

Is the effect of a political event more pronounced for government-controlled firms?

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ABSTRACT

This study investigates market reaction to a political event, which is the presidential election of Republic of Indonesia in 2014 by studying 387 publicly-traded firms in the Indonesia Stock Exchange. It employs event study method to measure the information content of this event. By going deeper, this study looked at the effect difference between government-controlled firms (partially privatized firms) and private firms. The results show that there was a significant abnormal return around the event date. The negative abnormal return one day before the election date, which was followed by rebounding one day after the event, indicate that investors consider that the election had been done well particularly with respect to the political stability and security. Moreover, this paper reveals that the effect of presidential election is more pronounced for government-controlled firms than private firms. Government-controlled firms may be more susceptible to political event.

ABSTRAK

Penelitian ini menguji reaksi pasar terhadap peristiwa politik yaitu pemilihan presiden Republik Indonesia pada tahun 2014 dengan menggunakan data 387 perusahaan Indonesia yang sahamnya diperdagangkan di Bursa Efek Indonesia. Peneliti menggunakan metode event study untuk mengukur kandungan informasi dari peristiwa ini. Lebih jauh, kami melihat perbedaan efek dari peristiwa ini pada perusahaan yang dikendalikan oleh pemerintah (perusahaan milik negara yang diprivatisasi sebagian) dengan perusahaan yang dimiliki oleh swasta. Hasil penelitian ini menunjukkan bahwa ada abnormal return yang signifikan pada sekitar tanggal peristiwa. Abnormal return yang negatif sehari sebelum tanggal pemilihan yang kemudian diikuti dengan pembalikan sehari sesudah peristiwa mengindikasikan bahwa investor merasa bahwa pemilihan tersebut telah terselenggara dengan baik khususnya terkait dengan stabilitas politik dan keamanan. Lebih lanjut, artikel ini menunjukkan bahwa efek dari pemilihan presiden ini lebih terasa pada perusahaan publik yang dikendalikan oleh pemerintah daripada perusahaan swasta. Perusahaan-perusahaan tersebut mungkin lebih rentan terhadap peristiwa politik.

1. INTRODUCTION

It has been widely known that financial markets are influenced by various factors including political issues. Click (1996) argues that stock price is associated with political situation, which means that political risk should be considered by investors. Politics is essential for business and economy particularly with respect to the financial markets. A safe and stable political condition could affect the supply and demand of securities as it improves investors' confidence, which in turn encourage them to invest their

funds in the market. On the other hand, political situation can also affect the fundamental (business operation) of firms and the macro economy as a whole.

In this present paper, this study investigates the effect of politics on financial markets by looking at the market reaction to a political event. Our event here is the Indonesia's presidential election in 2014, which is held on July 9, 2014. Presidential election has an important role to the financial markets due to it is directly and indirectly related to the uncertainty

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particularly with regards to the macroeconomic policies and regimes that will be taken by the government (Chau et al. 2014; Goodell et al. 2015).

Moreover, in the context of Indonesia, it took more attention especially due to there would be a new Indonesian president¹. Therefore, it creates much higher uncertainty compared to the election where the incumbent run and has a higher probability to be re-elected. Investors still wonder on the policies and programs of the new government especially concerning the economic and financial markets even though in the political campaign the candidates have explained their vision, mission and programs to achieve vision.

Some empirical papers have revealed the significant effect of political factors on the stock market behavior. A number of studies employ event studies to look at the information content provided by a political event. On the other hand, rather than focusing on a specific event, some others use time-series model to capture a long-term effect of a political factor.

More recently, Gunay (2016) investigates the effects of internal political risk on the Turkish stock market using time-series estimation. He concludes that political risk still matters in explaining the stock market in Turkey; however, the susceptibility of stock market to political risk has decreased in the recent years.

Political events are systematic risk due to the risk resulting from those events could not be minimized by diversifying portfolio. In other words, all of stocks in the market should be influenced by such events. However, how much the effect could be different between firms. Accordingly, going deeper, this study look at the difference in market reaction between state-owned firms and private firms.

Following the economic recovery after the crisis in the late 1990's, the Indonesian government has partially privatized a number of state-owned firms through initial public offerings. However, the government is still the majority shareholder. Widely considered, the strategy, direction and policy of government-controlled firms are influenced by the vision of the government. Moreover, it has the control right to appoint or select board of directors and board of commissioners. This indicates that whoever wins or get elected in the presidential election or

government succession will determine how government-controlled firms will be managed onward which subsequently determine the firm performance in the future.

