

# An Empirical Discourse Analysis on Correlations between the Minimum Wage and Domestic Private Investment

Kittisak Jermsittiparsert<sup>#1</sup>, Thanaporn Sriyakul<sup>\*2</sup>, Chayongkan Pamornmast<sup>\*3</sup>

#Graduate School, Kasetsart University
Ladyao, Chatuchak, Bangkok, Thailand 10900

finn ramon@hotmail.com

\*Faculty of Business Administration, Mahanakorn University of Technology Krathum Rai, Nonh Chok, Bangkok, Thailand 10530

> <sup>2</sup>ajbamut@gmail.com <sup>3</sup>chayongkanp@hotmail.com

Abstract— This research has an objective to empirically analyze on the discourse about correlations between the minimum wage and domestic private investment, 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, import of capital goods and domestic machinery sales by regression and the Johansen Cointegration Test. The regression analysis reveals that the minimum wage correlates in the same direction with both imports of capital goods and domestic machinery sales, whereas when applied the Johansen Cointegration Test, the findings surprisingly indicate that they do not possess any cointegration. This indicates that the claim that the minimum wage increase will affect the domestic private investment, 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**— Domestic Private Investment, Empirical Discourse Analysis, Minimum Wages, Quantitative Methodology, Thailand

#### I. INTRODUCTION

# A. On "Discourse" and "Discourse Analysis"

"Discourse" is a social science and humanity terminology which Somkiat Wanthana had translated from Michel Foucault's concept more than twenty years ago. [1] Later, the understandings on "social text" and "social reality" constructed and maintained through languages [2] which were scattered ideas in Foucault's works, was concluded and widely published in the academic field of Thai political science in the work of Chairat Charoensin-o-larn [3] 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" [3] in order to indoctrinate/cause a viewpoint, which is not truth, to eventually become "knowledge" and "truth."

As a critical analysis method, discourse has become very popular in different academic fields only after two decades after Foucault's death [4] in different meanings. It is used so often that there is no definition of the term, but simply assumption as it is for "discourse analysis". [5] The gist of discourse is about studies and researches on method, procedures, sequences, and details in building a symbol and meaning to things wrapping us in the society in the form of discourse, including the operations and effects of discourse on specific matters. [3]

The development of humanities in early 1960s towards psychology in early 1970s [6] shows that the discourse analysis completely related to studies and analyses of the use of language by qualitative methodology, [7] which were widely subject to questions on the negligence on scientific reasonableness. [8] This was mainly to explain the language structure and textual duty, and to reveal the relationship between textual usage and social context, [9] instead of proof of truth and lies. [3]

# B. Discourse on the Relationship between "Minimum Wage" and "Domestic Private Investment"

There have been criticisms on the Pua Thai Party's policy on the guarantee of the labor's minimum wage rate at 300 baht per day since the general election campaign on 3 July 2011, later when such policy was 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, and up until now. The public and private authorities stated that such policy would adversely affect the country's competitiveness, especially investment [10] and export. [11]

The past research on "An Empirical Proposal on Power, Knowledge and Truth of Correlations among the Minimum Wage, Foreign Direct Investment in the Industrial Sector and Export" [12] proved by empirical data that the minimum wage rate does not correlate with foreign direct investment in the industrial sector and that the minimum wage rate correlate in the same direction to



export with causality. The decision to implement such policy as campaigned, therefore, will not adversely affect foreign direct investment in the industrial sector or export.

