, that is only a statistical truth, resulting from the regression equation calculation.

In the real world, many relevant factors will have effects, which would not make the immediate increase of the minimum wage rate from 215 baht to 300 baht boost the export value for 20,046.4 million US dollars instantly.

Reasonableness between Minimum Wage Rate and Export

The result of the Pairwise Granger Causality Test demonstrate the nature of the relationship between the minimum wage rate and export that they are reasonable to each other, meaning they move in the same direction, not in a different direction. That is, even though the minimum wage rate immediately increases for 85 baht, it is possible that the export value will instantly increase for less than 20,046.4 million US dollars. It is also initially confirmed that the increase of the minimum wage rate will unlikely cause the export value to reduce.

 Table 5: Pairwise Granger Causality Test between Minimum Wage Rate and Export

Pairwise Granger Causality Tests

Lags: 12

Null Hypothesis:	Obs	F-Statistic	Probability
WAGE does not Granger Cause EXPORT	124	7.52553	1.1E-09
EXPORT does not Granger Cause WAGE		5.98015	9.6E-08

In conclusion, the discourse or viewpoint on "minimum wage rate" which is created and connected to the competitiveness of the country in foreign direct investment in the industrial sector as well as export as the opposite-diction relationships, not only shows the defects of the public authorities and the private sectors' arguments for themselves, but also depicts the use of the discourse fights on the economic unfairness and social-class discrimination, which are the root of Thailand's important structural problems.

Such fights have been utilized by authorities to transform their own viewpoints into knowledge as well as truth in order to dominate the society. This is consistent with the method that Dilokwittayarat referred to Supa Sirimanon's lecture 60 years ago at the 20th Supa Sirimanon Seminar on 23 July 2008 at the Faculty of Economics of Chulalongkorn University as follows:

"In the development of the capitalist system, productivity expands and continues to widely expand. However, it appears that what the workers and the public receive for a living is decreasing and even continuing to decrease with no relationship whatsoever with the expanding production power."

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