This study employed an event study to measure the information content of this event. There have been a number of studies employing event study to test the informational content of a political event. However, there were few studies have investigated the information content of governmental succession particularly for government-controlled firms.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Market Reaction to Political Event

Information is the essence of capital market. In the efficient market hypothesis postulated by Fama (1970, 1991), market efficiency could be achieved when the price of all traded securities has reflected all the information available in the market. In a strong efficient market, there will be no investor who can gain an abnormal return. Some previous studies have revealed that Indonesian capital market is categorized as semi strong in which it is possible for investors to gain abnormal return. The abnormal return reflects the delay to absorb and interpret the information

According to McWilliams & Siegel (1997), event study is a method used to determine the existence of abnormal return, which could also reflect the significance of an event. Peterson (1989) also mentions that event study is a method to examine the changes in stock price in capital market to investigate whether there is abnormal return gained by investors due to an event.

Event study has been applied in some fields particularly in finance and accounting, to study various events either firm, industry or market levels. Some have also empirically investigated the information content of political events. Chen et al. (2005) test the effect of various political events on stock performance in Taiwan market. In general, the result shows that the stock market reacts to political events as shown by the presence of significant abnormal return around the event dates. Oehler et al. (2012) study the market reaction during US election in 1976-2008. They find the presence of significant abnormal return in the most industries, both in positive and negative value. Guidolin & Ferrara (2010) analyze the effect of conflict attack that takes place worldwide on the assets market in the US, the UK, France, and Japan. They find that some markets show mixed reaction (positive and negative). Moreover, international conflict has a stronger effect than

¹ The former President SBY has already been two periods in his position that could not allow him to run in the presidential election according to the constitution. There were two candidates in the 2014 election; Ir. Joko Widodo (at this time was the Governor of Jakarta) and Letjend (Purn) Prabowo Subianto (a former military general).

Table 1
Result of One-Sample T-Test

Period	Date	df	AAR	t-statistic	Sig. (2-tailed)
t-5	2-Jul-14	386	0.0009476350	0.611	0.541
t-4	3-Jul-14	386	0.0014537343	0.702	0.483
t-3	4-Jul-14	386	0.0003689728	0.186	0.853
t-2	7-Jul-14	386	0.0052464104	2.902***	0.004
t-1	8-Jul-14	386	-0.0036658565	-2.504**	0.013
t+1	10-Jul-14	386	0.0035947146	1.795*	0.073
t+2	11-Jul-14	386	-0.0050778265	-3.668***	0.000
t+3	14-Jul-14	386	-0.0015728447	-1.041	0.299
t+4	15-Jul-14	386	0.0019905389	0.777	0.437
t+5	16-Jul-14	386	0.0104800497	2.548**	0.011

*, **, and *** indicates the significance level of 10%, 5%, and 1%.

internal conflict. Christofis et al. (2013) investigate the effect of three terrorism incidents in Turkey on the stock price in the Istanbul Stock Exchange. They document that the effect of the event is significant in several cases; however, the effect only takes place in a short period because market rebound quickly. Based on the industry, tourism firms is the most suffered industry. In the context of Indonesia, Setyawan & Suryawijaya (1998) test market reaction to political incident on 27 July 1996. They revealed that market reacted negatively (significant negative abnormal return) and spontaneously on the event date.

This present paper is primarily aimed at investigating the market reaction to the 2014 presidential election in Indonesia. Previous studies (Suryawijaya & Setiawan, 1998; Chen et al. 2005; Oehler et al. 2012; Guidolin & Ferrara, 2010; Christofis et al. 2013) reveal that political events have significant informational content and mostly find negative abnormal return due to the use of terrible political incidents. However, as the event here is a presidential election, this study expects that market will react, yet, how market reacts is unpredictable. Thus, the hypothesis is formulated as follows:

H1 : There is a significant abnormal return around the presidential election.

The Role of Government-Controlled Firms

This study goes deeper by looking at the effect difference between government-controlled firms and private firms. Basically, there are two theories to explain the role of government-controlled firms. The social or development theory argues that the presence of such firms is needed to help the government in the development program (Trinugroho et al. 2014).

