

## Chapter 4

### RESULTS ANALYSIS

#### 4.1 Hamzah Haz's Resignation

Hamzah was the head of Partai Persatuan Pembangunan (PPP party) which has the third largest number of seats in the House of Representative (DPR). He served as Minister of People's Welfare and Poverty Eradication in President Wahid's cabinet.

Appendix A presents the response of every industry to Hamzah Haz's resignation from the cabinet. In the agricultural sector, a significant negative abnormal return occurred the next day after the announcement. None of the CAR in the event period had positive value. In the basic industry, a significant negative abnormal return at level 5% appeared the day after the announcement of his resignation. The CAR in the event period was negative. The CAR continued to rise 4 days before the announcement, and reached as high as  $-10.47\%$  the day after the announcement. In the mining sector, a positive abnormal return was significant at a level of 5% 5 days after the announcement. And the CAR at the end of the period reduced to  $-1.70\%$  from  $-5.12\%$  one day before. In the miscellaneous industries, a significant abnormal return occurred on day 3 with a t-statistic of 2.06. This abnormal return was significant at a level of 2.5%. The CAR continued to increase from 5 days before the announcement and reached the highest level on day 2. In the other seven industries, there was no evidence of statistically significant response to Hamzah Haz's resignation. That is, no significant abnormal return occurred in the event period. At least on 3 consecutive days prior to the announcement, almost all the industries earned negative abnormal returns. Even in some industries, negative abnormal returns occurred on 5 consecutive days prior to the announcement. Surprisingly, however, all the industries experienced positive abnormal returns on the day of the announcement although they were not significant. In the Liquid 45 and composite indexes, no significant abnormal return occurred in the event period. They behaved in a similar manner as the other industries did. On 5 consecutive days prior to the announcement, the LQ45 and composite indexes experienced negative

abnormal returns. They were similar to the other industries in that, they both generated positive abnormal returns on the day of the announcement although insignificant.

Appendix B presents the average abnormal return before and after the announcement of Hamzah Haz's resignation. Out of ten industries, only in the consumer, manufacturing and trading sectors show significant difference between the average abnormal returns before the announcement and those after the announcement. The t-statistics were significant at a level of 5%. The average abnormal returns before and after the announcement were also different in signs. Before the announcement, the average abnormal returns were negative, whereas the average abnormal returns after the announcement were positive. It seems that the information was positively captured by these 3 industries. Similarly, significantly different average abnormal returns before and after the announcement also occurred in the LQ45 index at a level of 5%. On the contrary, no significant difference was realized in the composite index. In the other seven industries, there was no difference between average abnormal returns before and after the announcement released. Surprisingly, all the industries experienced negative average abnormal returns before the announcement and positive abnormal returns after the announcement. This behavior supports the above assertion that the industries absorbed the information positively. In other words, the decision of his resignation was positively viewed by the investors.

Appendix C presents the results of abnormal returns across all the industries. The results were similar to that of Appendix A. On 5 consecutive days prior to the announcement, the abnormal returns were negative, but positive on the day of the announcement. There was no significant abnormal return in the event period. However, on the day of the announcement the abnormal return turned to positive although it was insignificant. Therefore, we fail to reject the first hypothesis. The CAR shows negative value during the event period. The CAR continued to decline from day -5 to day -1. And a slightly increase on the day of the announcement.

Appendix D presents the results of cross-industrial analysis of average abnormal returns before and after the announcement. The results show that the average abnormal return before the announcement was significantly different from the average abnormal return after the announcement. The difference was significant at the level of 5% with a t-statistic of 2.47. Therefore, we reject the second hypothesis.

#### **4.2 Clash between Christians and Muslims in Buru, Maluku**

The clash between Christians and Muslims in Buru, Maluku broke out on December 22<sup>nd</sup>, 1999. The conflict was so bad that it resulted in the death of over 100 people, and made thousands of people to be homeless. Many Christians fled to Ambon for safety.

From appendix A, the results indicate that significant abnormal returns occurred only in the trading sector. The first abnormal return that was significant appeared on the day before the incident. The second abnormal return occurred on day 2 after the clash. These abnormal returns were significant at the level of 2.5%. The CAR continued to rise from day -3 to day 2. It reached the highest level of 2.17% on day 2, and then it started to decrease. The positive abnormal returns obtained on the day of the clash occurred and the subsequent days, they were contradictory to the expectation that investors would capture the information as negative news. That is, the abnormal returns on the day the clash occurred should be negative. The results of the other 9 industries show no significant abnormal returns in the event period. In fact, almost all the t-statistics of the abnormal returns were very low. That is, most of the t-statistics were below 1 point. Similarly, the results of the LQ45 and the composite indexes present no significant abnormal return throughout the event period. Their responses were similar to the responses of the industrial indexes, except for the trading sector. There was only one day when the t-statistic of abnormal return was above 1 point.

