Volume 23 No 2, Agustus 2018

p-ISSN 0853 - 862 X
e-ISSN 2089 - 8002

JURNAL ILMIAH EKONOMI BISNIS

JOURNAL OF BUSINESS ECONOMICS

Diterbitkan Oleh:
Bagian Publikasi Universitas Gunadarma

DEWAN REDAKSI JURNAL ILMIAH EKONOMI BISNIS

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JURNAL ILMIAH
EKONOMI BISNIS

NOMOR 2, VOLUME 23, AGUSTUS 2018

DAFTAR ISI

PENGARUH DANA PIHAK KETIGA TERHADAP RENTABILITAS DAN LIKUIDITAS PADA BANK MANDIRI, BNI DAN BCA

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Abstract

The rapid growth of banking industry is inseparable from the number of new banks which increasing the fund mobility and credit allocation. This situation triggers competitive competition among banks to keep improving their financial performance. The continuous and significant decrease of bank perfomance will lead to financial distress or difficult circumstances, or it can be said to happen a bankruptcy threshold and it has a major impact on banking industry in general as well as Indonesia economic conditions in particular. Banks must be able to improve the profitability and liquidity levels in order to survive as one of the performance factors and banks health assessment and third party fund as one of the main source of funds. The aim of this research is to obtain an overview the extent influence of third party funds on profitability and liquidity level of the bank. The data used in this study is secondary data taken from quarterly financial statements from 2005-2008 and simple linear regression analysis.The results of this research which conducted at Mandiri, BNI, and BCA found that there was a significant influence between third party funds on profitability and liquidity. For BNI, there is a significant relationship between third party funds to ROA, ROE and NIM, but negative outcomes in BNI can be attributed to RR, although positive results are obtained at the LDR ratio. At BCA, a significant relationship is only obtained by ROE and NIM, while ROA is not. Positive relationships were also obtained by BCA for LDR and RR. Positive results were obtained by Bank Mandiri for all ROA, ROE and NIM ratios and LDR and RR, from the three banks Mandiri banks that had the best level of profitability and liquidity. The significant relation at BCA was only obtained by ROE dan NIM, but not ROA. The positive relation also can obtained toward LDR and RR at BCA. The positive result was obtained by Mandiri toward all ratio ROA, ROE and NIM as well as LDR and RR. In conclusion from those three banks, Mandiri bank has the best level of profitability and liquidity.

***Keywords**: ROA, ROE, NIM, LDR, and RR*

Abstrak

Perkembangan industri perbankan yang semakin pesat tidak terlepas dari banyaknya bank-bank baru bermunculan sehingga meningkatkan mobilitas dana dan alokasi kredit. Kondisi ini memicu persaingan yang kompetitif antar bank, hal ini memicu bank untuk terus meningkatkan kinerja keuangannya, karena penurunan kinerja bank secara terus menerus dan signifikan akan menyebabkan terjadinya financial distress atau keadaan yang sulit, atau dapat dikatakan mengalami ambang kebangkrutan dan akan berdampak besar pada industri *perbankan pada umumnya serta kondisi perekonomian Indonesia pada khususnya. Untuk dapat bertahan, bank harus mampu meningkatkan tingkat rentabilitas serta likuiditas sebagai salah satu faktor penilaian kinerja dan kesehatan bank dan dana pihak ketiga menjadi salah satu sumber dana utama bank. Tujuan dari penelitian ini adalah untuk memperoleh gambaran sejauh mana pengaruh dana pihak ketiga terhadap tingkat rentabilitas dan likuiditas bank. Data yang digunakan dalam penelitian ini merupakan data sekunder diambil dari laporan keuangan triwulan periode 2005-2008, dan menggunakan analisis regresi linier sederhana.Hasil penelitian yang dilakukan di Mandiri, BNI, dan BCA ditemukan bahwa terdapat pengaruh yang signifikan antara dana pihak ketiga terhadap rentabilitas dan likuiditas. Untuk BNI terdapat hubungan yang signifikan antara dana pihak ketiga terhadap ROA, ROE dan NIM, akan tetapi hasil hubungan yang negatif di dapat BNI terhadap RR, walaupun hasil positif didapat pada rasio LDR. Pada BCA, hubungan signifikan hanya di dapat oleh ROE dan NIM, sedangkan ROA tidak. Hubungan yang positif juga didapat BCA terhadap LDR dan RR. Hasil yang positif didapat Bank Mandiri terhadap semua rasio ROA, ROE dan NIM serta LDR dan RR, dari ke tiga bank tersebut bank Mandiri yang memiliki tingkat rentabilitas dan likuiditas yang paling baik.*

***Kata Kunci**: ROA, ROE, NIM, LDR, dan RR*

PENDAHULUAN

Industri perbankan merupakan salah satu tulang punggung pembangunan sistem perekonomian dan finansial suatu negara. Dalam hal ini bank dapat berfungsi sebagai intermediary institution, yaitu lembaga yang mampu menyalurkan kembali dana-dana yang dimiliki oleh unit ekonomi yang surplus kepada unit-unit ekonomi yang membutuhkan dana atau defisit. Di dalam perkembangannya, industri perbankan di Indonesia telah mengalami pasang surut yaitu dimulai tahun 1982 ketika terjadi berbagai macam deregulasi.Deregulasi dan penerapan kebijakan yang terkait dengan sektor moneter dan riil telah menyebabkan sektor perbankan mempunyai kemampuan untuk meningkatkan kinerja ekonomi makro di Indonesia.Bisnis perbankan ini berkembang pesat pada kurun waktu 1988-1996. Namun pada pertengahan tahun 1997, industri perbankan mengalami kemunduran total akibat terjadinya krisis moneter dan krisis ekonomi yang melanda Indonesia. Sejak krisis tersebut, bank-bank tidak dapat lagi menjalankan perannya secara optimal.

Sistem perbankan merupakan inti sistem keuangan di Indonesia dengan tiga fungsi strategis yaitu sebagai perantara antara penabung dengan penerima kredit, bank merupakan lembaga keuangan yang dapat mengelola resiko keuangan, dan sistem perbankan merupakan penyelenggara sistem pembayaran nasional. Oleh karena fungsi yang strategis tersebut, gangguan pada sistem perbankan akan menghambat perputaran roda perekonomian nasional, kurangnya pembelanjaan dalam rangka pemulihan kegiatan dunia usaha, serta restrukturisasi perekonomian nasional. Upaya pemulihan kegiatan dunia usaha dan restrukturisasi perekonomian diperlukan untuk dapat meningkatkan kembali laju pertumbuhan ekonomi maupun penciptaan lapangan kerja (Pohan, 2002 dalam Muammil dan David, 2007).

Dalam dunia modern sekarang ini, peranan perbankan dalam memajukan perekonomian suatu negara sangatlah besar.Hampir semua sektor yang berhubungan dengan berbagai kegiatan keuangan selalu membutuhkan jasa bank, sehingga ada anggapan bank adalah nyawa untuk menggerakkan perekonomian suatu negara. Perkembangan industri perbankan yang semakin pesat tidak terlepas dari banyaknya bank-bank baru bermunculan sehingga meningkatkan mobilitas dana dan alokasi kredit. Kondisi ini memicu persaingan yang kompetitif antar bank, hal ini memicu bank untuk terus meningkatkan kinerja keuangannya, karena penurunan kinerja bank secara terus-menerus dan signifikan akan menyebabkan terjadinya *financial distress* atau keadaan yang sulit, atau dapat dikatakan mengalami ambang kebangkrutan dan akan berdampak besar pada industri perbankan pada umumnya serta kondisi perekonomian Indonesia pada khususnya.

Aktivitas perbankan yang utama adalah funding, yaitu menghimpun dana dari masyarakat luas. Agar masyarakat memiliki keinginan untuk menyimpan uangnya di bank, maka pihak bank harus memberikan rangsangan berupa balas jasa yang akan diberikan kepada masyarakat sebagai nasabah. Balas jasa tersebut dapat merupakan bunga, bagi hasil, hadiah atau balas jasa lainnya.Semakin tinggi balas jasa yang ditawarkan pihak bank, maka semakin tinggi minat masyarakat untuk menyimpan uangnya.Oleh karena itu pihak bank harus memberikan rangsangan dan kepercayaan kepada masyarakat. Usaha bank untuk menghimpun dana melalui simpanan deposit sangat menentukan pertumbuhan bank, sebab volume dana yang berhasil dihimpun akan menentukan pula volume dana yang dapat dikembangkan bank tersebut dalam bentuk penanaman dana yang menghasilkan, yaitu berupa bunga, sehingga dari selisih bunga tersebut bank memperoleh keuntungan.

Dari segi ekonomis, suatu bank didirikan juga untuk menghasilkan keuntungan. Keuntungan merupakan potensi bagi bank untuk menjaga kontinuitas operasionalnya serta perkembangannya. Dalam menghimpun dana bank memiliki berbagai macam sumber dana, salah satunya adalah dana pihak ketiga, yaitu berupa tabungan, deposito dan giro yang merupakan salah satu sumber dana utama bank. Sehubungan dengan fungsi penghimpun dana ini, bank sering disebut pula lembaga kepercayaan. Agar menjadi kepercayaan masyarakat bank harus berupaya membenahi diri dalam mengelola kewajiban bank dan pengelolaan aktiva sehingga mampu menghasilkan keputusan yang tepat. Kepercayaan masyarakat sangat dibutuhkan sebuah bank, sebab sumber dana utama bank yang berupa dana pihak ketiga berasal masyarakat. Semakin tinggi kepercayaan masyarakat semakin tinggi pula dana yang dihimpun masyarakat.

Tingginya kepercayaan masyarakat terhadap suatu bank akan mejadikan nilai plus bagi sebuah bank yang akan berpengaruh terhadap laba yang dihasilkan bank yang bersangkutan, sehingga kemampuan bank untuk menghasilkan laba akan tinggi. Kemampuan bank dalam menghasilkan laba dapat diukur dengan menggunakan analisis kinerja keuangan, yaitu dengan menggunakan analisis rentabilitas, dimana rentabilitas merupakan kemampuan bank dalam menghasilkan laba, sekaligus perbandingan antara laba dengan modal usaha, sehingga dengan rentabilitas diketahui besarnya laba yang yang dapat dicapai bank atas sumber dana yang berasal dari masyarakat dalam hal ini adalah dana pihak ketiga. Di lain pihak, karakteristik bank dihadapkan pula pada tingkat rentabilitas dan likuiditas, dimana bank selain mampu menghasilkan laba juga harus mampu mengelola likuiditas sebagai salah satu indikator kesehatan dan stabilitas perbankan. Kegiatan operasional bank tidak terlepas dari adanya sumber dana utama yang berupa simpanan masyarakat berupa tabungan, deposito dan giro yang lebih dikenal dengan dana pihak ketiga, yang sekaligus sebagai sumber dana utama pendukung operasional bank, sehingga peningkatan dan penurunan simpanan masyarakat akan memberikan pengaruh pada kemampuan likuiditas bank (Sinungan, 1991).Jika dilihat dari laporan keuangan tahun 2008 yang dipublikasikan Bank Indonesia ada 4 bank yang memiliki nilai total aset dan dana pihak ketiga lebih dari Rp 150 triliun dan modal inti lebih dari Rp 10 triliun seperti bank Mandiri, BCA, BRI dan BNI. Untuk merealisasikan pencapaian visi API ditetapkan 6 pilar API, pilar yang pertama menjelaskan penguatan struktur perbankan nasional salah satu tujuannya adalah penguatan permodalan bank.Jika dilhat dari modal bank tersebut keempat bank merupakan kategori modal *corporate*.

KERANGKA TEORI

Beberapa penelitian terdahulu tentang rentabilits dan likuiditas bank antara lain adalah Nurwati (2000), menjelaskan bahwa simpanan masyarakat, pinjaman yang diberikan jumlah nasabah, cadangan primer, biaya operasional, investasi aktva tetap dan jumlah asset secara serempak berpengaruh signifikan terhadap likuiditas. Pinjaman yang diberikan merupakan variabel yang paling dominan mempengaruhi penurunan likuiditas Bank Pembangunan Daerah (BPD).Hal ini disebabkan karena sejumlah pinjaman yang diberikan porsi kredit macet sebesar 24.74%, sehingga aliran kas masuk yang berupa cicilan pokok dan penerimaan bunga terganggu. Hal ini tentunya akan mempengaruhi penurunan likuiditas BPD.