The political theory contends that those firms are exploited by politicians for their self-interest. According to the seminal work of Shleifer and Vishny (1994) on the grabbing hand theory, state-owned

enterprises may not perform efficiently due to they are subject of politicians and bureaucrats. Politicians and bureaucrats have an incentive to extract resources from those firms because they have the power to do so.

Following the 1997/1998 financial and economic crisis, as a part of the restructuring program, the Indonesian government partially privatized some state-owned firms through initial public offerings. The government, however, keeps their majority ownership (Prabowo et al. 2014).

This study argues that partially privatized government-controlled firms will be more affected by political event especially the presidential election. Arguably, as those firms are controlled by the government, who will be the president is more important for the minority shareholders. The newly regime can determine the policy and strategy of the firms which are translated by board of directors under the supervision of board of commissioners. The board members are elected or appointed in the shareholders general meeting, however, as the government is the majority, most of the members are representative of the government. Thus, the second hypothesis is formulated as follows:

H2 : Government-controlled firms have higher abnormal return around the presidential election.

3. RESEARCH METHOD

Data

This study the market reaction to the presidential election in Indonesia by studying publicly-traded firms in the Indonesia Stock Exchange (ISE). The election was held on 9 July 2014. This study exclude firms that did corporate actions during the windows period to avoid the confounding effect. This study also do not account for firms having incomplete financial information. Finally, 387 firms are included in our sample.

This study collects the information of stock price

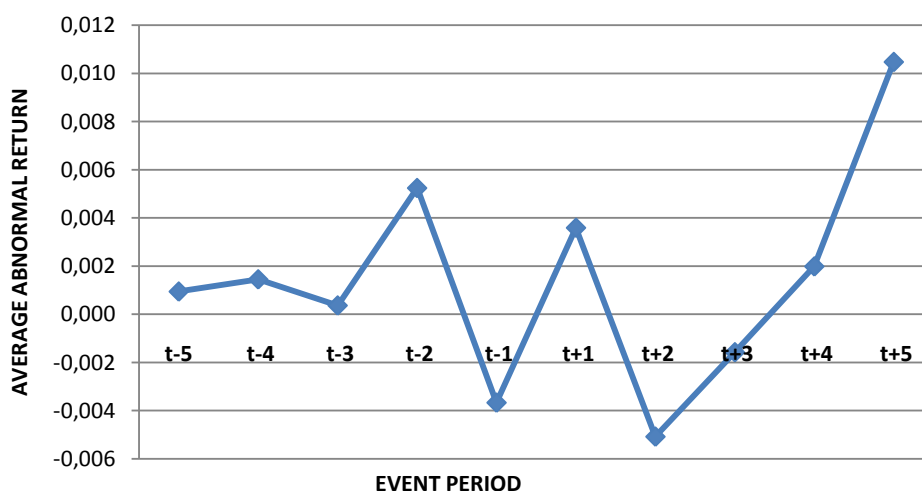


Figure 1
Average Abnormal Return (AAR) during the Windows Period

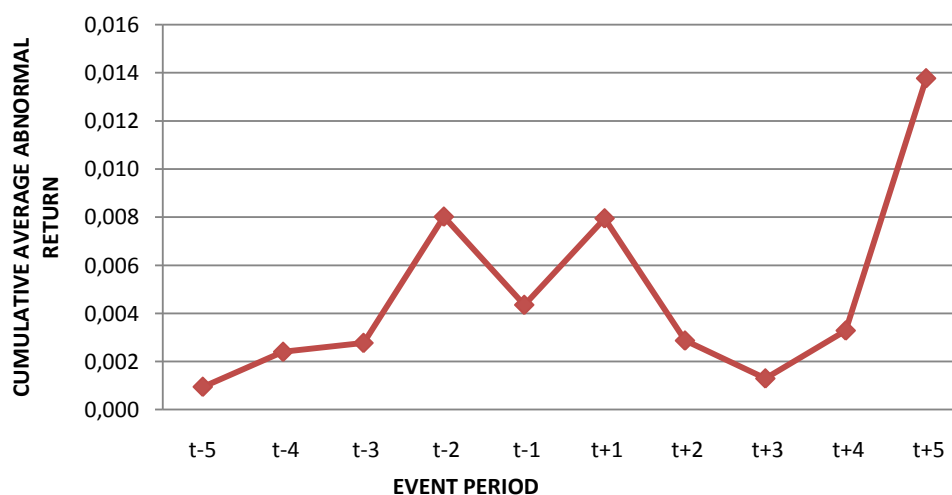


Figure 2
Cumulative Average Abnormal Return (CAAR) during Windows Period

in the ISE and the www.finance.yahoo.com. Financial information is gathered from the firms' financial statements, which are published in the ISE.