The results in appendix B indicate that in all the industries there was no difference between the average abnormal return before and after the clash. All the industries' t-

statistics were very low. That is, all was below 1 point. Similar results were also obtained from the LQ45 and the composite indexes.

The results in appendix C indicate that they are consistent with the results in appendix A. The cross-industrial abnormal returns in the event period were not significant. However, in 5 consecutive days prior to the clash, the abnormal returns were negative. The abnormal return on the day of the event was positive although insignificant, and then it turned to negative again on the next day. The CAR continued to increase from day -4 and reached as high as 5.25% two days after the incident.

The results in appendix D indicate that there was no difference between the average abnormal return before and after the clash. The t-statistic was 0.29, which was very low. The findings were consistent with the findings in appendix B. That is, none of the industries' average abnormal returns before and after the clash was different.

#### **4.3 General Wiranto's Removal**

General Wiranto was Minister of Defense in Wahid's cabinet. He was removed because of the allegation that he was involved in human right abuses in Timor Timur. It was said that at that time he was the most influential General in the military.

The results in appendix A show how industries reacted to his removal. In the agricultural industry, significant abnormal returns occurred on 2 days, that is, on day -5 and day 1. On day -5 the abnormal return was 5.25% with a t-statistic of 2.24. This was significant at 2.5% level. After the announcement, the abnormal return was 6.93% with a t-statistic of 2.96. This t-statistic was also significant at a level of 2.5%. However there was no significant abnormal return on the day of the announcement. The CAR continued to rise from day -4 to day 1, and on day 1 the CAR reached a height of 15.32%, and then started to decrease. In the basic industry, a significant abnormal return at 5% level occurred on day 3. The CAR turned to positive on the day of the announcement after being negative on 5 consecutive days prior to the announcement. In the consumer sector, 3 significant abnormal returns occurred after

the announcement. The abnormal returns on day 2 and 3 were  $-4.44\%$  and  $-6.70\%$  respectively, while the t-statistics were  $-2.11$  and  $-3.19$  respectively. These were significant at the level of  $2.5\%$ . The abnormal return on day 5 was  $-3.59\%$  with a t-statistic of  $1.71$ , and this was significant at a level of  $5\%$ . None of the CAR in the event period shows a positive value. The CAR continued to reduce in the event period. On day  $-5$  the CAR was  $-0.56\%$  and reached a lowest point of  $-21.03\%$  on day 5. In the manufacturing industry, abnormal returns were significant on day 2 and 3. The abnormal return on day 2 was  $-2.99\%$ , which was significant at the level of  $5\%$ . On the next day, on day 3, the abnormal return was  $-4.41\%$ , and this was significant at  $2.5\%$  level. The t-statistics on day 2 and 3 were  $-1.67$  and  $-2.47$  respectively. The CAR in this sector was similar to the ones in the consumer sector where no positive CAR was found in the event period. In the mining industry, a significant abnormal return occurred on day 3 with a return of  $-3.75\%$ . The t-statistic of this abnormal return was  $-2.02$ , which was significant at  $5\%$ . In contrast, the CAR from day  $-5$  to day 1 were positive. The CAR began to decline on day 2 and reached as low as  $-5.73\%$  on day 5. However, none of these sectors earned a significant abnormal return on the day of the announcement. Moreover, the other industries experienced no significant abnormal return throughout the event period. In the composite index, the abnormal return was significant at  $5\%$  level on day 3. The abnormal return was  $-3.63\%$  and its t-statistic was  $-1.93$ . Similarly, the LQ45 also behaved in the same manner with the composite index, where the significant abnormal return occurred on day 3. Its abnormal return on day 3 was  $-4.46\%$ , which was significant at  $2.5\%$  level. Again, there was no evidence of statistically significant abnormal return on the day of the announcement.

The results in appendix B indicate that all the industries provide no difference between the average abnormal returns before and after the announcement. Half of the industries had t-statistic of less than 1 point, and the other half had above 1-point, but they were not statistically high enough to prove the existence of any difference. Among all the industries, the miscellaneous industries had the highest t-statistic of  $-1.57$ . Similarly, the LQ45 and the composite indexes also experienced

the same thing. The LQ45 and composite indexes had t-statistics of  $-1.60$  and  $-1.28$  respectively.

In appendix C, the results indicate that there was no evidence of statistically significant abnormal returns. The t-statistics of abnormal returns in the event period were so low that we fail to reject the first hypothesis. The highest t-statistic during the event period was  $-1.39$  on day 3. The rest had t-statistic below 1. The results were consistent with the results in the appendix A, where almost all the industries failed to respond to the announcement of Wiranto's removal. The CAR tended to be stable from day  $-5$  to day 2, then began to decrease to a low of  $-5.56\%$  on day 5.