Puteri (2006), dalam penelitian ini peneliti berusaha untuk mengetahui pengaruh tabungan dan deposito terhadap tingkat rentabilitas di Bank Mandiri, BNI dan BRI.Variabel bebas dalam penelitian ini adalah tabungan dan deposito dan variabel tak bebas adalah tingkat rentabilitas. Hasil penelitian menunjukkan bahwa tabungan dan deposito sebagai dana mahal memiliki pengaruh yang signifikan terhadap tingkat rentabilitas. Ramadianti (2007) melakukan penelitian untuk menemukan pengaruh antara simpanan masyarakat, jumlah pinjaman yang diberikan dan investasi pada aktiva tetap terhadap likuiditas bank umum yang go public di Bursa Efek Jakarta (BEJ). Variabel yang digunakan dalam penelitian ini adalah kombinasi dari beberapa penelitian terdahulu.

Redmonddan Bohnsack (2007), meneliti profitabilitas dari bank dengan kategori ukuran asset yang berbeda. Profitabilitas dalam penelitian ini diukur dengan menggunakan ROE (Return on Equity).Dua analisis diimplementasikan. Pertama, melakukan tes terhadap ROE untuk menentukan apakah ada perbedaan statistik dalam profitabilitas. Kemudian, membuat sebuah model regresi sederhana, dengan menggunakan variabel tiruan untuk mewakili ukuran asset.Hipotesisnya menekankan bahwa ada perbedaan statistik terhadap profitabilitas dari bank-bank yang berbeda ukuran.Penelitian ini mengindikasikan bahwa ukuran dari sebuah bank ternyata memiliki pengaruh terhadap profitabilitasnya.Sufian dan Chong (2008), mengindikasikan bahwa semua variabel yang terkait dengan bank memiliki dampak yang signifikan secara statistik terhadap profitabilitas bank.Hasil penelitian ini juga mengindikasikan bahwa ukuran, risiko kredit dan perilaku pengeluaran berkorelasi secara negatif dengan profitabilitas bank, sementara pendapatan non bunga dan kapitalisasi memiliki dampak yang positif. Selama periode yang diteliti, hasilnya mengindikasikan bahwa inflasi memiliki dampak negatif terhadap profitabilitas, sedangkan dampak pertumbuhan ekonomi, supply uang dan kapitalisasi pasar modal tidak menjelaskan secara signifikan terhadap variasi yang menyebabkan profitabilitas bank.

Sufian dan Habibullah (2009), dari penelitian ini mengindikasikan bahwa karakteristik spesifik bank, khususnya intensitas pinjaman, risiko kredit dan biaya memiliki dampak yang positif dan signifikan terhadap performa bank, sementara pendapatan non bunga menunjukkan hubungan yang negatif dengan profitabilitas bank. Hasil penelitian ini mengindikasikan bahwa ukuran sebuah bank memiliki dampak negatif terhadap ROAA (*return on average assets*) dan NIM (*net interest margin*), sedangkan untuk dampak indikator makro ekonomi, disimpulkan bahwa variabel-variabel yang digunakan tidak memiliki dampak yang signifikan terhadap profitabilitas bank, kecuali inflasi yang memiliki hubungan negatif dengan profitabilitas.

METODE PENELITIAN

Penelitian ini menggunakan teknik dokumentasi sebagai teknik pengumpulan data, menurut Supomo (2002:86) teknik ini hanya memindahkan data dari sumber atau dokumen. Variabel dependen atau variabel terikat, merupakan variabel yang dipengaruhi atau yang menjadi akibat karena adanya variabel bebas.Variabel dependen (Y) dalam penelitian ini adalah tingkat rentabilitas dan likuiditas bank. Dalam mengukur tingkat rentabilitas dengan menggunakan pendekatan melalui Return On Assets (ROA), Return On Equity (ROE), dan Net Interest Margin (NIM), dalam penelitian tingkat likuiditas bank dengan menggunakan pendekatan Loan to Deposit Ratio (LDR) dan Reserve Requirement (RR). Variabel bebas merupakan variabel yang mempengaruhi atau yang menjadi sebab-sebab perubahan timbulnya variabel terikat. Variabel bebas (X) pada penelitian ini adalah dana pihak ketiga yang berupa tabungan, deposito dan giro. Penelitian ini dilakukan di tiga bank Bank Mandiri, BNIdan BCA selama periode dengan menggunakan regresi linier sederhana.

HASIL DAN PEMBAHASAN

Bank Mandiri

Analisis regresi linear sederhana ini digunakan untuk mengetahui sejauhmana pengaruh variabel dana pihak ketiga terhadap variabel rentabilitas dan likuiditas. Koefisien regeresi dana pihak ketiga, rentabilitas dan likuiditas Bank Mandiriseperti pada Tabel 1 dan Tabel 2.

Tabel 1. Koefisien Regresi Rentabilitas Bank Mandiri

Variabel	a	b	t hitung	Sig
ROA	0,073	$3{,}986 \times 10^{-9}$	2,794	,014
ROE	0,589	$4{,}768 \times 10^{-8}$	2,751	,016
NIM	0,496	$1{,}090 \times 10^{-8}$	2,962	,010

Tabel 2. Koefisien Regresi Likuiditas Bank Mandiri

Variabel	a	b	t hitung	Sig
LDR	78,360	$-1{,}045 \times 10^{-7}$	-6,305	,000

RR	9,405	1,172 x 10^{-8}	2,344	,034

Untuk variabel DPK diperoleh nilai signifikansi 0,014 untuk ROA, 0,016 untuk ROE, dan 0,010 untuk NIM. Hasil tersebut menunjukkan bahwa untuk variabel DPK berpengaruh secara signifikan terhadap ROA, ROE, dan NIM pada Bank Mandiri, dengan kata lain tingkat rentabilitas berpengaruh terhadap dana pihak ke tiga. Untuk melihat pengaruh variabel LDR dan RR terhadap DPK dapat dilihat dari signifikansi LDR sebesar 0,000 dan RR sebesar 0,034, artinya kedua variabel tersebut berpengaruh secara signifikan terhadap dana pihak ke tiga.

Berdasarkan hasil pengujian hipotesis bahwa dana pihak ketiga (DPK) berpengaruh secara signifikan terhadap rentabilitas dan likuiditas pada bank Mandiri. Tingkat rentabilitas menggambarkan kemampuan perusahaan dalam menghasilkan laba, pada penelitian ini nilai dana pihak ketiga mempunyai pengaruh yang signifikan terhadap rentabilitas. Semakin tinggi dana pihak ketiga maka semakin tinggi pula laba yang dihasilkan, sebaliknya jika dana pihak ketiga mengalami penurunan maka akan menurun pula laba yang dihasilkan. Dalam hal ini rasio yang digunakan untuk menilai tingkat rentabilitas adalah ROA, ROE dan NIM. Pertumbuhan rasio-rasio tersebut pada bank Mandiri ini tampak stabil sesuai dengan pertumbuhan yang stabil pula dari dana pihak ketiga. Dalam arti adanya pergerakan dana pihak ketiga yang meningkat ataupun menurun akan mengakibatkan ROA, ROE dan NIM yang meningkat ataupun menurun. Dana pihak ketiga pada bank Mandiri memiliki pengaruh yang paling signifikan terhadap Net Interest Margin (NIM) jika dilihat dari pertumbuhannya dibandingkan dengan ROA dan ROE. Pertumbuhan dana pihak ketiga dari tahun 2005 sampai dengan 2008 cukup signifikan setiap triwulannya, dikarenakan pengelolaan dana yang cukup baik sehingga dapat dinilai kinerja bank Mandiri dalam tingkat yang baik pula dan berdampak kepada tingkat keuntungan yang diperoleh.

Dana pihak ketiga juga mempunyai pengaruh yang signifikan terhadap likuiditas bank Mandiri. Dalam hal ini tingkat likuiditas dinilai dari rasio LDR dan RR, dan sesuai dengan yang ditentukan oleh BI bahwa batas aman suatu bank dikatakan likuid jika LDR < 110% dan GWM suatu bank sebesar 8% dan Mandiri memenuhi standar tersebut. Berdasarkan data yang didapat pertumbuhan dana pihak ketiga yang meningkat ataupun menurun mengakibatkan LDR menurun ataupun meningkat. Tingkat likuiditas yang dinilai berdasarkan Reserve Requirement Mandiri pada BI sudah memenuhi standar bahkan Mandiri memiliki excess reserve yang cukup untuk menjadikan Mandiri adalah bank yang likuid, yang berarti pula dana pihak ketiga dalam hal ini sebagai dana untuk memenuhi standar likuiditas mempunyai peranan yang penting untuk menentukan nilai dari RR tersebut.

Bank BNI

Pengaruh rentabilitas yang diukur dari ROA, ROE, dan NIM terlihat pada Tabel 3, masing-masing tingkat signifikansi adalah 0,025, 0,007, dan 0,031. Hal ini mengindikasikan bahwa tingkat rentebelitas berpengaruh signifikan terhadap dana pihak ke tiga pada Bank BNI. Sementara itu untuk melihat pengaruh tingkat likuiditas yang diukur dengan LDR dan RR ternyata hanya variabel LDR yang signifikan terhadap dana pihak ke tiga yaitu sebesar 0,035 tingkat signifikansinya.

Tabel 3. Koefisien Regresi Rentabilitas Bank BNI

Variabel	a	b	t hitung	Sig
ROA	-0,895	$1{,}510 \times 10^{-8}$	2,508	,025
ROE	-17,368	$2{,}421 \times 10^{-7}$	3,157	,007
NIM	-2,482	$4{,}706 \times 10^{-8}$	2,398	,031

Tabel 4. Koefisien Regresi Likuiditas Bank BNI

Variabel	**a**	**b**	**t hitung**	**Sig**
DR	30,353	$2{,}168 \times 10^{-7}$	2,330	,035
RR	12,834	$-6{,}731 \times 10^{-9}$	-0,319	,755

Berdasarkan hasil pengujian hipotesis bahwa dana pihak ketiga (DPK) berpengaruh secara signifikan terhadap rentabilitas dan likuiditas pada BNI. Pada penelitian ini nilai dana pihak ketiga mempunyai pengaruh yang signifikan terhadap rentabilitas. Semakin tinggi dana pihak ketiga maka semakin tinggi pula laba yang dihasilkan, sebaliknya jika dana pihak ketiga mengalami penurunan maka akan menurun pula laba yang dihasilkan. Pertumbuhan dana pihak ketiga yang meningkat ataupun menurun akan mengakibatkan ROA, ROE dan NIM yang meningkat ataupun menurun. Pada BNI dana pihak ketiga berpengaruh sangat signifikan terhadap ROE jika dibandingkan dengan rasio rentabilitas lainnya yaitu ROA dan NIM.

Dana pihak ketiga juga mempunyai pengaruh yang signifikan terhadap likuiditas BNI. Dalam hal ini tingkat likuiditas dinilai dari rasio LDR dan RR, dan sesuai dengan yang ditentukan oleh BI bahwa batas aman suatu bank dikatakan likuid jika LDR < 110% dan GWM suatu bank sebesar 8% dan BNI memenuhi standar tersebut. Berdasarkan data yang didapat pertumbuhan dana pihak ketiga yang meningkat ataupun menurun mengakibatkan LDR menurun ataupun meningkat. Tingkat likuiditas yang dinilai berdasarkan reserve requirement BNI pada BI sudah memenuhi standar bahkan BNI memiliki excess reserve yang cukup untuk menjadikan BNI adalah bank yang likuid. Namun dana pihak ketiga tidak berpengaruh signifikan terhadap Reserve Requirement BNI, kondisi ini dikarenakan pertumbuhan dana pihak ketiga tidak sebanding dengan pertumbuhan RR yang setiap triwulannya. Berdasarkan data yang didapat RR cenderung meningkat sedangkan dana pihak ketiga adanya peningkatan dan penurunan.

Bank BCA

Dari ke proxi untuk rentabilitas seperti pada Tabel 5 ada dua variabel yang signifikan berpengaruh terhadap dana pihak ke tiga pada Bank BNI yaitu variabel ROE dan NIM dengan tingkat signifikansi masing-masing sebesar 0,025 dan 0,010. Proxi untuk likuiditas LDR dan RR terhadap dana pihak ke tiga keduanya signifikan masing-masing tingkat signifikansi 0,000 dan 0,040, dengan demikian berarti tingkat likuiditas berpengaruh signifikan terhadap dana pihak ke tiga.