Event Study

The event period is during five days before and after the events ($t-5$ to $t+5$). The short event period may not be able to capture the overall market reactions, while longer event period will make a market reaction to become vague due to the possible confounding effects. However, this study also use three days before and after the event ($t-3$ up to $t+3$) to provide a comprehensive picture. Estimation period is 100 days before the event period using. Although the event date (t_0) on 9 July 2014 is a public holiday and there is no trading activity in the capital market, this study keeps it as the event date (t_0). This study employs standard t-test to test the significance of ab-

normal return in each day within the periods.

Regression

As explained earlier, this study also investigates the effect difference between government-controlled firms and private firms. To do so, this study builds an empirical model. The dependent variable is cumulative abnormal return (CAR). Our main explanatory variable is a dummy variable taking a value of 1 for government-controlled firms (the government is majority shareholder) and 0 otherwise.

This study includes a number of control variables. First, firm size is included. It is measured by the natural logarithm of total assets in 2013 (LN_{TA}). Second, this study takes into account firm leverage by including the ratio of debt to total assets (DAR) in 2013. Lastly, this study control for industries following the JASICA classification. Therefore, this study

Table 2
Descriptive Statistics of Variables

	Number of Observation		CAR3	CAR5	Total Assets (Billion Rp)	DAR
Full sample	387	Mean	-0.001398	0.013759	16567.84	0.53062
		Median	-0.003289	0.010109	2383	0.53
		Maximum	1.161841	0.934754	733100	3.35
		Minimum	-0.768692	-1.07701	14.96	0.00
		Std. Dev.	0.100415	0.126623	63334.99	0.308948
		Skewness	2.960679	-0.515332	8.055287	2.686373
Government-controlled firms	20	Mean	0.056541	0.126271	113730.90	0.5825
		Median	0.06458	0.076018	25115.50	0.59
		Maximum	0.124607	0.934754	733100	0.91
		Minimum	-0.018158	0.011042	1295	0.09
		Std. Dev.	0.046875	0.196947	212984.70	0.245504
		Skewness	-0.185432	3.687716	2.115385	-0.177523
Private firms	367	Mean	-0.004556	0.007627	11272.86	0.527793
		Median	-0.00434	0.004269	2109	0.53
		Maximum	1.161841	0.647522	496305	3.35
		Minimum	-0.768692	-1.077010	14.96	0.00
		Std. Dev.	0.10162	0.119023	36491.64	0.312059
		Skewness	3.078125	-1.795935	8.370135	2.764777

create a number of dummy variables to represent the industry differences which are Agriculture; Mining; Basic Industry and Chemicals; Consumer Goods; Property, Real Estate, and Building Construction; Infrastructure, Utilities, and Transportation; Finance; and Trade, Service, and Investment. The miscellaneous industry is the benchmark.

As it is a cross section research, ordinary least square (OLS) will be employed to examine the following regression models.

$$CAR3_i = \beta_0 + \beta_1 DGCF_i + \beta_2 LNTA_i + \beta_3 DAR_i + \beta_4 DAGRI_i + \beta_5 DMINING_i + \beta_6 DBASCHEM_i + \beta_7 DCONSGOOD_i + \beta_8 DPROPEBSU_i + \beta_9 DINFUTRANS_i + \beta_{10} DFINANCE_i + \beta_{11} DTRADSERVIN_i + \varepsilon_i \tag{1}$$

$$CAR5_i = \beta_0 + \beta_1 DGCF_i + \beta_2 LNTA_i + \beta_3 DAR_i + \beta_4 DAGRI_i + \beta_5 DMINING_i + \beta_6 DBASCHEM_i + \beta_7 DCONSGOOD_i + \beta_8 DPROPEBSU_i + \beta_9 DINFUTRANS_i + \beta_{10} DFINANCE_i + \beta_{11} DTRADSERVIN_i + \varepsilon_i \tag{2}$$

Note:

$CAR3_i$ = cumulative abnormal return during three days windows period ($t-3$ to $t+3$)