The concept of "domestic private investment" is still left unproved. The authorities such as Tanit Sorat [13] Vice Chairman of the Federation of Thai Industries and Arthit Wuthikaro [14] Director General of the Department of Industrial Works, firmly argued that domestic private investment will be staggered and may be so severe that businesses will be closed. This is consistent with the news resource from the Ministry of Industry that in July 2011 there were only four factories which obtained permissions from the Department of Industrial Works to operate. The investment value totalled 209 million baht, decreasing from the same period of last year by 1,476 percent or 14 times, the lowest recorded in the history and even lower than that during the global economic crisis in April 2009 in which the total value was more than 4,000 million baht. [15]

#### C. Objective

The research on "An Empirical Discourse Analysis on Correlations between the Minimum Wage and Domestic Private Investment" is conducted in order to analyze the relationship between the minimum wage rate and domestic private investment, using two indicators, which are import of capital goods and domestic machinery sale. This will reveal later whether the discourse created by the authorities, is actually the truth or just a suspicious viewpoint with a hidden agenda to make it a higher improper status of knowledge and truth.

#### II. METHODOLOGY

## A. Data and Variables

The researchers chose to use the time series data collected from the relevant and reliable agencies referred by the authorities and the public, covering the period of 136 months from January 2000 to April 2011 as the following variables:

- Minimum wage rate (WAGE), by using the minimum wage rate in Bangkok from the Ministry of Labor. [16] This is assigned as an independent variable of import of capital goods and domestic machinery sale.
- Import of capital goods (CAPITALIMPORT) at the fixed price of 2000 as an indicator of domestic private investment from the Bank of Thailand. [17] This is assigned as a dependent variable of the minimum wage rate.
- Domestic machinery sale (EQUIPMENT) at the fixed price of 2000 as the other indicator of domestic private investment from the Bank of Thailand. [17] This is assigned as a dependent of the minimum wage rate.

# B. Data Analysis

Empirical Discourse Analysis or EDA is used to reveal the gap of discourse by advanced quantitative methodology and regression analysis so as to test the relationships between variables. Later, the Johansen Cointegration Test [18], [19] is employed to double-check such relationships whether they have cointegrations, using built-in computer software.

#### III. CONCLUSION AND DISCUSSION

#### A. 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.

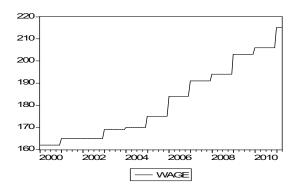


Fig. 1 Minimum Wage Rate

# B. Import of Capital Goods

Import of capital goods in January 2000 started at 41,844.34 billion baht and has increased and decreased in different intervals. However, considered in a big picture, the value of import of capital goods has had a trend to increase on average at 604.94 million baht per month, reaching the highest at 165,391.17 million baht in March 2011.

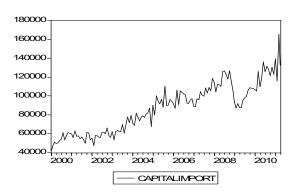


Fig. 2 Import of Capital Goods

#### C. Domestic Machinery Sale

The value of domestic machinery sale in January 2000 started at 24,689.62 million baht and has increased and decreased in different intervals. However, considered in a big picture, the value of domestic machinery sale has had a trend to increase on average at 200.64 million baht per month, the lowest at 24,019.98 million baht in April 2000 and the highest in March 2011 at 71,485.62 million baht.



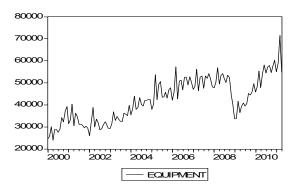


Fig. 3 Domestic Machinery Sale

# D. Relationship between the Minimum Wage Rate and Import of Capital Goods

At the beginning, the regression analysis shows that the minimum wage rate and import of capital goods 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 import of capital goods to change in the same direction for 1,411.12 million US dollars. The minimum wage rate can highly explain import of capital at 78.51 percent.

TABLE I: REGRESSION ANALYSIS ON MINIMUM WAGE RATE AND IMPORT OF CAPITAL GOODS

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-168990.3	21425.23	-7.887444	0.0000
WAGE	1411.116	121.6400	11.60076	0.0000
R-squared	0.785103	Prob(F-statis	tic)	0.000000
Newey-West HAC Standard Errors & Covariance (lag truncation=4)				

# E. Relationship between the Minimum Wage Rate and Domestic Machinery Sale

Table 2 demonstrates that the minimum wage rate and domestic machinery sale 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 domestic machinery sale to change in the same direction for 457.41 million baht. The minimum wage rate can explain domestic machinery sale at 58.14 percent.