In the appendix D, the average abnormal return before the announcement was  $0.07\%$ , while the average abnormal return after the announcement was  $-1.16\%$ . However, the results support that there was no difference between the average abnormal returns before and after the announcement. This finding is consistent with the results in appendix B where all the industries experienced no significant difference between the average abnormal returns before and after the announcement was made.

#### **4.4 Two Economic Ministers' Removal**

The two economic ministers were Laksamana Sukardi and Jusuf Kalla. Laksamana Sukardi comes from the Partai Demokrasi Indonesia Perjuangan (PDI-P), which was the largest party in the country. PDI-P was led by Megawaty Sukarnoputri, who at the time was the vice-president of Indonesia. Jusuf Kalla comes from Partai Golongan Karya (Golkar), which was the second largest party after PDI-P. Laksamana Sukardi was Minister of Investment and State Enterprises Development, while Jusuf Kalla was Minister of Industry and Trade. Both ministers were removed because of the allegation that they had built cronyism. In the hearing with the lower house, President Wahid failed to prove the allegation.

Appendix A presents the response of each industry as well as the LQ45 and the composite indexes to the announcement of their removals. The results indicate that

mixed responses have been obtained. However, 5 days prior to the announcement all the industries reacted in a similar manner, and significant negative abnormal returns were obtained in all industries on that day. Significant abnormal returns on the day of the announcement were also found in two industries, and these were the basic industry and the property sector. In the basic industry, the abnormal return on the day of the announcement was  $-2.94\%$  with a t-statistic of  $-1.72$ . The t-statistic was significant at a level of 10 percent. None of the CAR in the event period had a positive sign. Similarly, in the property sector, the abnormal return on the day of the announcement was significant at the level of 2.5%. The abnormal return on that day was  $-5.88\%$ . The entire CAR in the event period was negative. In the agricultural sector, a significant abnormal return also occurred on day 5. In the financial industry, the abnormal return of  $3.16\%$  on day 3 was also significant at a level of 5%. Almost all the industries experienced negative CAR throughout the event period. Furthermore, the LQ45 and the composite indexes behaved in the same way as the other industries. In both indexes, significant abnormal returns only occurred on 5 days prior to the announcement. In addition, the CAR in both indexes during the event period was also negative.

The results in appendix B indicate that the industries did not experience any difference between the average abnormal return before and after the announcement. Similar results were also obtained in the LQ45 and the composite indexes. Before the announcement, surprisingly, the average abnormal returns in all the industries were negative. In contrast, the average abnormal returns after the announcement were positive. However, the t-statistics in all the industries were so low that the magnitude of the changes was not statistically proven. Similarly, the LQ45 and the composite indexes did experience a similar change in sign of the average abnormal returns.

The cross-industrial analysis for abnormal returns was shown in the appendix C. The results indicate that a significant abnormal return occurred only on day-5, which is consistent with the results in appendix A. The abnormal return was significant at a level of 2.5%. This finding also indicates that the market had responded to the information before it was publicly announced. No significant abnormal return found

on the rest of the days in the event period. The CAR during the event period was negative. It reached the lowest at  $-7.08\%$  on day 2.

The results in appendix D supports the results in appendix B. In the appendix B, none of the industries had experienced a significant difference between the average abnormal return before and after the announcement. Similarly, the cross industries's results show that the average abnormal return across industries before the event was not significantly different from that after the event. The average abnormal return before the event was  $-0.98\%$ , while after the event was  $0.60\%$ . The t-statistic obtained was 2.06. These findings are also consistent with the findings of the composite index, that is, both behaved in a similar manner.

#### **4.5 Church Bombing in Medan**

The explosion occurred in one of the churches in Medan on Sunday, May 28<sup>th</sup>, 2000. Some other bombs were also found in other churches. The explosion injured 23 people who were mostly women. Since the incident took place on Sunday, Monday was considered as the event day.

The responses of each industry to this incident are presented in appendix A. The results indicate that the industries gave mixed responses. In some industries, negative abnormal returns were found on the day of the incident, while in the other industries, negative abnormal returns occurred few days after the incident. In the agricultural sector, a significant abnormal return occurred on the day of the incident. The abnormal return on that day was  $-8.55\%$  with a t-statistic of  $-2.60$ , which was significant at 2.5% level. In the basic industry, an abnormal return of  $-3.75\%$  that was significant occurred on day 2. It was significant at 2.5% level. In the consumer sector, two significant abnormal returns were found on the day of the incident and two day after the incident. The abnormal returns were  $-3.15\%$  and  $-3.62\%$ , respectively. These abnormal returns were significant at a level of 5%. In the financial sector, two significant abnormal returns were also found on the day of the incident and the following day. On the day of the incident the abnormal return was significant at a level of 2.5%, while on the following day it was significant at 5%. The