Tabel 5. Koefisien Regresi Rentabilitas Bank BNI

Variabel	a	b	t hitung	Sig
ROA	-0,167	$1{,}250 \times 10^{-8}$	1,650	,121
ROE	-3,567	$1{,}108 \times 10^{-7}$	2,509	,025
NIM	-2,447	$3{,}678 \times 10^{-8}$	3,002	,010

Tabel 6. Koefisien Regresi Likuiditas Bank BNI

Variabel	a	b	t hitung	Sig

LDR	12,560	1,873 x 10^{-7}	5,783	,000
RR	7,058	3,715 x 10^{-8}	2,259	,040

Berdasarkan hasil pengujian hipotesis bahwa dana pihak ketiga (DPK) berpengaruh secara signifikan terhadap rentabilitas dan likuiditas pada BCA. Tingkat rentabilitas menggambarkan kemampuan perusahaan dalam menghasilkan laba, dan menilai efisiensi kinerja pada suatu bank. Pada penelitian ini nilai dana pihak ketiga mempunyai pengaruh yang signifikan terhadap rentabilitas. Semakin tinggi dana pihak ketiga maka semakin tinggi pula laba yang dihasilkan, sebaliknya jika dana pihak ketiga mengalami penurunan maka akan menurun pula laba yang dihasilkan. Dalam hal ini rasio yang digunakan untuk menilai tingkat rentabilitas adalah ROA, ROE dan NIM. Pertumbuhan rasio-rasio tersebut pada BCA ini tampak stabil sesuai dengan pertumbuhan yang stabil pula dari dana pihak ketiga. Dalam arti adanya pergerakan dana pihak ketiga yang meningkat ataupun menurun akan mengakibatkan ROE dan NIM yang meningkat ataupun menurun, dan dana pihak ketiga dari BCA memiliki pengaruh sangat signifikan terhadap Net Interest Margin (NIM). Pertumbuhan dana pihak ketiga dari tahun 2005 sampai dengan 2008 cukup signifikan setiap triwulannya, dikarenakan pengelolaan dana yang cukup baik sehingga dapat dinilai kinerja BCA dalam tingkat yang baik pula dan berdampak kepada tingkat keuntungan yang diperoleh. Namun pada hasil penelitian ini ditemukan bahwa dana pihak ketiga tidak berpengaruh secara signifikan terhadap ROA.

Dana pihak ketiga juga mempunyai pengaruh yang signifikan terhadap likuiditas bank BCA. Dalam hal ini tingkat likuiditas dinilai dari rasio LDR dan RR, dan sesuai dengan yang ditentukan oleh BI bahwa batas aman suatu bank dikatakan likuid jika LDR < 110% dan GWM suatu bank sebesar 8% dan BCA memenuhi standar tersebut. Berdasarkan data yang didapat pertumbuhan dana pihak ketiga yang meningkat ataupun menurun mengakibatkan LDR menurun ataupun meningkat. Tingkat likuiditas yang dinilai berdasarkan reserve requirement BCA pada BI sudah memenuhi standar bahkan BCA memiliki excess reserve yang cukup untuk menjadikan BCA adalah bank yang likuid, yang berarti pula dana pihak ketiga dalam hal ini sebagai dana untuk memenuhi standar likuiditas mempunyai peranan yang penting untuk menentukan nilai dari RR tersebut.

Dari hasil pembahasan penelitian yang sudah penulis jabarkan pada sub bab sebelumnya, dimana dana pihak ketiga mempunyai pengaruh yang signifikan terhadap dan rentabilitas dengan menggunakan analisis rasio yaitu return on assets (ROA), return on equity (ROE) dan net interest margin (NIM) serta likuiditas bank dengan menggunakan rasio Loan to Deposit ratio (LDR) dan Reserve Requirement (RR) pada bank Mandiri, BCA dan BNI. Hasil ini tidak jauh berbeda dengan hasil penelitian Solikah Nurwati (2000) dan Intan Cynara (2006), dimana simpanan masyarakat memiliki pengaruh dominan terhadap likuiditas dan rentabilitas bank, sedangkan penelitian Willie J. Redmond, Craig L. Bohnsack (2007) yang meneliti profitabilitas dari bank dengan kategori ukuran asset yang berbeda dimana profitabilitas dalam penelitian ini diukur dengan menggunakan ROE (Return on Equity). Penelitian ini mengindikasikan bahwa ukuran dari sebuah bank ternyata memiliki pengaruh terhadap profitabilitasnya. Hasil penelitian tersebut sedikit banyak memberi gambaran terhadap penelitian ini dimana tiga bank besar juga diambil sebagai bahan penelitian dalam mengukur tingkat rentabilitas, sehingga dapat diambil benang merah bahwa ukuran bank mampu juga memberikan pengaruh terhadap rentabilitas bank itu sendiri. Penelitian lain yang diambil Fadzlan Sufian, Muzafar Shah Habibullah (2008) lebih menyorot dampak intensitas pinjaman, risiko kredit, dan biaya terhadap performa bank, dalam hal ini adalah rentabilitas, sedangkan dalam hasil penelitian yang lain Fadzlan Sufian (2009) menjelaskan bahwa pendapatan non bunga dan kapitalisasi memiliki dampak yang positif terhadap profitabilitas bank.

SIMPULAN DAN SARAN

Berdasarkan hasil analisis data dan pembahasan yang telah dilakukan diperoleh kesimpulan sebagai berikut:

1. Variabel likuiditas yang diukur dengan besarnya *Investing policy ratio* dan risiko sistematis mempunyai pengaruh positif. Artinya jika Likuiditas menaik maka return saham pun akan menaik. Dan jika Risiko Sistematis menaik maka return saham pun akan naik.
2. Secara bersamaan, variabel (Likuiditas dan Risiko sitematis) mempunyai pengaruh yang tidak signifikan terhadap Return Saham.
3. Secara individual, variabel yang berpengaruh adalah Risiko sitematis, sedangkan variabel Likuiditas tidak mempunyai pengaruh yang signifikan.
4. Proporsi pengaruh secara simultan variabel Likuiditas dan Risiko sitematis adalah sebesar 23,7%, sedangkan 76,3% dijelaskan oleh variabel lain.

Untuk investor dalam melakukan investasi disarankan selain melakukan analisa pengaruh Likuiditas dan Risiko sitematis didalam memperkirakan pergerakan Return Saham, investor juga harus menganalisa faktor-

faktor Kondisi fundamental perusahaan, Hukum permintaan dan penawaran, Suku bunga, Kurs valas, dana asing di bursa, *news and rumors*, deviden, laba, dan faktor lainnya. penelitian selanjutnya dalam melakukan pengumpulan data mungkin perlu dilengkapi dengan variabel lainnya seperti profitabilitas, leverage, solvabilitas. Hal ini mengingat betapa pentingnya peran kelangsungan sebuah perbankan sebagai penyalur uang, penyedia lapangan pekerjaan dan pemasok pajak ke Negara.

DAFTAR PUSTAKA

Indriantoro & Supomo. (2002). *Metodologi Penelitian Bisnis Untuk Akuntansi dan Manajemen*. Yogyakarta: BPFE-UGM.

Muchdarsyah, Sinungan. (1991). *Uang dan Bank*. Jakarta: Rineka Cipta.

Nurwati, Sholikah. (2000). *Analisis pengaruh variable simpanan masyarakat, pinjaman yang diberikan, jumlah nasabah, cadangan primer, biaya operasional, investasi aktiva tetap dan jumlah asset secara serempak berpengaruh signifikan terhadap likuiditas (dengan menggunakan pendekatan Loan to Deposit Ratio/LDR) Bank Pembangunan Daerah (BPD) di Kalimantan Tengah*. Tesis, Program Pascasarjana, Universitas Brawijaya. Malang.

Puteri, Intan Cynara Valentina. (2006). *Pengaruh Tabungan dan Deposito Terhadap Tingkat Rentabilitas Di Bank BNI, BRI dan Mandiri Periode 2000-2003*. Fakultas Bisnis dan Manajemen Universitas Widyatama. Bandung.

Ramadianti, Dwi Andika. (2007). *Pengaruh Simpanan Masyarakat, Jumlah Pinjaman Yang Diberikan dan Investasi pada Aktiva Tetap Terhadap Likuiditas Bank Umum yang Go Public di BEJ Periode 2003*-(2005). Fakultas Ekonomi Brawijaya. Malang.

Redmond, Willie J. & Craig L. Bohnsack. (2007). “Bank Size and Profitability: One Nation, One Bank?” *International Journal of Business Research*, 7 (1), 162.

Sufian, Fadzlan & Muzafar Shah Habibullah. (2009). “Determinants of Bank Profitability in a Developing Economy: Empirical Evidence From Bangladesh:” *Journal of Business Economics and Management* 10(3), 207-217.

Sufian, Fadzlan & Royfaizal Razali Chong. (2008). “Determinants of Bank Profitability in a Developing Economy: Empirical Evidence from Philippines” *Asian Academy of Management Journal of Accounting and Finance (AAMJAF),* 4 (2), 91-112

Sun’an, Muammil & David Kaluge. (2007). “Faktor Faktor Yang Mempengaruhi Penyaluran Kredit Investasi di Indonesia.” *Jurnal Keuangan dan Perbankan*, 11(2), 347 – 36.

THE INFLUENCE OF FIRM SIZE, CAPITAL ADEQUACY, AND PROFITABILITY ON LIQUIDITY RISK MANAGEMENT OF INDONESIA ISLAMIC BANKING

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Abstract

One of the problems facing sharia banking is liquidity risk management. Liquidity risk management in Islamic banking faces greater challenges because they need to be in accordance with Sharia. This research aims to determine the influence of firm size, capital adequacy, and profitability with return on asset and return on equity as proxies, on Indonesian Islamic banking liquidity risk management which is listed in Bank Indonesia in the period 2010-2014. This research uses panel data from eleven Islamic banks. The dependent variable in this research is liquidity risk and the independent variables are firm size, capital adequacy, and profitability with return on asset and return on equity as proxies. The method of analysis in this research uses descriptive statistics, regression model selection, classic assumption test, and hypothesis test. The results show that firm size, capital adequacy, and profitability with return on asset and return on equity as proxies simultaneously affect liquidity risk management, where partially return on equity does not affect liquidity risk management.

Keywords*: Capital Adequacy, Firm Size, Islamic Banking, Liquidity Risk Management, Profitability*

INTRODUCTION

Indonesia is a country that applies dual-banking system; Islamic banking and conventional banking. Both of them together support the finance capability of the sectors of national economy which the implementation is set in a range of legislation. The difference between the two is that conventional banking operates based on interest fee, while Islamic banking system is based on profit and loss sharing. By the end of 2015, there are 12 Islamic Banks, followed by 22 Islamic Banking Units and 161 Islamic Rural Banks with 433 offices across the country. As its function, Islamic banking also faces variety of risks. One of them is liquidity risk. Regarding the provision of liquidity, banks receive funds from depositors and distribute it to the real sector, and at the same time provide liquidity for any withdrawal of deposits. It's consistent with intermediation theory which mention that two of the most important reasons for the existence of financial institutions, especially banks, is the provision of liquidity and financial services. However, banks' role in transforming short-term savings into long-term loans makes them inherently vulnerable to liquidity risk (Bank for International Settlements (BIS) 2008 b: 1). In Indonesia, risk profile assessment has been regulated in Bank Indonesia Regulation (PBI) No. 13/1/PBI/2011 on the Assessment of Commercial Banks. This regulation is known as RGEC (Risk Profile, Good

Corporate Governance, Earnings and Capital) method. As for Islamic banking, Islamic Financial Services Board (IFSB) has published two references to manage liquidity risk in the contemporary business environment. These are: (i) the Guiding Principles of Risk Management for Institutions Offering Islamic Financial Services Only and (ii) the Technical Note on Issues in Strengthening Liquidity Management of Institutions Offering Islamic Financial Services: the Development of Islamic Money Markets.

According to Ariffin (2012), bank customer rationality in the conventional sense in which the motive for profit applies in every economic transaction can result in a withdrawal of liquidity from Islamic banks when returns in conventional partners are higher. Islamic banking might also experience serious liquidity mismatch when the market interest rate changes due to the changing economic environment. For example, in a high interest rate environment, Islamic banking experiences serious liquidity mismatch when assets (financing) tend to be more attractive than conventional bank loans, while Islamic banking deposits are relatively less attractive compared to conventional bank deposits. Several problems that cause liquidity risk faced by this industry are investment motive depositors, underdeveloped financial markets, limited banking instruments, fragility in macroeconomic problems, and others. (Ismal, 2008: 9-12).

Currently liquidity risk in Indonesia Islamic banking is still low. That is because the amount of third party funds exceeds the financing. However, that does not mean that Indonesia Islamic banking is safe from liquidity risk. This can be seen from the high number of current accounts that can be withdrawn at any time by depositors, bans on the sale, and purchase of receivables (Bai 'al-Dayn) in Islamic jurisprudence, as well as slow progress in the provision of fast funds sharia instruments.