$CAR5_i$ = cumulative abnormal return during five days windows period ($t-5$ to $t+5$)

$DGCF_i$ = dummy variable for government-controlled firms

$LNTA_i$ = natural logarithm of total assets

DAR_i = debt to total assets ratio

$DAGRI_i$ = dummy variable for agriculture industry

$DMINING_i$ = dummy variable for mining industry

$DBASCHEM_i$ = dummy variable for basic industry and chemicals

$DCONSGOOD_i$ = dummy variable for consumer goods industry

$DPROPEBSU_i$ = dummy variable property, real estate, and building construction industry

$DINFUTRANS_i$ = dummy variable for infrastructure, utilities, and transportation

$DFINANCE_i$ = dummy variable for finance industry

$DTRADSERVIN_i$ = dummy variable for trade, service, and investment industry

ε_i = error term.

4. DATA ANALYSIS AND DISCUSSION

Event Study

Table 1 presents the results of t-test. There are five days during the windows period that generate significant abnormal return which are $t-2$, $t-1$, $t+1$, $t+2$, and $t+5$.

In the pre-event days, market tended to fluctuate. It was shown that abnormal return in $t-5$ until $t-3$ is relatively stable and insignificant, it then becomes positive and significant in the $t-2$ which was then followed by a negative and significant reaction on $t-1$.

A day after the election ($t+1$), there was a rebound in stock market and the curve was changing, showing a positive significant abnormal return. However, this did not persist because the in subsequent day ($t+2$), the abnormal return curve changed its direction and showed a negative and significant

Table 4
Regression Results

	Dependent Variable: Cumulative Abnormal Return (CAR)	
	CAR3	CAR5
DGCF	2.346325** (0.0195)	3.087946*** (0.0022)
LNTA	-0.668322 (0.5043)	1.456982 (0.146)
DAR	0.593895 (0.5529)	0.38151 (0.703)
DAGRI	0.50262 (0.6155)	-0.443259 (0.6578)
DMINING	0.118676 (0.9056)	0.217826 (0.8277)
DBASCHEM	1.454057 (0.1468)	1.234626 (0.2177)
DCONSGOOD	0.748589 (0.4546)	0.031917 (0.8423)
DPROPEBU	3.416721*** (0.0007)	3.669929*** (0.0003)
DINFUTRANS	2.054381** (0.0406)	1.54573 (0.123)
DFINANCE	1.11479 (0.2657)	0.840312 (0.4013)
DTRADSERVIN	1.151495 (0.2503)	0.859197 (0.3908)
Method	OLS	OLS
Observations	387	387
Constant	Included	Included
R-squared	0.067000	0.107958
Adjusted R-squared	0.039632	0.081791
F-statistic	2.448111	4.125801
Prob(F-statistic)	0.005823	0.000009

The value in the brackets is p-value. *, **, and *** indicates significance at 10%, 5%, and 1% levels consecutively.

abnormal return. On the $t+3$ and $t+4$, capital market made another rebound, which was resulted in positive and significant abnormal return in $t+5$ after the presidential election.

Arguably, the negative significant abnormal return occurred in $t-1$ before the presidential elections shows that investors tend to take wait and see position due to political uncertainty. A substantial portion of investors prefer to sell their stocks until the election be done. The significant abnormal return in $t+1$ after the elections is due to market feel confident in term of political stability and security.

There was a negative abnormal return in the $t+2$. However, this is not quite surprising because it is estimated that there was profit taking after the significant and positive return in the previous day. It is proved with the increase in the average abnormal return curve until it reached the peak at $t+5$ after the presidential elections. Generally, it can be concluded

that the presidential election in 2014 leads to overall positive market reaction.

The empirical evidence of a relatively positive market reaction is also presented by the changes in cumulative average abnormal return in Figure 2. Despite the volatility, the cumulative average abnormal return is always positive during the windows period.

The political event of Indonesian presidential election in 2014 has a significant informational content, which is in line with the previous studies (e.g. Suryawijaya & Setiawan, 1998; Chen et al. 2005; Oehler et al. 2012). Indonesian capital market is considered as semi-strong with respect to its market efficiency. This is due to the existence of prolonged abnormal return in the more than three time spots around the event. As explained by Fama (1970), if abnormal return is prolonged, it means that market response is late in absorbing and interpreting the information.

