THE EFFECT OF BOARD DIVERSITY ON FINANCIAL PERFORMANCE OF EMPLOYER'S PENSION FUND

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Abstract

Good corporate governance as a concept gains wide public attention especially after the 1997-1998 financial crises. The falls of many financial institutions is believed related to the absence of good corporate governance. As one of financial institutions which mainly serve for providing future benefits after retirement, Indonesian employer's pension fund also required to implement good pension fund governance through a regulation from Head of BAPEPAM-LK Number Kep-136/BL/2006 about the Guidelines of Pension Fund Governance. The implementation of this regulation will give impacts on the board diversity since the board will be the front line in implementing good pension fund governance.

The objective of this research is to examine the effect of board diversity to financial performance of Indonesian employer's pension fund. In this research, board diversity is measured by three variables, i.e. gender, education background and duality. Financial Performance is measured by Return on Investment, Return on Assets and Fund Sufficiency Ratio. Research sample consists of ten employer's pension fund as members of Indonesian Christian Pension Fund Association who conduct defined benefit program, which possesses complete data from 2006-2009 Association's Directory. Analysis is done with multiple regressions by controlling pension fund basis, board size and pension fund size. The result finds that board diversity impact employer's pension fund financial performance. It implies the need to consider board heterogeneity in the election of board member to optimize employer's fund financial performance.

Keywords: corporate governance, board diversity, financial performance, pension fund

Abstrak

Good corporate governance (GCG) merupakan konsep yang menjadi perhatian publik khususnya setelah krisis keuangan yang terjadi pada tahun 1997-1998. Jatuhnya beberapa lembaga keuangan juga dikaitkan dengan ketiadaan GCG dalam lembaga tersebut. Sebagai salah satu lembaga keuangan yang secara khusus menyediaan jasa pembayaran manfaat di masa pensiun, Dana Pensiun Pemberi Kerja (DPPK) di Indonesia juga disyaratkan untuk menerapkan tata kelola dana pensiun yang baik, melalui Keputusan Ketua Bapepam LK Nomor Kep-136/BL/2006 tentang Pedoman Tata Kelola Dana Pensiun. Pelaksanaan peraturan ini akan memberikan dampak kepada persebaran pengurus sebagai dewan direksi dana pensiun (board diversity) mengingat pengurus adalah pihak yang secara langsung terlibat dalam pelaksanaan tata kelola dana pensiun.

Penelitian ini bertujuan untuk menguji pengaruh persebaran pengurus (board diversity) terhadap kinerja keuangan DPPK. Dalam penelitian ini, board diversity akan dilihat dari tiga variabel yaitu gender, latar belakang pendidikan dan perangkapan jabatan (duality). Kinerja keuangan diukur dengan ROI, ROA, dan Rasio Kecukupan Dana (RKD). Sampel penelitian terdiri dari 10 dana pensiun yang menjadi anggota Badan Kerjasama Dana Pensiun Kristen Indonesia yang menjalankan Program Pensiun Manfaat Pasti (PPMP), yang memiliki kelengkapan data penelitian tahun 2006-2009. Analisis dilakukan dengan regresi berganda dengan variabel kontrol basis dana pensiun, jumlah pengurus, dan besaran dana pensiun. Hasil penelitian menunjukkan bahwa board diversity mempengaruhi kinerja keuangan dana pensiun pemberi kerja. Temuan ini mengimplikasikan perlunya mempertimbangkan heterogenitas di dalam pemilihan pengurus dana pension dalam rangka mengoptimalkan kinerja dana pensiun pemberi kerja.

Kata kunci: corporate governance, board diversity, financial performance, pension fund

JEL Classification: G23, G34

1. Introduction

The economic system of a country is widely known as one of the factors which influence its economic growth because economic system has an important role to channel fund from surplus unit to deficit unit. Fund mobilization is very important because business sectors which often serve as the deficit unit need the fund to finance their business operation which in turn will create job opportunity and finally give significant contribution to economic growth.

As one of the country which severely affected by financial crises in the late of 1990s, Indonesia has been aware of the strategic role played by economic system. A healthy financial system is needed to accelerate Indonesian economic growth. Learning from its past experiences, Indonesian government has put much attention to the reformation process in its financial sectors. Many new regulations are passed by the house of representative in order to prevent the crises from happening in the future, include the regulation of good governance implementation.