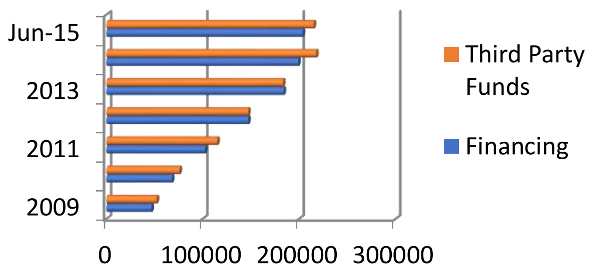

Figure 1.1 the Comparisons between Third Party Funds and Financing

Just like conventional banking which has interbank call money, Islamic banking also has Islamic money market namely PUAS *(Pasar Uang Antar Bank Berdasarkan Prinsip Syariah)* and central bank Islamic monetary instrument (SBIS). However, unlike money market activities in the conventional money market, PUAS activities are not very active because internal liquidity management is quite robust and SBIS is not the main target of Islamic banking financing. This shows the ineffectiveness of Islamic monetary instrument to influence liquidity but on the other hand the minimum placement in SBIS indicates the intensive bank financing to the real sector (Ismal, 2011: 11-9). Therefore, based on the background that has been described above, this research highlights which factor that has the most significant effect on liquidity risk management of Indonesian Islamic banking in order to create more sound and stable financial performance.

LITERATURE REVIEW

Indonesian Islamic Banking

Job (2011) describes Islamic Financial Institutions (IFIs) functioning as intermediaries between surplus and deficit units. However, the "interest" instrument is replaced by a series of other instruments. While conventional banks generally pay and burden interest in operational activities, Islamic financial institutions must avoid interest and use more than one main instruments as the basis for intercession activities. The most striking difference is that the risk of Islamic banking remains in ownership, so IFI shares profits or losses arising from investments and profits from trading activities and their leases as a result of the risks and obligations taken and adds real value to business activities. They mobilize savings on the distribution of profits or losses and to a certain extent based on *Wakalah* who get service fees or agency costs that have been set.

The same as most of the Muslim countries, Indonesia has a progressive Islamic banking industry which relies on the performance of the real sector. The existence of Islamic banks in fact continues to strengthen, both in terms of institutional and operational basis. This can be seen since the enactment of banking Law number 7 of 1992, as amended by Law number 10 of 1998 which allows the implementation of Islamic banking along with conventional ones. The existence of Islamic banks is even further strengthened by the central bank Law number 23 of 1999 as amended by Law number 3 of 2004 stating that the country operates sharia and conventional monetary operations (Ismal, 2011).

Indonesian Islamic banking has several engines of growth that have triggered such industrial developments, especially the large Muslim population, support from governments, banking regulators, parliaments and Islamic scholars. However, despite robust industrial performance, there are several challenges facing the industry to move forward. The first challenge is a small market share that limits the operations of Islamic banks, Islamic financial market activities, and industrial contributions to the economy. Second is the lack of human resources that may not fully meet the demand for highly skilled and highly educated employees. And third is the lack of product development to facilitate various Islamic financial transactions (Ismal, 2011).

Grand Theory

a) The Theory of Financial Intermediation

The main function of banks is financial intermediaries, which is the process of purchasing excess funds from the business sector, government and households to be distributed to the economic unit deficit. The financial intermediation function arises as a result of high monitoring costs, liquidity costs, and price risks due to asymmetric information between the owner of the fund (household/net saver) and users of corporate funds (net company/borrower) and so we need an intermediary capable of accommodating the second need parties (Siringoringo, 2012).

b) The Theory of the Firm

Underlying theoretical basis for arguing that a firm size is related to profitability can be found in the traditional neoclassical view of the firm and the concept known as economies of scale. Economies of scale may occur for various reasons such as financial reasons (large companies can get a better interest rate as well as a better discount rate due to large purchases), organizational reasons (specialization and division of labor), and technical reasons (fixed costs high in a large number of units), etc. In line with this concept, a positive relationship between firm size and profitability is expected (Pervan and Visic: 2012). As profitability is opposed to liquidity, firm size is expected to have a negative relationship with liquidity.

c) Capital Buffer Theory

Capital buffer is the mandatory capital that financial institutions are required to hold in addition to other minimum capital requirements. Capital buffer is the excess capital owned by banks above the minimum determined legally and has a very important role to maintain the stability of the banking sector, especially in countries where banks are the main source of funding. Bank capital buffer is very important to maintain its solvency, and to maintain the possibility of unlimited lending in the economy (Eliskovski, 2013). Capital buffers identified in Basel III reforms include countercyclical capital buffers, which are determined by Basel Committee member jurisdictions and vary according to a percentage of risk weighted assets, and capital conservation buffers, which are built up outside periods of financial stress (Investopedia, http://www.investopedia.com/ terms/c/capital-buffer.asp, February 28th 2016).

d) Trade-Off Between Liquidity and Profitability Theory

The liquidity and profitability goals are contradictory to each other in most decisions which the finance manager takes. If a bank wants to maintain its liquidity position, it must increase the cash reserves. This causes some funds to be idle so that the level of profitability decreases. On the contrary, if a bank wants to achieve great profitability, then the bank must sacrifice liquidity. In addition to this, referring to the risk return theory there is a direct relationship between risk and return. Thus, firms with high liquidity may have low risk and then low profitability. Conversely, firms that have low liquidity may face high results to higher return. Consequently, a firm is required to maintain a balance between liquidity and profitability in its daily operations (Niresh, 2012).

Liquidity Risk Management

Ismal (2011) stated that liquidity risk management in banks is defined as the risk of not being able to fulfill its obligations to depositors or fund an increase in assets at maturity without incurring unacceptable costs or losses. This risk occurs when the depositors collectively decide to withdraw more funds than the bank immediately has on hand (Hubbard, as cited in Ismal, 2011), or when the borrowers fail to meet their financial obligation to the banks. In the other words, liquidity risk occurs in two cases. Firstly, it arises symmetrically to the borrowers in their relationship with the banks, for example when the banks decide to terminate the loans but the borrowers cannot afford it. Secondly, it arrises in the context of the banks' relationships with their depositors, for example, when the depositors decide to redeem their deposits but the banks cannot afford it (Greenbaum and Thakor, as cited in Ismal, 2011). In practice, the banks regularly find imbalances (gaps) between the asset and the liability side that need to be equalized because, by nature, banks accept liquid liabilities but invest in illiquid assets (Zhu, as cited in Ismal, 2011). If a bank fails to balance such a gap, liquidity risk might occur, followed by some undesireable consequences such as insolvency risk, government bailout risk, and reputation risk.

The failure or inefficiency of liquidity of liquidity management is caused by the strength of liquidity pressure, the preparation of a bank's liquid instruments, the banks' condition at the time of liquidity pressure, and the inability of the banks to find internal or external liquid sources. Table 1 lists some internal and external factors in banks that may potentially lead to the liquidity problems.

Table 1 Internal and External Factors Leading to Liquidity Risk Problems

Internal Banking Factors	**External Banking Factors**
High off-balance sheet exposures.	Very sensitive financial markets and depositors.
The banks rely heavily on the short-term corporate deposits.	External and internal economic shocks.
A gap in the maturity dates of assets and liabilities.	Low/slow economic performances.
The banks' rapid asset expansions exceed the available funds on the liability side.	Decreasing depositors' trust on the banking sector.
Concentration of deposits in the short-term tenor.	Non-economic factors (political unrest, etc.).
Less allocation in the liquid government instruments.	Sudden and massive liquidity withdrawals from depositors.
Fewer placements of funds in long-term deposits.	Unplanned termination of government deposits.

Source: The Indonesian Islamic Banking: Theory and Practices (2011:38)

Liquidity Risk in Islamic Banking

According to the IFSB, liquidity risk is the potential loss of Islamic banks due to their inability to meet liabilities or finance an increase in assets at maturity or burdened with losses and the cost beyond capability. Liquidity risk can arise because of problems on both the liability and asset sides. Some examples of the problems from the former are: (i) limited deposit products restricting the financing activities of Islamic banks, (ii) concentration of funds in short-term deposit tenors, (iii) dependency on certain big depositors, and (iv) domination of the return oriented (rational) depositors who seek to maximize their short-term profit, switch the deposits/banks for higher profit, and are unaware of the prohibition of interest. These are liquidity problems on the liability side that may create an asset-liability mismatch. In Ismal (2011:59), Ismal (2010:228-229) stated that meanwhile on the asset side, liquidity problems might come about when there are disturbances in both certainty and uncertainty financing. Certainty financing, which consists of trade-based contracts generating regular incomes for Islamic banks, can be infected by default risk, commodity risk, or asset value volatility risk. For example, (i) Murabahah financing is extremely sensitive because of its short-term deferred payment, (ii) Ijarah has various problems in its leased asset, whilst (iii) risk in Salam and Istisna arise in instances of non-deliverable object risk and/or the falling of the price objects.

Also in Ismal (2011:59), Ismal (2010:232) stated on the other hand, uncertainty financing which consists of investment-based contracts generating unpredictable incomes for Islamic banks, depends on business life cycles such as industrial performance, good deeds of the entrepreneurs, and non-economic environtments. Fortunately, Islamic banking is excused from the interest rate risk as it operates based on Sharia values and principles. Nontheless, interest rate risk may still indirectly affect Islamic banks because Islamic banks operate in the same playground as the conventional banks.

Relationship Between Variables

In Arifin (2013), it is described the influence of firm size on liquidity is as follows. Assets are used for operational activities of the company. Semakin besar aset diharapkan semakin besar hasil operasi perusahaan. Research conducted by Akhtar (2011) on liquidity risk management between Islamic banks and conventional banks in Pakistan has resulted in findings that firm size has a positive relationship but not significant to liquidity in conventional banks and Islamic banks. Ahmed (2011) and Iqbal (2012) in their research obtained results that the bank's size were significantly and positively related to liquidity.

Capital Adequacy Ratio is the ratio that indicates the amount of owned capital adequacy of a bank. The more efficient use of capital for operational activities resulted in bank capable to increase credit provision so that it will reduce the level of bank risk (Arifin, 2013). The higher the CAR, the better condition of a bank will be. Akhtar (2011) research found that CAR had a significant positive relationship at the conventional banks and had not significant in Islamic banks. A similar research conducted by Iqbal (2012) with the findings CAR positive and significant impact on liquidity in conventional banks and Islamic banks (Arifin, 2013).

ROA shows the effectiveness of the company in generating profits by optimizing its assets which will affect its liquidity. The greater the ROA of a bank, the greater that bank's profit level will be achieved and the better the bank's position in its use of its assets (Arifin, 2013). The results of the research that has been done by Akhtar (2011) is that ROA is positive to liquidity but not significant in conventional banks and significant in Islamic banks. Similar studies have also been performed by Iqbal (2012), and the results of the research showed that ROA has positive and significant impact on liquidity in conventional banks and Islamic banks (Arifin, 2013).