TABLE II: REGRESSION ANALYSIS ON THE MINIMUM WAGE RATE AND DOMESTIC MACHINERY SALE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-40618.37	11691.45	-3.474193	0.0007
WAGE	457.4104	66.69178	6.858572	0.0000
R-squared	0.581420	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 the relationship between the minimum wage rate and domestic private investment created by the authorities, has 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 inevitably affect the domestic private investment.

Nevertheless, these relationships which seem to go along with a common sense might come from using nonstationary series in the regression analysis and could be only falsified relationships. [20] Consequently, the Johansen Cointegration Test is used to double-check the relationships.

# F. Cointegration between Minimum Wage Rate and Import of Capital Goods

The Johansen Cointegration Test shows that the minimum wage rate and import of capital goods do not have any cointegration at the significance of .05, meaning that the relationship in the above regression analysis of the two variables is only falsified.

TABLE III: JOHANSEN COINTEGRATION TEST ON MINIMUM WAGE RATE AND IMPORT OF CAPITAL GOODS

Hypothesized		Trace	5 Percent	1 Percent
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Critical Value
None	0.088687	12.16587	14.07	18.63
At most 1	0.021600	2.860673	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

# G. Cointegration between Minimum Wage Rate and Domestic Machinery Sale

Table 4 shows that as with import of capital goods, domestic machinery sale does not have any cointegration with the minimum wage rate at the significance of .05, meaning the relationship found in the above regression analysis of the two variables is only falsified.

TABLE IV: JOHANSEN COINTEGRATION TEST ON MINIMUM WAGE RATE AND DOMESTIC MACHINERY SALE

	Trace	5 Percent	1 Percent
Eigenvalue	Statistic	Critical	Critical
	Statistic	Value	Value
0.058845	7.944835	14.07	18.63
0.009453	1.244179	3.76	6.65
	0.058845	Eigenvalue Statistic  0.058845 7.944835	EigenvalueStatisticCritical Value0.0588457.94483514.07

\*(\*\*) denotes rejection of the hypothesis at the 5%(1%) level Trace test indicates no cointegration at both 5% and 1% levels

The advanced quantitative methodology demonstrates that the minimum wage rate does not have any relationship with import of capital goods nor domestic machinery sale, or in another word, the minimum wage rate has no relationship with domestic private investment.

# IV. CONCLUSIONS

In conclusion, the discourse or viewpoint on the minimum wage rate which is created and connected to the competitiveness of the country in domestic private investment foreign as an opposite-diction relationship, not only shows the defects of the public authorities and the private sectors' arguments for themselves, but also depicts the efforts of establishing and growing a belief through the legitimacy of the authorities [21] through the use of language. Discourse, including a reproduction of it, is such a powerful and efficient tool [22] to dominate and economically take advantage of and discriminate against people of different social classes, all of 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.

Even though the empirical discourse analysis does not give end-of-the-tunnel findings of structure, strategy or procedure [23] as the original discourse analyzers were interested, this new way of discourse analysis has empirically revealed the discontinuity of logics and gaps of discourse, which are clearly the start of critical thinking methods to texts produced and reproduced by the authorities until they become familiar and overlooked and finally accepted in the society without questions or examinations.

With a wide application as well as prevention of (re) production of discourse by authorities, the analysis at the beginning period can be developed and sharpened in the future.