The formulation of National Committee for Corporate Governance (NCGG) on 9 August 2001 was a proof of Indonesian government seriousness in doing governance reforms as mandated by International Monetary Fund (IMF). Following the formulation was the issuance of Indonesian Code of Corporate Governance which was adopted from the OECD Principles of Corporate Governance. The Indonesian Code of Corporate Governance thus triggered the issuance of many regulations by Indonesian Capital Market Supervisory Agency (Harijono and Tanewsky, 2010).

Pension Fund as one of non-bank institutions has also been regulated to secure its operation. One of the regulations which emerged on 2006 is The Capital Market Supervisory Body and Financial Institutions Decree Number Kep-136/BL/2006 about Good Pension Fund Governance. The regulation mandated every pension fund to reduce its operation risk and to formulate pension fund governance. There are several main principles of pension fund governance according to the decree, namely transparency, accountability, responsibility, independency, and fairness.

According to Black et al. (2002), good corporate governance will influence firm value which explanation is based on signaling theory and endogenity. Good governance will send a positive signal to firm value hence a good corporate will tend to implement good governance. Other studies by Carter et al. (2003 and 2007) found the relationship between board characteristic and firm value although the results is contradictive. Since board diversity will influence good governance which in turn affect firm value thus it is hypothesized that board diversity will have an effect on firm value.

In the context of pension fund, the implementation of good pension fund governance is highly determined by pension fund directors as the executive of pension fund operation. The diversity of pension fund directors is assumed will influence pension fund value. This research aims to examine the relationship between board diversity and pension fund value since the research in pension fund institutions is rarely found.

The selection of pension fund as the object of this research is based on several considerations. First, the scarcity of research in pension fund industry. Secondly, the requirement of Pension Fund to implement Pension Fund Governance as stated in regulation from Head of BAPEPAM-LK Number Kep-136/BL/2006 about the Guidelines of Pension Fund Governance, Third, unlike banks and insurance which highly regulated due to their strategic position in

Indonesian financial system, the development of Indonesian pension fund is somewhat lagged behind. Nonetheless, according to Indonesian Finance Minister (Info Dana Pensiun, 2010) pension fund contribution to Indonesian economy is increasing with average growth rate of 17.6% in the last fifteen years. It shows the importance of pension fund industry in Indonesian economy.

By considering those factors, the study of board diversity and pension fund financial performance is interesting and enlighten. It is hoped that the result will give input in deciding pension fund director's composition to increase pension fund value which finally rise this industry contribution to Indonesian economy. The variables chosen to measure board diversity are gender and duality of directors.

2. Literature Review

According to Cox and Blake (1991) and Robinson and Dechant (1997) in Carter et al. (2003), *board diversity* is believed will influence firm value both in the short and in the long run. Hermalin and Weisbach (2000) in Carter et al. (2003) emphasizes that *agency theory* in its simple form cannot predict accurately the relationship between board diversity and firm value. These findings create dilemmas in which the existing theory could not give a clear prediction towards board diversity and firm value but on the other hand there is a widespread acceptance that there exists a positive relationship between board diversity and firm value.

Robinson and Dechant in Carter et al. (2003) gives empirical evidence related to board diversity. First, board diversity gives better understanding toward marketplace, in which exists heterogeneity of supplier and consumer demography. Second, board diversity increases creativity and innovation. Third, board diversity produces effective alternative problem solving. Although heterogeneity of board generates more conflicts, nonetheless it gives rise to the alternative solution as well. Fourth, board diversity increases affectivity of company's leadership. This relates to the board perspective where homogeneity of the board will narrow their perspectives compare to a more diverse board. Fifth, board diversity improves global relationship.

In case of Pension Fund Program, there are two types of pension fund program namely defined benefit program and defined contribution program. Defined benefit program guaranteed the amount of pension benefit according to a fixed formula. The employer bears all the risks that emerge from insufficient fund. On the contrary, defined contribution program shit the risk of fund management to the member/employees but ensure the fixed amount of monthly contribution. It thus understandable that to avoid deficit funding in defined benefit program, its board of directors should maintain and enhance its performance. According to the regulation, board performance is determined by its ability to achieve the targeted return on investment. It means that the value of pension fund is determined by the ability of pension fund board of directors to obtain targeted return. In condition where board plays a strategic role towards pension fund value, the diversity of the board is worth noting since the diversity will finally affect its value.