Business rentability shows a comparison between the net profits after tax available to shareholders by the amount of company's capital (Arifin, 2013). Akhtar (2011) found that ROE has insignificant and negative effect on liquidity in conventional banks, but significant in Islamic banks. While Iqbal (2012) found that ROE had positive and significant effect on liquidity (Arifin, 2013)

RESEARCH METHOD

This research used quantitative secondary panel data. The data obtained from the publication of Islamic banking annual financial statements for 2010-2014, which is registered in Bank Indonesia through the central bank official website based on these criteria:

1. Islamic Banking registered at Bank Indonesia.
2. Banks used as the sample is still in operation during the period of research.
3. Banks studied have already become Islamic banks in period of the research.
4. Banks surveyed publish annual financial statements (December 31) full 2010-2014

The dependent variable on this research is liquidity risk. The independent variables in this research are firm size, capital adequacy ratio (CAR), return on assets (ROA), and return on equity (ROE). Below are the formulas used for each variable.

a) Liquidity Risk

According to SEBI no. 13/23 / PBI / 2011, liquidity risk is the risk due to the bank inability to meet its maturing obligations of the fund sources of cash flow and/or high-quality liquid assets that can be pledged, without disrupting the activities and financial condition of the bank.

$$Liquidity\ Risk = \frac{Capital}{Total\ Asset}$$

b) Firm Size

According to Wimelda and Marlinah (2013), firm size is the size of a company where the larger company will be easier to get loans from the outside in form of debt and equity because usually accompanied with a pretty good reputation in public.

c) Capital Adequacy Ratio

According to SEBI No. 6/23 / DPNP dated May 31, 2004, capital adequacy ratio is a comparison between capital and risk weighted assets.

$$CAR = \frac{Tier\ 1\ Capital + Tier\ 2\ Capital}{Risk\ Weighted\ Assets}$$

d) Return on Assets

According to Bank Indonesia Circular Letter No. 3/30/DPNP dated December 14, 2001, calculating ROA is formulated as follows:

$$ROA = \frac{Earning\ Before\ Tax}{Total\ Asset} \times 100\%$$

e) Return on Equity

According to Bank Indonesia Circular Letter No. 3/30 / DPNP dated December 14, 2001, calculating ROE is formulated as follows:

$$ROE = \frac{Earning\ After\ Tax}{Capital} \times 100\%$$

Estimation of the regression model with panel data used in this study using the fixed effect approach. This model allows heterogeneity between subjects by giving each entity a separate interception value (Gujarati, 2012). The term "fixed effect" is used because even though intercepts vary for each subject, but the interception of each entity does not change with time (time invariant). So the model becomes as follows:

$$LQR_{it} = \propto_{1i} + \beta_2 BKS_{it} + \beta_3 CAR_{it} + \beta_4 ROA_{it} + \beta_5 ROE_{it} + u_{it} \ldots\ldots\ldots\ldots (1)$$

The equation model is described as a fixed effect model (FEM) processed using eViews 6. The use of a dummy is done to determine the pattern of liquidity risk in eleven Islamic banks in Indonesia, over a five-year research period, which is thought to be different. This is because of the differences in the characteristics of each bank so that the equations used in this study are as follows:

$$LQR_{it} = \propto_{1i} + \propto_2 D_{2i} + \propto_3 D_{3i} + \ldots + \propto_{11} D_{11i} + \beta_2 BKS_{it} + \beta_3 CAR_{it} + \beta_4 ROA_{it} + \beta_5 ROE_{it} + u_{it} \ldots\ldots\ldots (2)$$

Where:

D1 = BCA Syariah's dummy
D2 = BNI Syariah's dummy
D3 = BRI Syariah's dummy
D4 = Jabar Banten Syariah's dummy
D5 = Maybank Syariah Indonesia's dummy
D6 = Mega Syariah's dummy
D7 = Muamalat Syariah's dummy
D8 = Panin Syariah's dummy
D9 = Syariah Bukopin's dummy
D10 = Syariah Mandiri's dummy
D11 = Victoria Syariah's dummy
$\propto_1$ = intercept
$\propto_2 - \propto_{11}$ = Islamic bank dummy coefficient
$\beta_2 - \beta_5$ = variable coefficient

RESULT AND DISCUSSION

Panel data regression analysis in this study results the representation of appendix 3. Panel data regression analysis is used to see the influence of firm size, ROA, ROE, and CAR on liquidity risk. From processing eviews 6, the following representation of general equations is obtained.

$$\mathbf{LQR = 4.889 - 0.308BKS + 0.002CAR + 11.998ROA - 0.7333ROE}$$

Where:

LQR = Liquidity Risk

BKS = Firm Size

CAR = Capital Adequacy

ROA = Return on Asset

ROE = Return on Equity

The equation model above can be interpreted as the equation from regression analysis which shows that the value of a constant coefficient is stated by assuming the absence of firm size, CAR, ROA, and ROE variables, then the liquidity risk will increase by 4.889. The coefficient of firm size is stated by assuming the absence of other independent variables and increasing the size of the company by 1%, then liquidity risk will decrease by -0.308. The CAR coefficient is stated by assuming the absence of other independent variables and CAR increases by 1%, then liquidity risk will increase by 0.002. The ROA coefficient is stated by assuming the absence of other independent variables and ROA increases by 1%, then liquidity risk will increase by 11,998. The ROE coefficient is stated by assuming the absence of other independent variables and increasing ROE by 1%, then liquidity risk will decrease by -0.7333.

According to Ghozali (2013), the F test basically shows whether all the independent variables included in the regression model simultaneously affect the dependent variable. In this study, the F test is conducted to see whether the variables of firm size, CAR, ROA, and ROE simultaneously affect liquidity risk. From the results of the F test based on appendix 2, the F statistic value is 12.468 and the table F value is 4.53. It can be concluded that F> Fa so that H0 is rejected and H1 is accepted, this means that firm size, CAR, ROA, and ROE simultaneously affect liquidity risk significantly. Based on the results in appendix 2, firm size, CAR, ROA, and ROE have a significant effect on liquidity risk. The value obtained in adjusted R2 is 0.748. This means that 74.8% of the liquidity risk variables can be explained by independent variables including firm size, CAR, ROA and ROE. While 25.2% is explained by other variables not included in the research model.

The Influence of Firm Size on Liquidity Risk

From the results, the data can be seen that the firm size significantly and negatively related to liquidity risk. These results are supported by a research by Abdul (2012), which shows that the relationship between firm size and liquidity were significant and negative in domestic banks and insignificant in foreign banks. However, contrary to the results of this research, Ramzan and Zafar (2014) stated that asset base or firm size had a positive and significant relationship with liquidity risk. This research is supported by Naveed, Muhammad, and Usman (2011), whose results showed that the size of Islamic banks had a positive and statistically significant influence on liquidity risk.

Firm size describes the size of a company where the company will find it easier to get an external loan in the form of debt or equity because usually larger companies come with a good reputation in the eyes of society (Wimelda and Marlinah, 2013). In addition, Joni and Lina (2010) stated that the size of a large company is considered as an indicator that describes the level of risk for investors to invest in the company, because if it has good financial capabilities, it is believed that the company will be able to fulfill all obligations and provide an adequate rate of return for investors.

As in theory of firm, a positive relationship between firm size and profitability is expected (Pervan, and Visic: 2012). As the profitability is in contrary with liquidity, firm size is expected to have a negative relationship with liquidity. So, based on the findings in this study, Islamic banking is considered to be in accordance with theory of firm where it is able to manage its liquidity risk.

The Influence of CAR on Liquidity Risk

From the results it is known that the capital adequacy ratio has no significant effect on liquidity risk. This is similar to Ramzan (2014) who stated that CAR does not have an impact on liquidity risk in Islamic banking. However, the results of this study are different from Iqbal (2012), Akhtar (2011 who stated that CAR has a positive and significant effect on liquidity.

The Influence of ROA on Liquidity Risk

From the results it can be seen that return on assets (ROA) has a positive effect on liquidity risk. This is according to Ariffin (2013) who stated that the greater the ROA of a bank, the greater the profit level reached the bank, the better the position of the bank in terms of asset utilization will be. The results of the research that has been done by Ahmed, Akhtar, Muhammad and Usman (2011) also concluded that ROA has a positive but insignificant effect on conventional banks and a significant effect on Islamic banks liquidity. Similar studies have also been performed by Iqbal (2012), who stated that ROA has positive and significant impact on liquidity in conventional banks and Islamic banks (Ariffin, 2013). Although this is against the trade-off between liquidity and profitability theory, it can be assumed that Islamic banking in Indonesia has idle funds, so that in its operation it does not require a lot of external loans.

According to Ismail (2011:68-69), managing the asset sides based on sharia can be done by three modes of financing contracts, which are: (a) equity-based financing; (b) debt-based financing; and (c) benevolent loans and services. The first examples of the first mode are *Mudarabah* (trustee partnership), *Musharakah* (joint venture), *Muzara'ah* (harvest yield profit-sharing)), and *Musaqah* (plantation management fee, based on certain portion of yield) (Antonio, 1999: 143-155). The examples of the second one are *Murabhah* (cost-plus sale), *Ijarah* (leasing), *Salam* (deferred delivery sale), *Istisna* (manufacture-sale), and *Qardh* (benevolent loan). The examples of the last one are *Wakalah* (opening of letter of credit), *Kafalah* (letter of guarantee), and *Hiwalah* (Obaidullah, 2005: 113-115).

In the Islamic banks' asset management, it is encouraged to: (a) be in accordance with the characteristics of the project and the funds available on deposits; (B) be in accordance with cash flows generated from projects with a payment schedule for profit and loss sharing on the liability side; (C) select business partners through selective due diligence and financing criteria; (D) conduct joint financing with other Islamic banks to share and minimize risks; and (e) establish cooperation with entrepreneurs and parties related to financing activities.

The Influence of ROE on Liquidity Risk

From these results it can be seen that return on equity (ROE) has a negative and not significant effect on liquidity risk of -0.733. This result is consistent with Abdullah and Khan (2012) who stated that return on equity has a negative effect both in domestic banks and in foreign banks. The result of this study is also consistent with Ahmed et al (2011) who found that ROE has a negative and not significant effect in conventional banks, but significant in Islamic banks. From the results it can be seen that ROE fulfill the trade-off between liquidity and profitability theory, where ROE negatively affect liquidity risk. It indicates the provision of capital on Indonesian Islamic banking by the investor which is able to minimize the level of liquidity risk, though on one side overcame profitability.

CONCLUSION AND SUGGESTION

This study uses four independent variables consisting of firm size, capital adequacy ratio, return on assets and return on equity. Four variables are tested whether they have an influence on liquidity risk. The results show that the null hypothesis is rejected in this study; where research on firm size, capital adequacy ratio, return on assets and return on equity simultaneously influence liquidity risk. Of the five independent variables there is one variable that does not have a significant relationship with the dependent variable, namely the capital adequacy ratio.

REFERENCES

Abdullah, Asim., and Khan, Abdul Qayyum. (2012). "Liquidity Risk Management: A Comparative Study between Domestic and Foreign Banks in Pakistan" *Journal of Managerial Sciences*, 6 (1), 61-72

Ahmed, Naveed., Akhtar, Muhammad Farhan., and Usman, Muhammad. (2011). "Risk Management Practices and Islamic Banks: An Empirical Investigation from Pakistan", *Interdisciplinary Journal of Research in Business*, 1(6), 50-57

Ariffin, Noraini Mohd. (2012). "Liquidity Risk Management and Financial Performance in Malaysia: Empirical Evidence from Islamic Banks", *Aceh International Journal of Social Sciences*, 1(2), 77-84

Ayub, Muhammad. (2007). *Understanding Islamic Finance: A-Z Keuangan Syariah*. Jakarta: PT. Gramedia Pustaka Utama.

Eliskovski, Milan. (2014). "The Determinants of Capital Buffer in the Macedonian Banking Sector", *JCEBI*, 1(2), 19-33

Ghozali, Imam. (2013). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 21 Update PLS Regresi*, edisi 7. Semarang: Badan Penerbit Universitas Diponegoro

Gujarati, Damodar N., and Porter Dawn C. (2012). *Dasar-Dasar Ekonometrika*. Jakarta: Salemba Empat.

Iqbal, Anjum. (2012). "Liquidity Risk Management: A Comparative Study between Conventional and Islamic Bank of

Pakistan", *Global Journal of Management and Business Research*, 12 (5), 54-64

Ismal, Rifki. (2011). *The Indonesian Islamic Banking: Theory and Practices*. Depok: Gramedia Publishing

Niresh, J. Aloy. (2012). "Trade-Off between Liquidity and Profitability: A Study of Selected Manufacturing Firms in Sri Lanka", *International Refereed Research Journal*, 3(4)

Obaidullah, Mohammed. (2015). "Islamic Risk Management: Towards Greater Ethics and Efficiency", *International Journal of Islamic Financial Services*, 3(4)

Pervan, Maja., and Visic, Josipa. (2012). "Influence of Firm Size on Its Business Success" *Croatian Operational Research Review*, Vol. 3, 213-223

Ramzan, Muhammad., and Zafar, Muhammad Imran. (2014). "Liquidity Risk Management in Islamic Banks: A Study of Islamic Banks of Pakistan", *Interdisciplinary Journal of Contemporary Research in Business*, 5(12), 199-215

Siringoringo, Renniwaty. (2012). "Karakteristik dan Fungsi Intermediasi Perbankan Indonesia", *Buletin Ekonomi Moneter dan Perbankan,* July 2012, 61-83.