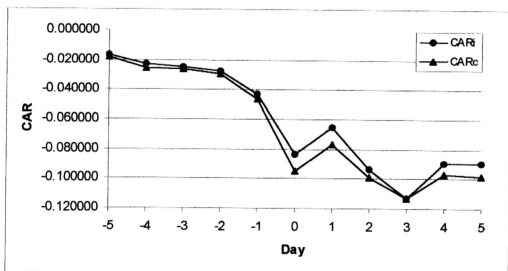


abnormal returns were  $-4.06\%$  on the day of the incident and  $3.435$  on the following day. In the infrastructure industry, significant abnormal returns occurred on day 3 and 4, respectively. The abnormal return on day 3 was  $-5.08\%$ , while it was  $4.12\%$  on the following day. The latter was significant at the level of  $5\%$ . In the manufacturing sector, significant abnormal returns were also found in two days. One was on the day of the incident with a return of  $-3.32\%$  and the other one on day 2 with a return of  $-3.79\%$ . Both abnormal returns were significant at  $2.5\%$  level. In the mining sector, a significant abnormal return occurred only on the day of the incident with a return of  $-7.04\%$ . The abnormal return was significant at  $2.5\%$ . In the miscellaneous industries, abnormal returns were significant at  $2.5\%$  on the day of the incident and on day 2. The abnormal returns were  $-5.04\%$  and  $-4.28\%$ , respectively. In the property sector, two significant abnormal returns were also found in two days of the event period. The first occurred on the day prior to the incident with a return of  $-3.84\%$  and the second occurred on the day of the incident with return of  $-3.84\%$ . These abnormal returns were significant at  $5\%$ . In the trading sector, an abnormal return that was significant at  $2.5\%$  appears on the day of the incident. The abnormal return on that day was  $-7.20\%$ . Similarly, the composite index experienced a significant negative abnormal return of  $-4.06\%$  on the day of the incident. In the LQ45 index, significant abnormal returns occurred in 3 days, and these were on the day of the incident, day 2, and day 4. The abnormal returns were  $-4.90\%$ ,  $-3.61\%$ , and  $3.59\%$ , respectively. Surprisingly, however, all the industries including the LQ45 and the composite indexes experienced positive abnormal returns on the day after the incident occurred. It reflects that each industry had underreacted to the event. Furthermore, almost all the industries provided negative CAR during the event period.

The results in the appendix B show that all the industries provide no evidence of statistically significant difference of the average abnormal returns before and after the incident. The t-statistics in these 9 industries were very low. None of these industries' t-statistics were above 1 point. There was only one sector where the t-statistic is almost significant at  $5\%$  level, that is, the financial sector. In this sector, the mean abnormal return before the incident was  $-1.63\%$ , whereas the mean after

the incident was 0.59%. The LQ45 and the composite indexes also behaved in a similar manner as the all industries. The differences between the means of the abnormal returns in these two industries were insignificant. In fact, the t-statistics were very low.

Figure 4.1: Cumulative abnormal return for the overall industries and the composite index



The results in appendix C indicate that the market responded immediately to the incident. The cross-industrial abnormal return on the day of the incident was  $-4.82\%$  with t-statistic of  $-2.20$ . The t-statistic was significant at 5%. The response was similar to the response given by the market. The results were consistent with the expectation that the market would respond negatively to this incident. These results were also consistent with the Efficient Market Hypothesis, whereby an event should be followed immediately with share price changes. Moreover, the results suggest that Indonesian Stock Market was relatively efficient. In other words, the stock market rapidly reacts and incorporates in an unbiased manner to a specific category of information. However, the reduction of the CAR was observed four days before the announcement. The sharp decline of the CAR occurred on the day of the

incident. A slight increase of the CAR occurred the next day and it declined again for the next two days. It reached a lowest point of  $-11.32\%$  three days after the incident.

The results in appendix D indicate that there was no significant difference between the average abnormal return before and after the incident across industries. These results were consistent with the results in appendix B.

#### **4.6 Violence in Halmahera, North Maluku**

The clash between two ethnic groups in Halmahera broke out on June 20, 2000. The incident had led to the death of 114 people, the burning of 229 houses and the injuries of many people.