This research will examine the effect of board diversity to financial performance of defined benefit pension fund. As one of major players in financial industry, the role of Pension Fund in Indonesian economy is gaining importance. Total fund mobilized by Indonesian Pension Fund amount around 121 billion Rupiah on 2009 (Annual Report Biro Dana Pensiun). Since the decision of fund placement relies mostly on pension fund directors, hence the competency and qualification of pension fund directors should be unquestionable. They should be professionals who possess sufficient knowledge of investment, legal and actuarial. At the present time the professionalism of directors are based on their ability to obtain certificate of general basic competency as stated in Dirjen Lembaga Keuangan decree Number KEP-4263/LK/2004. In this research, board diversity is measured by gender, education background and duality.

2.1. Gender

According to Deaux and Ernswiller (1974) in Crawford (2006) male's success is related to his intellectual ability and talents. On the contrary, female's success is caused by her fortunate. This phenomenon results in a small number of female executives compare to male. Nonetheless Cash et al. (1993) and Etaugh and Brown (1978) in Crawford (2006) argue that female's success is associated with hard working. On the other hand, female's failure is associated with her inability whereas male's failure is associated with bad luck.

In general, female is more conservative, more careful and more risk averse compare to male. Hence, the existence of female directors will reduce the level of risk taken by the board of directors as a whole. By carefully considering every consequence of decisions, female directors will play a significant role in increasing firm value. Ironically, the number of female executives in Pension Fund board of directors is relatively small compare to male. In essence that Pension Fund director is responsible for the formulation of investment policy and constructing portfolio of funds which is influenced by risk profile of the directors thus gender is believed will affect pension fund performance. Female directors as a risk-averse person is tend to choose a conservative investment policy and invest in low risk instruments such as time deposits and fixed-income instruments. On the contrary, male directors as a risk-seeker person is more interested in high risk instruments such as stocks. At the end, the difference of risk preferences among female and male directors will determine their portfolio return.

The study by Charness and Gneezy (2004) toward students of decision making class finds that female invest a smaller amount of fund compare to male because they have a lower level of risk tolerance. This explains the smaller number of female executives in the board. Carter et al. (2003) reveals that companies with two or more female executives in the board results in a higher firm value compare to companies with less number of female executives. Thus, the hypothesis of this research is:

H_1 : Gender affects pension fund financial performance

2.2. Education Background

The complexity of pension fund management implies the presence of director's professionalism. One of the supporting factors for director's professionalism is education background. Level of education is closely related with knowledge possession. A higher level of education means a better understanding and a deeper knowledge possession. Bray and Howard (1980) and Golan (1981) in Santrock (1995) argues that university education positively contribute to career achievement. A higher level of education means a faster and higher level of career achievement.

As a provider for retirement fund, pension fund is concerned primarily to the ability to manage and invest the fund efficiently and effectively. This implies the need of investment knowledge and competency. Therefore the presence of directors with bachelor of economic background is beneficial since most of decisions made are related to investment such as asset allocation and portfolio selection.

The investment competence together with other soft skill possessions such as adaptability, communication, leadership, decision making, problem solving, and conflict resolution (http://www.mail-archive.com) will play significant role on pension fund performance. Nurudin (2004) says that based on Research conducted in Harvard University, 80% of a person's success is determined by his/her soft skill possession. Thus, the hypothesis for this research is:

H_2 : Education background affects pension fund financial performance

2.3. Duality

Board Duality is a duplication of job in one or more pension funds. Since there are no regulations so far that prohibit duality of directors then it is seldom found a duality in pension fund industry. One explanation of this phenomenon is the relatively few number of competence director available. To be appoints as a director, one should pass an examination and obtain a certificate from profession standard institution.

A director who serves more than one pension fund is considered of more capable in doing his or her job due to his/her competency and wider understanding of pension fund operation. On the contrary, duplication gives negative impact to pension fund performance in terms that the director's is not able to allocate and manage time wisely. In addition, the director could also loose the focus of his/her job. Hence, the hypothesis for this research is:

H_3 : Duality affects pension fund financial performance

3. Research Method

3.1 Sample

The sample for this research is ten employer's pension fund as members of Indonesian Christian Pension Fund Association who conduct defined benefit program for the period of 2006 – 2009, so there are 40 firm-years observation. This research uses purposive sampling with criteria:

a. Pension fund has positive ROI, to avoid unbiased data because this research use global crisis period (2008).
b. Pension fund has available and completely data for this research.

According to the criteria, we find 35 samples to further analysis.