Regression Results

Table 2 exhibits the descriptive statistics of variables for the regression on the determinants of cumulative abnormal return (CAR). It is found that the average CAR5 of government-controlled firms (0.126271) is higher than private firms (0.007627). Similarly, the average CAR3 of private firms is lower than government-controlled firms are. Table 3 presents the correlation matrix of variables (see in Appendices). As expected, the dummy variable of government-controlled firms (DGCF) is positively correlated with the cumulative abnormal return both three days (CAR3) and five days (CAR5) around the event date.

The regression results on the determinants of cumulative abnormal return (CAR3 and CAR5) are presented in Table 4. The coefficients of the dummy variable to represent the government-controlled firms are found to be positive and significant which means that those firms have a higher abnormal return during the windows period. It confirms our hypothesis that the effect of political event particularly presidential election is more pronounced for government-controlled firms. As revealed by Fisman (2001), closeness with political power has an impact on the market value of firms particularly in the emerging markets.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

This study investigates market reaction to a political event, which is the presidential election of Republic of Indonesia in 2014 by studying publicly traded firms in the Indonesia Stock Exchange. First, this study does find that there is significant abnormal return during windows period particularly in the t-2, t-1, t+1, t+2, and t+5. Second, the negative abnormal return one day before the election date, which was followed by rebounding one day after the event, indicate that investors consider that the election has been done well particularly with respect to the political stability and security. Third, government-controlled firms have a higher abnormal return than private firms do, which means that they are more susceptible to political event especially the presidential election. Fourth, confirming some previous studies, Indonesian capital market is a semi-strong market in which it is possible for investors to gain abnormal return.

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APPENDICES

Table 3
Correlation Matrix of Variables

	1	2	3	4	5	6	7	8	9	10	11	12
(1) CAR3	1											
(2) DGCf	0.134870	1										
(3) LNTA	0.007727	0.299802	1									
(4) DAR	0.010788	0.039252	0.242472	1								
(5) DAGRI	-0.036650	-0.048479	-0.021257	-0.049634	1							
(6) DMINING	-0.075796	0.060110	0.107816	-0.015710	-0.061281	1						
(7) DBASCHEM	0.018216	0.014477	-0.081527	0.012459	-0.079991	-0.113665	1					
(8) DCONSGOOD	-0.026869	0.022224	-0.077718	-0.094406	-0.059106	-0.083987	-0.109630	1				
(9) DPROPESBU	0.184694	0.068652	0.011162	-0.095744	-0.072458	-0.102961	-0.134396	-0.099305	1			
(10) DINFUTRANS	0.075519	0.082876	0.030681	0.025548	-0.067521	-0.095945	-0.125238	-0.092539	-0.113444	1		
(11) DFINANCE	-0.022016	0.021757	0.237745	0.227227	-0.092440	-0.131354	-0.171458	-0.126691	-0.155312	-0.144729	1	
(12) DTRADSERVIN	-0.044016	-0.126645	-0.160161	-0.116776	-0.112662	-0.160089	-0.208966	-0.154406	-0.189287	-0.176389	-0.241487	1
(1) CAR5	1											
(2) DGCf	0.207697	1										
(3) LNTA	0.136256	0.299802	1									
(4) DAR	0.030337	0.039252	0.242472	1								
(5) DAGRI	-0.086806	-0.048479	-0.021257	-0.049634	1							
(6) DMINING	-0.035666	0.060110	0.107816	-0.015710	-0.061281	1						
(7) DBASCHEM	0.011134	0.014477	-0.081527	0.012459	-0.079991	-0.113665	1					
(8) DCONSGOOD	-0.057231	0.022224	-0.077718	-0.094406	-0.059106	-0.083987	-0.109630	1				
(9) DPROPESBU	0.225262	0.068652	0.011162	-0.095744	-0.072458	-0.102961	-0.134396	-0.099305	1			
(10) DINFUTRANS	0.058900	0.082876	0.030681	0.025548	-0.067521	-0.095945	-0.125238	-0.092539	-0.113444	1		
(11) DFINANCE	0.002497	0.021757	0.237745	0.227227	-0.092440	-0.131354	-0.171458	-0.126691	-0.155312	-0.144729	1	
(12) DTRADSERVIN	-0.067806	-0.126645	-0.160161	-0.116776	-0.112662	-0.160089	-0.208966	-0.154406	-0.189287	-0.176389	-0.241487	1