The results in appendix A indicate that there was no significant abnormal return on the day of the incident in all the industries including the LQ45 and the composite indexes. Furthermore, half of the industries experience no significant abnormal return throughout the event period. Similar reactions were also given by the LQ45 and the composite indexes. In the infrastructure sector, a significant abnormal return occurred on the fourth day prior to the incident. The CAR increased from day  $-2$  and reached a height of  $6.34\%$  on day 3. In the mining sector, there were 3 days when abnormal returns were significant at a level of  $2.5\%$ . The first significant abnormal return of  $5.85\%$  occurred on day  $-3$ . The second one, which was  $6.53\%$ , occurred on the day after the incident. The last one of  $5.15\%$  occurred on day 4. The CAR in this sector continued to increase from day  $-5$  to day 4, when it reached a height of  $21.22\%$ . In the miscellaneous industries, a significant abnormal return of  $2.17\%$  occurred on the day prior to the incident. There was no significant abnormal return on the day of the incident. The t-statistic of this abnormal return was 2.17, which was significant at  $2.5\%$ . In the property sector, an abnormal return was significant at  $5\%$  on the third day after the incident with a t-statistic of 1.75. Two significant abnormal returns were found in the trading sector on day  $-2$  and day  $-1$ . The abnormal return on day  $-2$  was  $5.245$  and  $4.89\%$  on day  $-1$ .

According to the results in appendix B, none of the industries including the LQ45 and the composite indexes experienced a significant difference between the means before and after the incident. The t-statistics of comparing the means were very low. That is, the difference was close to zero.

The results in the appendix C support the results in the appendix A. The cross-industrial analysis of abnormal returns also support that there was no significant abnormal return in the event period. However, the CAR shows an upward sloping. It continued to increase from four days before the incident and reached a height of 10.87% on day 4. A slight decline of the CAR occurred the next day.

The results in the appendix D provide similar results as the individual industry's analysis. Moreover, the results support that there was no significant difference between the average abnormal return before and after the incident.

#### **4.7 Explosion in the Attorney General's Office**

A bomb exploded in the building housing the Attorney General's office in Jakarta at 18.05PM on July 4, 2000. The incident occurred just about one hour after the son of former President Suharto, Hutomo Mandala Putra, left the place. He came to the Attorney General's office as a witness for a 144-hectare land case that he bought from Supersemar Foundation. The explosion itself had raised speculation among the people.

Appendix A presents the results of the impact of the explosion in the Attorney General's office on the industrial returns as well as returns of the liquid 45 index and the composite index. The results indicate that no response to the incident was obtained from the industries including the LQ45 and the composite indexes. The abnormal returns on that day were close to zero. However, in some other industries, responses were obtained before the incident occurred. In the financial sector, for example, significant abnormal returns occurred on two trading days before the incident, that is, day -3 and day -2. The abnormal returns on those days were 4.61% and -3.83%, respectively. The abnormal returns were significant at 2.5%. In

the mining sector, two significant abnormal returns of 5.04% and 4.60% occurred on day -5 and -1, respectively. The latter was significant at 5%. The CAR in this sector went up and down as the returns changed over time. In the miscellaneous industries, it was only on day -3 when the abnormal return was significant. It was significant at 2.5%. Similarly, the CAR in this industry also moved up and down. A similar results in the financial sector were obtained from the property and trading sector where the abnormal returns were significant on day -3 and -2. They were also significant at 2.5%. In the property sector, the abnormal returns on day -3 and -2 were 6.02% and -4.02%, respectively. The abnormal returns on day -3 and -2 in the trading sector were 4.51% and -6.09% with a t-statistic of 2.12 and 2.86, respectively.

The results in appendix B present no difference of the average abnormal returns before the incident and those after the incident in all the industries including the LQ45 and the composite indexes, that is, the difference was close to zero.

The results of cross-industrial analysis of abnormal returns indicate that there was no response by the industries as a whole. Although some individual industries experience significant abnormal returns before the incident, there was no significant abnormal return across the industries. The CAR moved up and down. A sharp decline of the CAR occurred on day -3, but it declined sharply the next day, and then it tended to increase until day 1.

The results in appendix D were consistent with the results in appendix B where there was no significant difference between the average abnormal return before after the incident. The average abnormal returns before and after the incident were 0.375% and 0.12%, respectively.

#### **4.8 Four Prominent Leaders' Meeting**

As the political situation was getting worse, there was a hope among the people of Indonesia that President Wahid, Megawaty, Amien Rais, and Akbar Tandjung could meet to cool down the situation. Fortunately, with the invitation of Sultan

Hamengkubuwono X, the meeting could be held on August 1<sup>st</sup>, 2000 in the Kraton Yogyakarta.

Appendix A explains how the industries responded to this event. The results of no significant abnormal returns in all the industries during the event period indicate that the industries did not consider the event as an important event. Moreover, the meeting also did not improve the situation as negative abnormal return was still obtained on the day of the event. Similarly, the LQ45 and composite indexes provided similar results. Almost all the t-statistics of the abnormal returns were below 1. As no significant abnormal return was obtained prior to the event, a conclusion that the event had been anticipated could not be drawn. The changes in signs (positive-negative) of abnormal returns support the nature of the political instability.