3.2 Types and Sources of Data

This research uses secondary data from Indonesian Christian Pension Fund Association's directory that possessed complete data from 2006-2010.

3.3 Variable Definition and Measurement

3.3.1 Dependent Variables

The dependent variables in this research are pension fund financial performance measured by:

a. Return on investment (ROI) is measured by net investment income divided by average investment.
b. Return on assets (ROA) is measured by net investment income divided by total asset.
c. Fund sufficiency ratio (RKD/*Rasio Kecukupan Dana*) is measured by total assets divided by total actuarial liabilities.

3.3.2 Independent Variables

The independent variables for this research are three dimensions of board diversity namely: gender, education background, and duality. The measurement of those variables are as follows:

a. Gender (GENDER), is measured by proportion of female director in board member.
b. Education Background (BSTUDY) is measured by proportion of board member from economic background.
c. Duality (DUAL) is measured by proportion of board member who serves more than one pension fund.

3.3.3 Control Variables

There are three control variables in this research similar with the study conducted by Carter et al. (2003):

a. *Pension Fund Based* (PFBASED), which measured by *dummy variable* where 1 is for pension fund based on foundation and 0 for non-foundation based pension fund.
b. *Board size* (BSIZE), measured by number of board member.
c. P*ension fund size* (PFSIZE), measured by natural logarithm of pension fund total assets.

3.4 Method of Analysis

Hypothesis testing for this research employs multiple regression analysis with equation as follows:

$$ROI = a+b_1GENDER+ b_2\ BSTUDY + b_3DUAL+ b_4PFBASED+ b_5BSIZE + b_6PFSIZE+e$$

$$ROA = a+b_1GENDER+ b_2\ BSTUDY + b_3DUAL+ b_4PFBASED+ b_5BSIZE + b_6PFSIZE+e$$

$$RKD = a+b_1GENDER+ b_2\ BSTUDY + b_3DUAL+ b_4PFBASED+ b_5BSIZE + b_6PFSIZE+e$$

Where:

ROI = Return on investment
ROA = Return on assets
RKD = Fund sufficiency ratio
GENDER = The proportion of female directors
BSTUDY = Education Background
DUAL = Proportion of board member who serves more than one pension fund
PFBASED = Pension Fund Basis
BSIZE = Board Size
PFSIZE = Pension fund Size
a = Constant
b_i = Regression Coefficient
e = Error

The statistics hypothesis is:

$H_0 : b_i = 0$ dan $Ha : b_i \neq 0$

4. Results and Discussions

4.1. Descriptive Statistics

General description for variables used in this research can be seen in Table.1 below:

Table 1. Descriptive Statistics of Research Data

Research variables	Minimum	Maximum	Mean	Std. Deviation
ROI	1.11	33.76	12.3029	5.95214
ROA	2.18	31.39	10.7637	5.89252
RKD	45.00	155.00	100.7377	23.52260
GENDER	0.00	0.80	0.2954	0.25515
BSTUDY	0.00	0.80	0.4757	0.21722
DUAL	0.00	0.20	0.0457	0.08521
PFBASED	0.00	1.00	0.3143	0.47101
BSIZE	3.00	5.00	3.7714	0.91026
PFSIZE	9.26	11.45	10.6463	0.54331

Based on the Table, the average annual return on investment of employer pension fund is 12.30%. It means that on average samples pension fund are able to achieve return higher than time deposit return. Looking at the standard deviation it can be said that return highly varied among pension fund. The same condition is found for return on assets. For fund sufficiency ratio on average pension funds are classified as first level funds sufficiency because the value is above 100%. It means that they have sufficient fund to cover actuarial liabilities.

For gender as an independent variable, the result shows that most of employer pension fund do not have female directors in their board structure. It is evident by the proportion of female directors which less than 50% of total board. In case of education background not many pension fund employees economic background directors. This can be seen from proportion of directors who possess economic degree which less than half of the board.

Examining the duality variable reveals that only few directors which serve more than one pension fund. Investigating the board size indicate a tendency of employing more than 3 directors in pension fund. In terms of pension fund size it is clear that the average size of pension fund nearly the same.

4.2 Test of Classical Assumptions

Since the usage of multiple regressions require several assumptions thus before analyzing the data, the test of classical assumptions: normality, heteroscedasticity, multicolinearity and autocorrelation should be done first (attached are the SPSS results). The result of normality test use Kolmogorov-Smirnov Test shows the normal distribution of research variables. The same result found in other classical assumptions test. Based on the results, it could be concluded that the regression model used in this research free from classical assumptions.