#### REFERENCES

- [1] N. Mektrairat, "Political Discourse on Thai Democracy," *Social Sciences Book*, vol. 12, pp. 15-36, 1989.
- [2] M. Alvesson and D. Karreman, "Varieties of Discourse: On the Study of Organizations through Discourse Analysis," *Human Relations*, vol. 53, pp.1125-1149, 2000.
- [3] C. Charoensin-o-larn, Development Discourse: Power, Knowledge, Truth, Identity and Otherness, 4<sup>th</sup> ed., Bangkok, Thailand: Wipasa, 2006.
- [4] F. Vighi and H. Feldner, "Ideology Critique or Discourse Analysis?: Zizek against Foucault," European Journal of Political Theory, vol. 6, pp. 141-159, 2007.
- [5] J. Cheek, "At the Margins? Discourse Analysis and Qualitative Research," Qualitative Health Research, vol. 14, pp. 1140-1150, 2004
- [6] T. van Dijk, Ed., Discourse Studies, London, England: Sage, 2007. 5 vols.
- [7] B. Hodge, A. Kuper and S. Reeves, "Qualitative Research: Discourse Analysis," *British Medical Journal*, no. 337, pp. 570-572, 2008.
- [8] D. Freshwater, J. Cahill, E. Walsh and T. Muncey, "Qualitative Research as Evidence: Criteria for Rigour and Relevance," *Journal of Research in Nursing*, vol. 15, pp. 497-508, 2010.
- [9] G. Stillar, Analyzing Everyday Texts: Discourse, Rhetoric, and Social Perspectives, California, United States of America: Sage, 1998
- [10] "The Joint Standing Committee on Commerce, Industry and Banking Opposed 300 Baht Wage-Investment to Plummet Hundred Billion," *Post Today*, Jul. 20, 2011. [Online]. Available: http://bit.ly/mQizU8.
- [11] Matichon, pp. 17, Aug. 15, 2011.
- [12] K. Jermsittiparsert, T. Sriyakul and C. Pamornmast, "An Empirical Proposal on Power, Knowledge and Truth of Correlations among the Minimum Wage, Foreign Direct Investment in the Industrial Sector and Export," MUT Journal of Business Administration, vol. 8, pp. 1-12, 2011.
- [13] T. Sorat. (2011) The 300 Baht per Day Wage Policy and the Competitiveness of Thailand. [Online]. Available: http://www.fti.or.th/ 2008/ftidivision/thai/newsdetail.aspx?sid=32&id=188.
- [14] "Second-Half Slowdown of Investment in Factories, Effects of 300 Baht Wage in Cost Increase, Many Risking Close of Business in 2012," *Prachachat Turakit*, Jul 15, 2011. [Online]. Available: http://www.prachachat.net/news\_detail.php?newsid =1310709294&grpid=&catid=00&subcatid=0000.
- [15] "Shock, Wage Increase, New Factories Decline," *Thai Post*, Aug 1, 2011. [Online]. Available: http://www.fti.or.th/2008/ftidivision/thai/newsdetail.aspx?sid=32&id=188.
- [16] Ministry of Labor, Table Shows the Minimum Wage and Enforce (Since 1973-present). 2011.
- [17] Bank of Thailand, Private Investment Indicators, 2011.

- [18] S. Johansen, "Statistical Analysis of Cointegration Vectors," *Journal of Economic Dynamics and Control*, vol. 12, pp. 231-254, 1988.
- [19] S. Johansen, "Cointegration and Hypothesis Testing of Cointegration Vectors in Gaussian Vector Autoregressive Models," *Econometrica*, vol. 59, pp. 1551-1580, 1991.
- [20] G. Box and G. Jenkins, *Time Series Analysis: Forecasting and Control*, San Francisco, United States of America: Holden-Day, 1976
- [21] M. Weber, The Theory of Social and Economic Organization, New York, United States of America: Free, 1977.
- [22] T. van Leeuwen, Discourse and Practice: New Tools for Critical Discourse Analysis. Oxford, United Kingdom: Oxford University Press, 2008.
- [23] T. van Dijk. (n.d.) What do we mean by 'Discourse Analysis'?. [Online]. Available: http://www.discourses.org/journals/das/ whatisdiscourseanalysis/index.html.