Appendix B also shows that there was no significant difference between the average abnormal returns before the event and after the event in all the industries. Similar results were also obtained from the LQ45 and the composite indexes. The results of no significant difference between the means suggest that the difference was close to zero. The highest t-statistic obtained was 1.67 that was from the trading sector. However, it was not statistically large enough to conclude that the event affected the trading industry.

As a result of the failure to observe significant abnormal return in any industry, no significant abnormal return obtained from the cross industrial analysis was not a surprise. In fact, the results in appendix C support the above assertion. The cross industries behaved in a similar manner as the individuals in a number of ways. Firstly, the returns changed over time in signs, indicating that the situation was unstable. Secondly, a negative abnormal return was obtained on the day of the meeting. This contradicts the expectation that the meeting would provide certainty for the country's political life. In fact, the investors did not consider the meeting as an important event.

The results in appendix D were consistent with the results in appendix B where there was no statistical difference between the average abnormal return before and after the event. However, the average abnormal return after the event had increased

nominally although insignificant compare to that before the event. The average abnormal return before the meeting was  $-0.37\%$ , whereas the average abnormal return after the event was  $0.02\%$ .

#### **4.9 New Cabinet Announcement**

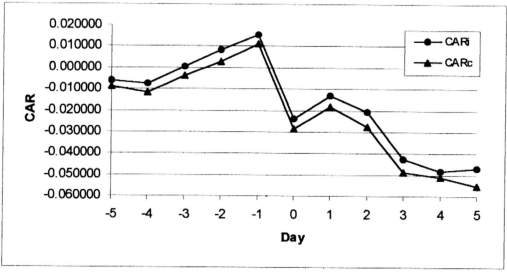
President Abdurrahman Wahid announced his new reshuffled-cabinet at 16.30pm on Wednesday, August 23, 2000. Unlike the previous reshuffled meetings, the Vice-President Megawaty Sukarnoputri. Megawaty was not present at this particular meeting when the announcement was made. Megawaty left the meeting 30 minutes before the announcement.

The results in appendix A indicate that mixed responses have been obtained from all the industries. Among the industries in the Indonesian Stock Market, there is only one industry, the agricultural sector, which did not respond. Among the industries that did respond to the announcement, there was only one whose abnormal return on the day of the announcement was significant at 5%. The rest were significant at 2.5%. The significant abnormal returns occurred only on the day of the announcement. It reflects that the industries gave immediate responses to this political issue. There was no significant abnormal return on neither the following days nor on the days prior to the announcement. The negative abnormal returns obtained also suggest that the industries responded negatively to the cabinet reshuffle. Similarly, in the LQ45 and the composite indexes, a significant abnormal return also occurred on the day of the announcement. They behaved in a similar manner as the majority of other industries.

The results in appendix B indicate that all the industries experienced no significant difference between the average abnormal returns before and after the announcement. Similarly, the LQ45 and the composite indexes also did not experience any differences. In the agricultural sector, the average abnormal return before the new cabinet was announced was  $0.73\%$  and the average after the announcement was  $-0.97\%$ . In the consumer sector, the average abnormal return before the announcement was  $0.61\%$  and after the announcement was  $-0.78\%$ .

Surprisingly, all the industries experienced a decline of the average returns after the announcement was made. This results support the assertion that the information was negatively absorbed by the investors.

Figure 4.2: Cumulative abnormal return for the overall industries and the composite index



The results in appendix C were consistent with the findings of individual industries' response. The results indicate that the industries as a whole did respond to the new cabinet announcement. The negative response may be due to the absence of Vice President Megawaty Sukarnoputri when the announcement was made. The absence of Megawaty had been viewed by the people that conflicts between her and the President still existed. The cross-industrial abnormal return on the day of the announcement was  $-3.91\%$  with a t-statistic of  $-2.07$ . The t-statistic was significant at 5%. The cross-industrial results were also consistent with the results of the market, which was represented by the composite index. The results were consistent with the EMH. Therefore, according to these results, the Indonesian stock market was relatively efficient. The CAR tended to increase from day  $-4$  to day  $-1$ . However, on the day of the announcement, the CAR declined sharply. It declined



from a height of 1.53% on the day before the announcement to -2.38% on the day of the announcement. A slight increase of the CAR occurred the next day. However, the CAR continued to decline again on the following days.

The results in appendix D suggest that there was no difference between the average abnormal return before the announcement and that after the announcement across industries. The average abnormal return before the announcement was 0.31%, while the average after the announcement was -0.46%.

#### **4.10 Riot in Pontianak**

The results in appendix A indicate that no significant abnormal return was obtained in all the industries including the LQ45 and the composite indexes on the day of the incident. However, some industries experienced significant abnormal returns on the other days. For example, in the basic industry, two significant abnormal returns occurred on day -4 and day -3. The abnormal returns on those days were 5.58% and -3.20%, respectively. The latter was significant at 5%. Similarly, in the manufacturing sector, a significant abnormal return of 2.76%, which was significant at 5%, occurred on day -4. In the mining sector, the abnormal return of 5.13% that was significant at 2.5% occurred 3 days after the incident. The t-statistic of this abnormal return was 2.57.