4.3 Test of Hypotheses

The Table below shows the summary of three hypotheses developed:

Table 2. Regression Output Summary

	ROI	ROA	RKD
Constant	-8.803	-25.071	64.388
	(22.449)	(20.695)	(82.927)
GENDER	5.590	5.401	-28.905*
	(3.989)	(3.677)	(14.735)
BSTUDY	-14.497**	-19.114**	-1.590
	(6.573)	(6.059)	(24.281)
DUAL	31.822*	33.810*	40.738
	(18.266)	(16.839)	(67.475)
PFBASED	-5.652	-7.340**	27.013**
	(3.428)	(3.160)	(12.663)
BSIZE	-1.532	0.117	-0.366
	(1.940)	(1.788)	(7.166)
PFSIZE	3.048	4.100**	3.445
	(2.004)	(1.847)	(4.403)
R^2	0.314	0.405	0.400
Adj R^2	0.167	0.277	0.272
F	2.133*	3.174**	3.115**

**Significant at the 0.05 level. *Significant at the 0.10 level.

Based on the Table 2, it can be seen that all independent variables used in this model simultaneously affect pension fund financial performance which measured by ROI, ROA, and RKD at 10% and 5% level of significance. The explanation power of ROA is the highest among these three indicators as shown by adjusted R^2. These results confirm previous researches findings such as Carter et al. (2003 and 2007) and Black et al. (2002).

Partially, gender negatively affects financial performance of pension fund as measured by RKD at 10% significance level. It means that more female directors in pension fund board, the lower is financial performance of pension fund as measured by RKD.

This result is different from Carter et al. (2003) research. The argumentation behind this result is related to risk profile of female directors who tend to reject high risk investment instrument. On the other side, the low risk preference correlates with low return. Finally it lower pension fund financial performance. Nonetheless, the result support research by Charness and Gneezy (2004) that found female tend to be more risk averse than male. Another presumption is related to Deaux and Ernswiller statement in Crawford (2006) that doubt female competency compare to male as policy maker.

In line with gender, at 5% level of significance, education background negatively affects financial performance of pension fund as measured by ROI and ROA. The more directors with economic or business background, the lower pension fund financial performance. This might be correlated with the board risk tolerance as their possessions of business knowledge indirectly increase their level of risk aversion.

Duality positively affects pension fund performance as measured by ROI and ROA at 10% level of significance. This result supports the positive benefit of duality in which the directors are considered of more capable in doing his or her job due to his/her competency and possess a wider understanding toward pension fund operation.

Among three control variables in this research pension fund based and pension fund size gives significant impact at 5% level of significance. In other words, the form of pension fund based and pension fund size contribute to pension fund financial performance as measured by ROA. Pension fund based also positively affects pension fund financial performance as measured by RKD. Since the main business of pension fund is managing long term fund, it is understandable that the more fund managed by the directors, the higher the return since the pension fund had a better bargaining position in requiring return above average from banks and securities. On the other hand, the pension fund based also determines the financial performance since the investment policy is affected by the pension fund based.

Overall the board diversity affects pension fund financial performance. It suggests that to increase pension fund financial performance needs consider the characteristic of board director. This supported the research conducted Cox and Blake (1991) also Robinson and Dechant (1997) in Carter et al. (2003) which believe that board diversity affect firm value.
It contradicts with the view of Hermalin and Weisbach (2000) in Carter et al. (2003) which concludes that the simple agency theory could not give a clear prediction toward the relationship between board diversity and firm value.

4.4. Conclusion

Based on the analysis done for the data gathered it can be concluded that board diversity as measured by gender, education background and duality of directors simultaneously affect pension fund financial performance. The regression output shows that F test is sign at 5% level. This result support the study done by Cox and Blake (1991) also Robinson and Dechant (1997) in Carter et al. (2003) but contradict with the view of Hermalin and Weisbach (2000) in Carter et al. (2003).

The research result implies the needs to consider board characteristic in increasing pension fund financial performance. The limitation of this research lies on its inability to reveal more information because the research is only based on secondary data. In the future it is suggested to do more complete data gathering in the form of in depth interview and observation. The next research should consider the pension fund heterogeneity since homogeneity could not give much explanation regarding the effect of board diversity toward pension fund financial performance.

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