Wimelda, L., & Marlinah, A. (2013). *Variabel-variabel yang mempengaruhi struktur modal pada perusahaan publik sektor non keuangan.* Media Bisnis, 5(3), 200–213

APPENDIX

1. Descriptive Statistics

Date: 03/13/16

Time: 18:20

Sample: 2010 2014

	LQR	BKS	CAR	ROA	ROE
Mean	0.247753	15.42788	2.525837	0.014565	0.084681
Median	0.104869	15.36203	0.167296	0.010376	0.059470
Maximum	3.440819	18.01934	124.4306	0.137455	0.583949
Minimum	0.009472	11.37808	0.013034	-0.018756	-0.060390
Std. Dev.	0.500335	1.537837	16.74459	0.021966	0.102277
Skewness	5.246130	-0.337557	7.208987	3.794563	2.592600
Kurtosis	32.42300	3.148023	52.98625	20.57330	12.32603
Jarque-Bera	2236.209	1.094704	6202.402	839.7023	260.9318
Probability	0.000000	0.578480	0.000000	0.000000	0.000000
Sum	13.62641	848.5336	138.9211	0.801081	4.657466
Sum Sq. Dev.	13.51808	127.7069	15140.58	0.026055	0.564876
Observations	55	55	55	55	55

2 Regression Analysis

Dependent Variable: LQR?
Method: Pooled Least Squares
Date: 03/13/16 Time: 12:02
Sample: 2010 2014
Included observations: 5
Cross-sections included: 11
Total pool (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.889442	1.033562	4.730672	0.0000
BKS?	-0.308420	0.065982	-4.674291	0.0000
CAR?	0.001556	0.002307	0.674539	0.5038
ROA?	11.99790	2.192380	5.472546	0.0000
ROE?	-0.733317	0.428936	-1.709620	0.0951
Fixed Effects (Cross)				
_BCA--C	-0.002262			
_BNI--C	0.156895			
_BRI--C	0.231114			
_JBS--C	-0.119287			
_MSI--C	-0.277001			
_MGS--C	-0.010832			
_MUS--C	0.547827			
_PNS--C	-0.217720			
_SBK--C	-0.131635			
_SYM--C	0.570644			
_VCS--C	-0.747743			

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.813565	Mean dependent var	0.247753
Adjusted R-squared	0.748313	S.D. dependent var	0.500335
S.E. of regression	0.251010	Akaike info criterion	0.300352
Sum squared resid	2.520239	Schwarz criterion	0.847807
Log likelihood	6.740314	Hannan-Quinn criter.	0.512057
F-statistic	12.46802	Durbin-Watson stat	1.677889
Prob(F-statistic)	0.000000		

3. Representation

Estimation Command:
=====================
LS(CX=F,COV=CXWHITE) LQR? BKS? CAR? ROA? ROE?
Estimation Equations:
=====================
LQR_BCA = C(6) + C(1) + C(2)*BKS_BCA + C(3)*CAR_BCA + C(4)*ROA_BCA + C(5)*ROE_BCA
LQR_BNI = C(7) + C(1) + C(2)*BKS_BNI + C(3)*CAR_BNI + C(4)*ROA_BNI + C(5)*ROE_BNI
LQR_BRI = C(8) + C(1) + C(2)*BKS_BRI + C(3)*CAR_BRI + C(4)*ROA_BRI + C(5)*ROE_BRI
LQR_JBS = C(9) + C(1) + C(2)*BKS_JBS + C(3)*CAR_JBS + C(4)*ROA_JBS + C(5)*ROE_JBS
LQR_MSI = C(10) + C(1) + C(2)*BKS_MSI + C(3)*CAR_MSI + C(4)*ROA_MSI + C(5)*ROE_MSI
LQR_MGS = C(11) + C(1) + C(2)*BKS_MGS + C(3)*CAR_MGS + C(4)*ROA_MGS + C(5)*ROE_MGS
LQR_MUS = C(12) + C(1) + C(2)*BKS_MUS + C(3)*CAR_MUS + C(4)*ROA_MUS + C(5)*ROE_MUS
LQR_PNS = C(13) + C(1) + C(2)*BKS_PNS + C(3)*CAR_PNS + C(4)*ROA_PNS + C(5)*ROE_PNS
LQR_SBK = C(14) + C(1) + C(2)*BKS_SBK + C(3)*CAR_SBK + C(4)*ROA_SBK + C(5)*ROE_SBK
LQR_SYM = C(15) + C(1) + C(2)*BKS_SYM + C(3)*CAR_SYM + C(4)*ROA_SYM + C(5)*ROE_SYM

LQR_VCS = C(16) + C(1) + C(2)*BKS_VCS + C(3)*CAR_VCS + C(4)*ROA_VCS + C(5)*ROE_VCS
LQR_BCA = -0.00226222348845 + 4.88944195814 - 0.308420248924*BKS_BCA + 0.00155602991868*CAR_BCA + 11.9979018286*ROA_BCA - 0.733317210359*ROE_BCA
LQR_BNI = 0.156894899141 + 4.88944195814 - 0.308420248924*BKS_BNI + 0.00155602991868*CAR_BNI + 11.9979018286*ROA_BNI - 0.733317210359*ROE_BNI
LQR_BRI = 0.231113846198 + 4.88944195814 - 0.308420248924*BKS_BRI + 0.00155602991868*CAR_BRI + 11.9979018286*ROA_BRI - 0.733317210359*ROE_BRI
LQR_JBS = -0.119286946114 + 4.88944195814 - 0.308420248924*BKS_JBS + 0.00155602991868*CAR_JBS + 11.9979018286*ROA_JBS - 0.733317210359*ROE_JBS
LQR_MSI = -0.277000779387 + 4.88944195814 - 0.308420248924*BKS_MSI + 0.00155602991868*CAR_MSI + 11.9979018286*ROA_MSI - 0.733317210359*ROE_MSI
LQR_MGS = -0.0108322883019 + 4.88944195814 - 0.308420248924*BKS_MGS + 0.00155602991868*CAR_MGS + 11.9979018286*ROA_MGS - 0.733317210359*ROE_MGS
LQR_MUS = 0.547826991433 + 4.88944195814 - 0.308420248924*BKS_MUS + 0.00155602991868*CAR_MUS + 11.9979018286*ROA_MUS - 0.733317210359*ROE_MUS
LQR_PNS = -0.217719763135 + 4.88944195814 - 0.308420248924*BKS_PNS + 0.00155602991868*CAR_PNS + 11.9979018286*ROA_PNS - 0.733317210359*ROE_PNS
LQR_SBK = -0.131635168916 + 4.88944195814 - 0.308420248924*BKS_SBK + 0.00155602991868*CAR_SBK + 11.9979018286*ROA_SBK - 0.733317210359*ROE_SBK
LQR_SYM = 0.570644035865 + 4.88944195814 - 0.308420248924*BKS_SYM + 0.00155602991868*CAR_SYM + 11.9979018286*ROA_SYM - 0.733317210359*ROE_SYM
LQR_VCS = -0.747742603295 + 4.88944195814 - 0.308420248924*BKS_VCS + 0.00155602991868*CAR_VCS + 11.9979018286*ROA_VCS - 0.733317210359*ROE_VCS

THE EFFECT OF ENVIRONMENTAL PERFORMANCE ON COMPANY VALUE WITH FINANCIAL PERFORMANCE AS INTERVENING VARIABLE AT THE MANUFACTURING COMPANY LISTED IN INDONESIA STOCK EXCHANGE

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ABSTRACT

Environmental problems have become a central issue for several countries around the world, especially in Indonesia and become a concern to the various parties, including government, public, even the accounting disciplines. The reason is that Indonesia has decreased in Environmental Performance Index and causes a lot of negative impacts, not only for the community itself but also the company that takes the raw material from nature for their production activity. This study aimed to investigate the effect of environmental performance on company value directly and indirectly through financial performance as an intervening variable. The object is some manufacturing companies listed in Indonesia Stock Exchange from 2011-2014. This study used purposive sampling to determine the sample, that generates 20 manufacturing companies as a study sample. Data used in this study is secondary data obtained from the annual report and PROPER Assessment Report. This method used path analysis to see the direct and indirect effect between the independent variables with the dependent variable. The results showed that environmental performance does not give significant effect on company value, while environmental performance gives a significant effect on financial performance, financial performance gives a significant effect on company value, and environmental performance has a significant effect on company value through financial performance as intervening variables. Furthermore, financial performance is intervening variables that may mediate the relationship between environmental performance and company value.

Keywords: *Environmental Performance, Company Values, Financial Performance*

INTRODUCTION

Nowadays, environmental problems have become a central issue for countries around the world, especially in Indonesia. Based on the Environmental Performance Index (EPI) results compiled by the environmental experts from Yale University and Columbia University, Indonesia has a decrease in the Environmental Performance Index. In 2012, Indonesia held its ranking at 74th of 132 countries in the world with Environmental Performance Index 66. In 2014, the ranked decreased quite significantly, which is ranked 112th out of 178 countries with index 44.36. It shows that environmental management in Indonesia is getting worse, where one of them due to lack of pollution control and about 85% of the pollution caused by the emissions from motor vehicles. Besides, the forest fires and industrial activities have a role in contributing to air pollution in Indonesia as well (www.kompasiana.com).

The industrial sector, especially in Indonesia is the main component of economic growth. It had shown from the industrial sector roles for the national economy, which is nearly 25% before the economic crisis. Indonesia has several industry sectors, one of them is the manufacturing sector, which named as the leading sector. It is a sector that gives a significant contribution to the economic growth in Indonesia. The data about the growth of the contribution of manufacturing industry to national GDP in 2011 until 2014 as follows 21,76%, 21,45%, 20,98%, and 21,02% (Badan Pusat Statistik, 2015).

Based on the data, the GDP growth of the manufacturing industry from 2011 to 2014 is positive and getting bigger. It shows that the performance of the manufacturing industry is getting stronger, so it gives a massive contribution to the national economy and attracts investors to invest their money continuously. Therefore, the company is more aligned to the investors (the capitalist) that only material profit-oriented, consequently the companies exploiting the natural resources and community (social) uncontrollably. Aside from the contribution on economic growth in Indonesia, manufacturing industry also contributed to the pullution of soil, water, and air, so it caused the environmental degradation, which interferes the human life (Anggraini, 2006). The environmental issues subsequently become a concern to the various parties, including government, public, even the accounting disciplines.

The attention from the government is a government has set the norms and legal instruments about the environment which has been conceiving in law since 1982. In addition, since 2002, the government through the Ministry of Environment held a Program Performance Rating (PROPER) in environmental management, which was an effort to encourage the company structure in environmental management (Titisari and Alviana, 2012) and aimed to encourage the increasing of corporate compliance in environmental management with the sustainable basis (Purnomoand Widianingsih, 2012). According to the law, the company which runs the operations activities are required to keep, maintain and manage the living environment, and it is presumed that environmental performance is not only considered as a charity but also seen as competitiveness (Hansen and Mowen, 2009:410) to achieve the superior performance for the company, which will increase the firm value. Increasing the firm value is a long-term goal to be achieved by each company. Accounting discipline has a role in dealing with environmental issues as well.

Environmental accounting is a part of accounting science. Basically, environmental accounting is to prosecute awareness of companies and organizations took advantage of natural resources or environment. The environmental accounting concept usage could encourage the companies ability to minimize the environmental problems by increasing the efficiency in environmental management by assessing the environmental performance from a cost perspective (environmental cost) and benefits or effects (Nuryanti et al., 2015). Thus, it may create eco-efficiency benefits for the company, that is organizations able to produce the goods or services which are more useful while reducing the negative environmental impacts, resource consumption, and costs simultaneously (Hansen and Mowen, 2009:410).

The concern of environmental issue also comes from the community, as there are some industrial activities performed in the community environment. The companies existence in community environment has positive and negative effects (Titisari and Alviana, 2012). The positive effects are employment opportunities created for people around the industrial area. Hence, it may increase their revenue and support their economic improvement, the availability of consumer goods required, and give the contribution to the local income from the taxes. Meanwhile, the negative effects including pollution and chemical waste produced by industrial activities may cause soil, water, and air pollution. From the negative impact above, the community realized that disturb their daily lives, and become larger. Thus, it is hard to control. When society perceive that the operations are not in accordance with the norms, they will withdraw or revoke the ‘contract’ through various ways to prevent the actions which are inconsistent with public expectations. The stakeholder theory mentioned that the stakeholders basically have the ability to affect the economic resources used for the companies production activities (Setyawan and Zulaikha, 2012).

From the description above, it proved that the company existence was affected by the stakeholders' support. Therefore, legitimacy theory revealed that the organization is continuously trying to convince the society that its activities are in accordance with the norms where they located (Cuganesan et al., 2007). By acquiring the legitimacy and trust of the community, it may secure the company from undesirable things and improve the companies brand image. Hence, it may increase sales, which may affect the companies financial performance. It is supported by research conducted by Purnomo and Widianingsih (2012) who found that environmental performance has a positive effect on financial performance. Another study also conducted by Pérez-Calderón et al., (2012) showed that there is a positive correlation between environmental performance and financial performance. The companies financial performance can be shown from the financial ratios, such as profitability ratios. If profit is defined as economic profit, then profit maximisation in the long term will be consistent as well with the company value maximization (Wardhani, 2013).