The results in appendix B also show none of the industries experienced significant differences between the average abnormal returns before the incident and those after the incident. Almost all the t-statistics were below 1, implying that the difference was close to zero. Furthermore, the LQ45 index and the composite index also had similar experiences, that is, there was no difference between the means.

The results in appendix C were consistent with the results in appendix A. Since the individual industries did not respond to the incident, the cross industries' response should not exist. The results support the above assertion that no significant abnormal return was obtained during the event period. The change in signs of the abnormal returns suggests that they were due to political instability. The CAR tended

to decrease until day 2 and the next day, the market rebounded. The CAR continued to increase after it reached a low of  $-2.04\%$  on day 2.

The results in appendix D also indicate that there was no difference between the average abnormal return before and after the incident, that is, the difference was close to zero.

#### **4.11 Clash between Dayaks and Madurese Settlers**

The results in appendix A indicate that the significant abnormal return on the day of the incident was only found in one sector, which was the agricultural sector. However, some industries experienced significant abnormal returns on the other days, while others did not respond to the incident at all. In the agricultural sector itself, significant abnormal returns occurred on several days. They were day  $-5$ ,  $-3.28\%$ , day  $-4$ ,  $3.55\%$ , day  $0$ ,  $5.83\%$ , day  $3$ ,  $-2.71\%$  and day  $4$ ,  $5.03\%$ . The abnormal returns on day  $-4$ ,  $0$ ,  $3$ , and  $4$  were significant at  $2.5\%$ . But the abnormal return on day  $-5$  was significant at  $5\%$ . In the infrastructure industry, significant abnormal returns occurred on 2 consecutive days, which were day  $-2$  and  $-1$ . The returns were  $12.88\%$  and  $-5.11\%$ . Both were significant at  $2.5\%$ . The CAR had negative values only in 2 days. In the miscellaneous industries, a significant abnormal return of  $2.4\%$  occurred on day  $-2$ . This was significant at  $5\%$ . In contrast, the CAR had positive value only on two days. Similarly, in the property sector, the abnormal return that was significant also occurred 2 days prior to the incident. The abnormal return of  $3.29\%$  was significant at  $2.5\%$ . In this industry, the CAR had no negative value. In the trading sector, significant abnormal returns occurred on two consecutive days, which were day  $-3$  with a return of  $-3.49\%$  and day  $-2$  with a return of  $3.74\%$ . On the contrary, the CAR in this industry had no positive value. A significant abnormal return on day  $-2$  also occurred in the composite index. The abnormal return on this day was  $4.09\%$  with a t-statistic of  $2.76$ . This return was significant at  $2.5\%$ .

The results in appendix B indicate that none of the industries experienced a significant difference between the means of abnormal returns. It was only in the

property sector that the t-statistic was above 1. However, it was statistically insignificant. The low statistics value suggests that the differences between the average abnormal returns before and after the incident were close to zero.

The results in appendix C indicate that there was no significant response of cross industries to the incident. The changes in signs of the abnormal returns also reflect the nature of the politics in this country. The CAR experienced a sharp increase on day -2. However, it was not statistically significant enough. After experiencing the sharp increase, the CAR on the subsequent days turned up and down. It reflects the uncertainty of the political environment in Indonesia.

The results in appendix D also indicate that there was statistically difference between the means of the abnormal returns before the incident and after the incident, that is, the difference was close to zero.

#### **4.12 Summary of the Analysis**

This part attempts to provide a summary of the analysis that has been done earlier. In this part, the focus or emphasis will be more on the comparison of the responses given by the industries as a whole and the market, which is represented by the composite index. An attempt was made to determine if there were any differences in the responses of the industries as a whole and the market particular. In general, however, we do not observe any differences. A clear comparison is presented in the tables 4.1 and 4.2 below:

Table 4.1 Responses given by the overall industries and the composite index

Significant Abnormal Return	Events	
	Cross Industries	Composite Index
No response	1, 2, 3, 6, 7, 8, 10, 11	1, 2, 6, 8, 10
Before the event day	4**	4**, 7*, 11**
Only on the day of the event	5*, 9*	5**, 9**
After the event day		3*

\* significant at 5 percent level

\*\* significant at 2.5 percent level

Table 4.1 presents the comparison of responses given by the cross industries and the composite index, which represents the market return. The table indicates that in most cases, both responded in a similar manner. However, there were differences in their responses to events: 3, 7, and 11. In the case of event 7 and 11, there was no response across the industries, but the market as a whole did respond before the event occurred. Similarly, in the case of event 3, the cross industries did not respond, but the market as a whole did respond few days after the event occurred.