Empirical research about the relationship between environmental performance and company value has been done generally, but these studies still show the various result, such as the research conducted by Iqbal et al., (2013), shows that the environmental performance effect on company value. This study is in line with research conducted by Hariati and Widya (2015) showed a positive relationship between environmental performance with company value. The different results shown by research conducted by Tjahjono (2013), the result showed that environmental performance does not have a direct influence on company value, but it has an indirect influence on company value through financial performance. Besides, the empirical studies used financial performance as an intervening variable has been done by other researchers, such as Ratih (2011) that examined the effect of Good Corporate Governance on company value with financial performance proxied by NPM and ROA as intervening variable in the company which wins The Most Trusted Company. This research used a simple path analysis. The result shows that GCG has no direct effect on NPM and ROA. NPM has no significant effect on company value, but ROA has a significant effect on company value. The GCG also has no indirect effect on company value through NPM and ROA, which means that NPM and ROA are not an intervening variable that mediated the relation between GCG and company value.

Wardhani (2013) examined the effect of CSR disclosure on company value with financial performance and going concern as an intervening variable in the manufacturing company listed in IDX from 2007 to 2009. This research used path analysis that more complex, as there are two intervening variables. The results show that CSR disclosure has no significant direct effect on financial performance, going concern value, company value. In addition, CSR disclosure has no significant indirect effect on company value through financial performance, but CSR disclosure has a significant indirect effect on company value through going concern value. It means that going concern value is the intervening variable that mediated the relation between CSR disclosure and company value, while financial performance is not the intervening variable that mediated the relation between CSR disclosure and company value. According to Tjahjono (2013) in the indirect relation between environmental performance with the company value, the company financial performance can be used as an intervening variable. Therefore, from the environmental issues and the impact on company value either directly or indirectly, this topic is interesting for further study, that is how the effect of environmental performance on company value by adding the financial performance as an intervening variable.

LITERATURE REVIEW

The company environmental performance is the company performance in creating a good environment (green) (Suratno et al., 2006). The superior environmental performance may reduce long-term risks associated with running out of resources, energy costs fluctuations, debt products, pollution and waste disposal management (Shrivastava, 1995 in Ismail et al., 2011). It may be the competitive advantage basis and an opportunity to increase revenue as well by fulfilling the green consumer (Hart, 1995 in Ismail et al., 2011). This shows the positive influence of environmental performance to financial performance.

Financial performance evaluated the efficiency and effectiveness of the company activities that have been implemented in a certain period (Wardhani, 2013). The correlation between environmental performance and financial performance can be seen from the viewpoint of revenue and cost (Aniela, 2012). Besides, the superior environmental performance may provide the opportunities for improving the public relations and the corporate image thus it will increase the attractiveness of investor and potential investor to invest which is can rising the company stock prices. If the company stock price is going higher, then the company value is higher as well. The correlation among company value, environmental performance, and financial performance are company value will increase and sustain, if companies pay attention to the social, economic, and environmental as the company sustainability is an economic, social, and community balance (Rimba, 2010 in Wardhani, 2013).

Based on the description, the conceptual framework shown in Figure 1.

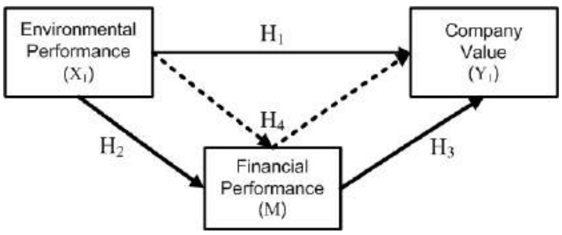

Figure 1. Conceptual Framework

From the conceptual framework, then the hypothesis in this study can be formulated as follows:

H_1: Environmental performance has significant effect on company value

H_2: Environmental performance has significant effect on financial performance

H_3: Financial performance has significant effect on company value

H_4: Environmental performance has significant effect on company value with financial performance as intervening variable.

RESEARCH METHOD

Independent Variables

The independent variable used in this study is environmental performance. Environmental performance in this study measured by using the company achievement level in the PROPER program. The PROPER performance rating system using five color indicators, which scored in a sequence, that is gold = 5; green = 4; blue = 3; red = 2; and black = 1.

Dependent Variable

The dependent variable in this study is company value proxied by Tobin's Q value. Tobin's Q value is a statistic that can be used as a proxy for measuring the company value from the investor perspectives (Wolfe and Sauaia, 2003). Mathematically, Tobin's Q value can be calculated by the following formula:

$$q = \frac{(EMV + D)}{(EBV + D)}$$

Description:

q = Company Value

EMV = (Closing Price x Number of Outstanding Shares)

EBV = Book Value of Total Assets

D = Book Value of Total Debt

Intervening Variables

An intervening variable is a variable that is placed between the dependent and independent variable. Hence, it becomes an indirect relationship. The intervening variable also considered as a mediator variable. The intervening variables used in this study is financial performance measured by profitability ratios, Return On Assets (ROA). Return On Assets (ROA) is a ratio used to indicate the ability of company capital that invested in total assets to generate profits for all shareholders or investors (Riyanto, 2010:336). Mathematically, ROA calculated with the following formula:

$$ROA = \frac{Earning\ After\ Tax}{Total\ Assets}$$

Population and Sampling

The population in this study is the manufacturing company listed in Indonesia Stock Exchange from the year 2011 to 2014. The sampling method used in this study is a purposive sampling method, by taking the sample from a population based on the available information and accordance with the research objectives. The criteria as follows:

1. Manufacturing companies listed on Indonesia Stock Exchange from 2011 to 2014.
2. Manufacturing companies that publish the annual reports from 2011 to 2014.
3. Manufacturing companies that publish the annual reports in rupiahs.

4. Manufacturing companies that has positive ROA from 2011 to 2014
5. Manufacturing companies that have followed Program Performance Rating (PROPER) in 2011 until 2014.

Based on the predefined criteria, then the selected sample cosist of 20 manufacturing companies.

Data

This study used secondary data source from the companies annual report from 2011 until 2014 obtained from the Indonesia Stock Exchange official website (www.idx.co.id) and the companies official website, while for the PROPER ranks, it is obtained from PROPER Assessment Report from 2011 to 2014 published by Ministry of Environment in Indonesia.

Model

Data analysis method in this study is path analysis with two structural regression model, as follows:

Model I $ROA = \alpha + \beta_1 EnP + e_1$

Model II $Q = \alpha + \beta_1 EnP + \beta_2 ROA + e_2$

Path analysis is helping in seeing how much the direct and indirect influence between the independent variables and dependent variables. The path analysis model in this study shown in Figure 2.

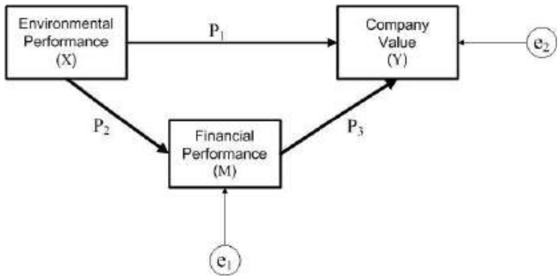

Figure 2. Path Analysis Model

In addition, this study also equipped with descriptive statistical tests, the classical assumption test, goodness of fit model test and hypothesis test assisted with the statistical test equipment, that is SPSS 22.0 for Windows.

RESULT AND DISCUSSION

Statistics Descriptive Test Results

The statistic descriptive test result of variables company value, environmental performance, and financial performance for period 2011 to 2014 are presented in Table 1.

Table 1. Statistics Descriptive Test Results

Variabel	N	Min.	Max.	Mean	Std. Deviation
Q	80	0,613	18,922	3,71706	4,023396
EnP	80	2	5	3,31	0,821
ROA	80	0,002	0,427	0,13719	0,105956

Source: Secondary Data Processed, 2016

Based on Table 1 it can be seen that there are 80 samples (observations) in this study. The variable of company value proxied by Tobin's Q value describes the condition of company investment opportunities. In Table 1 shows that Tobin's Q value has minimum value, that is 0,613 and the maximum value, that is 18,922. The mean value of Tobin's Q is 3,71706, which is more than 1 (Tobin's Q > 1), it shows that the company has a high growth rate in conditions of invesment opportunities. Financial performance proxied by Return on Assets (ROA) has the minimum value, which is 0,02 and the maximum value, which is 0,427. The average value is 0,13719 or 13,7%, which is more than 10%. It means that the average company has relatively good financial performance. Environmental performance measured by PROPER shows the minimum ratings, which is 2 or red ratings and the maximum ratings, that is 5 or gold ratings. The average value is 3 or blue ratings, which means the average company get a blue rating in their environmental performance.

Classical Assumption Test Results

Normality Test Results

This study used Kolmogorov-Smirnov to test whether the data is meet the normality assumption by looking at the significant value. The results of the Kolmogorov-Smirnov test have shown in Table 2.

Table 2. The Kolmogorov-Smirnov Test Results

	Unstandardized Residual
N	80
Test Statistic	0,080
Asymp. Sig. (2-tailed)	0,200

Source: Secondary Data Processed, 2016

Table 2 shows the Asymp. Sig. (2-tailed) value is 0,200 which is more than 0,05, and the data residuals meet the normality assumption.

Multicollinearity Test Results

Multicollinearity test aims to test whether the regression model found a correlation between the independent variables by looking at the value of tolerance and Inflation Variance Factor (VIF). The multicollinearity test results have shown in Table 3.

Table 3. Multicollinearity Test Results

	Model	Tolerance	VIF
1	LnEnP	,900	1,111
	LnROA	,900	1,111

a. Dependent Variable: LnQ

Source: Secondary Data Processed, 2016

In Table 3 shows there are no independent variables that have tolerance value less than 0,10 and VIF value more than 10, it means that there is no correlation between the independent variables or there is no multicollinearity in the regression model.

Autocorrelation Test Results

The autocorrelation test can be detected by using the Durbin-Watson test. The result has presented in Table 4.

Table 4. Autocorrelation Test Results

Model	Durbin-Watson
LnEnP LnROA	2,224
a. Dependent Variable: LnQ	

Source: Secondary Data Processed, 2016

Table 4 shows that the Durbin-Watson value is 2,224. This value is compared with value in Durbin-Watson table (N = 80; k = 2) which the upper value (dU) is 1,6882 and the lower value (dL) is 1,5859. The D-W value 2,224 is bigger than the upper value (dU), and less than 2,3118 (4 – dU) or (dU < d < 4 – dU), it can be concluded that there is no autocorrelation.

Heteroscedasticity Test Results

The heteroscedasticity test can be tested using Glejser Test by looking at the significant value. The heteroscedasticity test results have shown in Table 5.

Table 5. Heteroscedasticity Test Results

Model		Sig.
1	LnEnP	0,765
	LnROA	0,845
a. Dependent Variable: AbsRES_7		

Source: Secondary Data Processed, 2016

In Table 5 shows that the significant value of the environmental performance variable is 0,765 that is bigger than 0,05 (> 0,05), and the significant value of financial performance variables is 0,845 that is bigger than 0,05 (> 0,05) as well. It means that statistically, the independent variables have no effect on dependent variables, which means there are no heteroscedasticity problems.

Goodness of Fit Model Test Results

Statistics F Test Results

The F test aims to determine whether the independent variables simultaneously affect the dependent variable significantly. This test performed by comparing the Fcount with Ftable, or by looking at the significant value. The results have shown in Table 6.

Table 6. Statistics F Test Results

	F	Sig.
Regression Model I	8,692	0,004
Regression Model II	64,544	0,000

Source: Secondary Data Processed, 2016

Table 6 shows the significant value of the regression model I is 0,004 which is less than 0,05. It means that the independent variable is explanatory for the dependent variable or independent variable can affect the dependent variable simultaneously, while the significant value of regression model II is 0,000 which is also less than 0,05. It means that the independent variable simultaneously is explanatory for the dependent variable or independent variable can affect the dependent variable simultaneously.

Coefficient of Determination (R2) Test Results

The coefficient of determination (R2) aims to measure the ability of the model to explain the variations of the dependent variable. This study used the Adjusted R2 value to evaluate the regression model. The results have shown in Table 7.