Since the East Asian markets are greatly influenced by happenings in the United States, we had further examined whether the significant abnormal returns of events 3, 4, 5, 7, 9 and 11 were mainly generated by the events themselves or by other events that occurred in the United States. From the observation of the Dow Jones composite index, the study found that there was nothing unusual about its movement on the days when those 6 events occurred in Indonesia. Therefore, the possibility that those significant abnormal returns might have been triggered by the happenings in the United States can not be concluded.

Table 4.2 Difference of two means

Two Means	Events	
	Cross Industries	Composite Index
Different	1*	
Not different	2, 3, 4, 5, 6, 7, 8, 9,10, 11	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

\* significant at 5 percent level

Table 4.2 shows that the overall industries and the composite index behaved in a similar manner in most of the cases. In fact, 10 out of 11 cases support the above-mentioned assertion. However, in the case of event 1, a significant difference between the average abnormal return before and after the announcement was obtained in the overall industries, whereas the composite index did not experience any differences.

#### 4.13 Why An Event is not An Event?

In the cross-industrial analysis, there are only 2 cases out of 11 where the industries as a whole responded to the events. They are the events of church bombing and cabinet announcement. The results of these two cases support the EMH, that is, Indonesia's stock market is relatively efficient. The other 9 political events provided no important information to the investors. One event had been anticipated as a significant abnormal return was found prior to the event. The composite index seems to be more sensitive to the political events than the industries as a whole. As shown in table 4.1 the significant abnormal returns occurred in 6 events out of 11 in the composite index, compared to only 3 in the cross-industrial analysis.

So why did the industries as a whole and the composite index fail to react to the other political events?

A study by Bhattacharya et al. (2000) suggests that in the emerging market, insider trading plays an important role in causing the market not to respond to the firm-

specific issues. In most cases, the information is fully incorporated even before its release to the public. They also found nothing unusual about the returns and volatility of returns.

In this study, there may be three possible reasons why the market does not react to particular domestic political issues. First, It is possible that the market does not react to domestic political events, but rather to firm-specific news. Second, it is possible that the events have already been completely anticipated because of rumors or information about some of the events had actually been circulating among the public. Third, it is possible that the way the market reacts to such information had changed. Thus, these events were seen as less important than the other events.

We apparently reject the first reason because Indonesian stock market did react to particular political events such as when a bomb exploded in one of the churches in Medan on May 28<sup>th</sup>, 2000 and, when the new cabinet was announced in the absence of Vice-President Megawaty. In fact, the abnormal returns were significant in both across the industries and the composite index.

We do find that there is evidence of an event being anticipated. In the case of event 4, for example, a significant abnormal return occurred few days before the public announcement about the removal was made. Furthermore, three events had been anticipated in the composite index. However, most of the events had not been anticipated as there was no significant abnormal return prior to the event day.

We suggest that there is a change in the way the people respond to political events. To explore more on that, a comparison of the volatility of returns prior to the 1997 crisis period to the volatility after the crisis needs to be made.

As shown in table 4.3, the dispersion in the market performance had increased due to so many random shocks to the system in the post 1997 period. Prior to the 1997 period, the standard deviation was stable at around 1%. However, after the 1997 period, the standard deviation had increased 3 times in 1998. Although the standard deviation in 1999 and 2000 were not as high as the standard deviation in 1998, they were much higher than the standard deviations prior to the 1997 period.

The increase of the dispersion in the market performance indicates that there were so many random shocks to the system in the post 1997 period. In this case, the events that were identified in this study may not stand out as more important than other random events in the post 1997 period. As in this study, we have focused on domestic political events, but there may be external events that have contributed to greater volatility, too. From a statistical point of view, a larger standard deviation of returns means that any given political change was less likely to appear significantly different from other events.

Table 4.3 A comparison of standard deviations of daily market returns

Year	Daily Average Return (%)	Standard Deviation (%)
1994	-0.0958	0.9533
1995	0.0459	0.9287
1996	0.0921	1.0188
1998	0.0614	3.0082
1999	0.2480	2.2416
2000	-0.1915	1.5259
1995-1996	0.0697	0.9753
1998-1999	0.1539	2.6548
1994-1996	0.0156	0.9706
1998-2000	0.0391	2.3452

We further compare the standard deviation of the 1998 period to the standard deviations of the 1999 and 2000 periods. We found that the volatility in the 1998 period was larger than the volatility in the 1999 and 2000 periods. This indicates that the political events that occurred in the 1999 and 2000 periods are likely to be less important than the political events in the 1998 period. Therefore, it would not be a surprise to find that the magnitudes of the political events in the 1998 period are larger than that in the period after 1998. Indeed, today, the people of Indonesia do

not bother too much about the political issues anymore. Compared to the early 1998, the way people react to political issues today has changed a lot in real life.