Table 7. Coefficient of Determination (R^2) Test Results

Model	Adjusted R Square
Regression Model I	0,089
Regression Model II	0,617

Source: Secondary Data Processed, 2016

Table 7 shows the Adjusted R Square value of regression model I is 0,089, meaning that 8,9% financial performance variation can be explained by environmental performance variation. Meanwhile, the rest 91,1% (100% - 8,9%) is explained by other factors outside the model and the Adjusted R Square value of regression model II is 0,617, which means that 61,7% company value variation can be explained by environmental performance variation and financial performance, while the rest 38,3% (100% - 61,7%) is explained by other factors outside the model.

Path Analysis Results

The regression coefficients of structural model I and model II were processed using SPSS 22.0 have shown in Table 8.

Table 8. Coefficient Path

		Unstandardized Coefficients B	R^2	e^2
Regression Model I	(Constant)	-3,854	0,100	0,9487
	LnEnP	1,297		
	a. Dependent Variable: LnROA			
Regression Model II	(Constant)	2,654	0,626	0,6116
	LnEnP	-,124		
	LnROA	,680		
	a. Dependent Variable: LnQ			

Source: Secondary Data Processed, 2016

From Table 8 it can be seen the path coefficient of P1 is -0,124 which is the beta coefficient of environmental performance in regression model II, P2 is

1,297 which is the beta coefficient of environmental performance in regression model I, and path coefficient of P3 is 0,680 which is the beta coefficient of financial performance in regression model II, and from the error coefficient (e) calculation obtained the e1 value is 0,9487 and e2 value is 0,6116. Based on the path coefficient test, the interpretation of path analysis can be made in the path diagram shown in Figure 3.

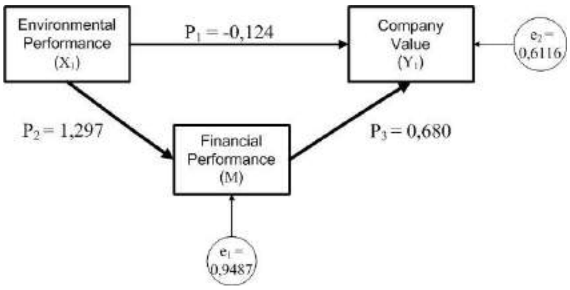

Figure 3.Path Diagram

In path diagram in Figure 3, there is a direct and indirect effect of independent variables on the dependent variable. If the indirect effect is greater than the direct effect (Indirect > Direct), it means that the correlation of an independent variable with the dependent variable is actually an indirect correlation. From Figure 3 it can be summed up that environmental performance has an indirect effect on company value as the value of indirect effect is 0,882 (1,297 x 0,680) is greater than the absolute value of direct effect, that is -0,124. From the description, it can be concluded that financial performance is an intervening variable which mediates the relationship between environmental performance on company value.

Hypothesis Test Result

Statistics t Test Results

The statistics t-test is used to determine the significant effect of an independent variable on the dependent variable partially or individually. The results of the regression model I and II were processed using SPSS 22.0 presented in Table 9 and Table 10.

Table 9. Statistics t Test Results of Model I

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	-3,854	,525	-7,341	,000
	LnEnP	1,297	,440	2,948	,004
a. Dependent Variable: LnROA					

Source: Secondary Data Processed, 2016

From Table 9 it can be created structural regression model as follows:

$$LnROA = -3{,}854 + 1{,}297 LnEnP + e_1$$

The regression model can be interpreted as follows:

1. If the environmental performance is constant, it will decrease the financial performance at 3,854.
2. Every one percent increase in environmental performance will increase the financial performance measured by ROA at 1,297.

The significance value of environmental performance is 0,004 which is less than 0,05 (< 0,05). Hence, it can be concluded that environmental performance has a significant effect on financial performance. Therefore, the Hypothesis of **H2 is accepted**. The beta coefficient is positive, which means the effect is positive.

Table 10. Statistics t Test Results of Model II

Model		Unstandardized Coefficients B	Std. Error	t	Sig.
1	(Constant)	2,654	,375	7,073	,000
	LnEnP	-,124	,255	-,487	,628
	LnROA	,680	,062	10,921	,000
a. Dependent Variable: LnQ					

Source: Secondary Data Processed, 2016

From Table 10 it can be created structural regression model as follows:

$$LnQ = 2{,}654 - 0{,}124LnEnP + 0{,}680LnROA + e_2$$

The regression model can be interpreted as follows:

1. If environmental performance and financial performance are constant, it will increase the company value at 2,654.
2. Every one percent increase in environmental performance will decrease the company value measured by Tobin's Q value at 0,124.
3. Every one percent increase in financial performance will increase the company value measured by Tobin's Q value at 0,680.

The significance value of environmental performance is 0,628 which is greater than 0,05 (> 0,05). It can be concluded that environmental performance has no significant effect on company value. Therefore, the **Hypothesis H_1 is rejected**. The significance value of financial performance is subsequently 0,000 which is less than 0,05 (< 0,05). Hence, it can be concluded that financial performance has a significant effect on company value. Therefore, the **Hypothesis of H_3 is accepted**. The beta coefficient is positive, which means that the effect is positive.

Sobel Test Results

The significant effect of the intervening variables (mediation) shown by the multiplication of path coefficient P2 and P3 can be tested using the Sobel test as follows:

$$\mathrm{S}_{\mathrm{P}_2\mathrm{P}_3} = \sqrt{\mathrm{P}_3{}^2\mathrm{S}_{\mathrm{P}_2}{}^2 + \mathrm{P}_2{}^2\mathrm{S}_{\mathrm{P}_3}{}^2 + \mathrm{S}_{\mathrm{P}_2}{}^2\mathrm{S}_{\mathrm{P}_3}{}^2}$$

$$\mathrm{S}_{\mathrm{P}_2\mathrm{P}_3} = \sqrt{[(0{,}680)^2(0{,}440)^2] + [(1{,}297)^2(0{,}062)^2] + [(0{,}440)^2(0{,}062)^2]}$$

$$\mathrm{S}_{\mathrm{P}_2\mathrm{P}_3} = 0{,}311$$

Based on the calculation above, then t value can be calculated. The t value is used to determine or test the significance of the indirect effect (mediation effect) of intervening variables. The t value can be calculated as follows:

$$t = \frac{P_2P_3}{S_{P_2}S_{P_3}} = \frac{0{,}882}{0{,}311} = 2{,}836$$

From the calculation results, the value of t_{count} is 2,836 which is bigger than the value of t_{table} with significance level of 0,05, that is 1,99 ($t_{count} > t_{table}$). Therefore, it can be summed up that the mediation coefficient which is 0,882 is significant. It means there is mediation effect on relationship between environmental performance and company value. Thus, it can be concluded that environmental performance has significant effect on company value mediated by financial performance as intervening variable. Therefore, the **Hypothesis H_4 is accepted**. The coefficient is positive, which means that the indirect effect is positive.

The Effect of Environmental Performance on Company Value

In the first hypothesis (H_1) showed that environmental performance has no significant effect on company value. This result is consistent with research conducted by Tjahjono (2013) who also found that environmental performance has no significant effect on company value measured by stock price. There is no significant effect as the PROPER is not the factor that determines the fluctuations of company market value in a certain period. Meanwhile, there is another factor that determines the company market value fluctuations. There is no significant effect as well because of the market situation in Indonesia is quite different from other countries. The capital market in Indonesia has not shown a response to company rating performance related to environmental management as one of the company performance indicators, although the Ministry of Environment issued the policies and information related to environmental performance that directly and indirectly affect the company. Investors still consider that environmental performance ratings do not contain relevant information to investors in making investment decisions. The statement supported by Sudaryanto and Raharja (2011) stated that the valuation of company environmental performance conducted by the Ministry of Environment has not yet to provide meaning to the investors in Indonesia stock market. The results do not support the previous studies conducted by Iqbal et al., (2013) and Hariati and Widya (2015) who states that environmental performance has a significant effect on company value.

The Effect of Environmental Performance on Financial Performance

In the second hypothesis (H2) test result showed that environmental performance has a significant positive effect on financial performance. This results consistent with previous studies conducted by Johansson and Orre (2008); Djuitaningsih and Ristiawatil (2011); Titisari and Alviana (2012); Purnomo and Widianingsih (2012); Pérez-Calderón et al., (2012); Arafat et al., (2012); and Tjahjono (2013). These studies found a significant positive effect between environmental performance and financial performance as well. It means that if the environmental performance has increased, the financial performance increased as well. Furthermore, if the environmental performance has decreased, then the financial performance will be decreased as well.

The positive effect is possible as good environmental performance may be the basis of competitive advantage and opportunities to increase the revenues by fulfilling the green consumers' needs, considering the public nowadays prefer to buy or consume the green products (environmentally friendly products). The company actions in changing the product into environmentally friendly products have the potential to improve financial performance as reflected in products quality. In addition, the company can reduce the cost related to environmental impact. Increased revenue and decreased costs in financial statements will increase the profit.

The results are supported by the eco-efficiency concept which states that the company that environmentally responsible is likely to gain benefits such as lower social costs, reduce the environmental costs, and maintain or create the competitive advantage. It also supported by stakeholders theory which states that the company conducted the pro-stakeholders program, including the environmental management activities, will positively be responded by stakeholders through the high trust towards the company. The stakeholders trust is reflected by the loyalty, which will increase the products sales. The results of this study is inconsistent with Sarumpaet (2005) who found that environmental performance has no significant effect on financial performance.

The Effect of Financial Performance on Company Value

In the third hypothesis (H3) test result showed that financial performance has a significant positive effect on company value. This result is consistent with several studies conducted by Ratih (2011); Pertiwi and Pratama (2012); Tjahjono (2013); Putri (2013); Alghifari et al., (2013); and Wijaya and Linawati (2015). These studies also found the significant positive influence between financial performance and company value, which means the improved financial performance will improve the company value. When the financial performance is decreased, then the company value is decreased as well.

The positive effect proves that the investors in making the investment decisions firstly is doing the company overview by looking at the financial ratios as an investment evaluation tool. The ratio which most concern to investors is Return of Assets ratio (ROA), as according to Weygandt et al., (2010:402) ROA ratio is the measurement of overall profitability. ROA ratio reflects the company able to generate profits from assets invested in a certain period. The higher ROA, the better assets productivity in generating the net income is as well. The increased profits in a company will be responded positively by investors to invest their funds in the company, which will increase the company value reflected by share prices. Those statements also supported by Alghifari et al., (2013) who states that company performance measured by ROA also be used as a signal for the investors about the future cash flow, as ROA is obtained from earning after tax that used as the basis for calculating the net cash flow. A company with good financial performance is proved by the large ROA. The large ROA will be responded positively by investors by investing in a company. It will push the company stock price rises, and the rising company stock price will rising the company value as well. The results are not consistent with research conducted by Wardhani (2013) who found out that financial performance has no significant effect on company value.

The Effect of Environmental Performance on Company Value with Financial Performance as Intervening Variable

In fourth hypothesis (H4) test result showed that environmental performance has a significant effect on company value through financial performance as intervening variable, which means that good environmental performance will improve financial performance which will increase the company value as well.

Companies with good environmental performance and has a high level of efficiency may reduce costs. The cost reductions will increase the company profits and reduce the emissions below the standard set by the regulations. In this case, the company activities in accordance with the applicable regulations, thus the company may avoid the lawsuits related costs. It would be followed by increasing the reputation and brand image, as well as increasing the financial position. Companies which have a good reputation and good financial position will be responded positively by investors and potential investors, which will increase the company value.

The result is in line with research conducted by Rahmawati and Ahmad (2012) and Tjahjono (2013). According to Rahmawati and Ahmad (2012), the indirect effect existed due to the information about environmental performance ratings issued by Ministry of Environment does not directly affect the economic performance as measured from the investors' reaction to the company stock. In other words, the investors have no response to such information, thus it requires the factors that mediate this effect. One of them is financial performance, considering the investors are still using the information from financial statements in making the investment decisions.

CONCLUSION AND SUGGESTION

Based on the hypothesis testing results and the discussion above, to sum up, the environmental performance proxied by PROPER rating has no significant direct effect on company value proxied by Tobin's Q value. The changes in PROPER has no effect on company value. It is because the valuation of environmental performance conducted by the Ministry of Environment has no meaning for the investor in the stock market. Hence, the market players have not shown a response to company environmental performance ratings as one of the company performance indicators. The investors still consider the environmental performance rating does not contain the relevant information to investors in making the investment decision. However, environmental performance has a significant indirect effect on company value through financial performance as an intervening variable.

Financial performance has a significant effect in mediating the correlation between environmental performance and company value. Environmental performance and financial performance will strengthen each other, so it has a significant effect on company value. This is perhaps because the capital market behaviour in Indonesia is meticulous in determining the investment decisions. Hence, the stand-alone environmental performance variable has no significant effect on investor decisions. Investors are still considering financial performance in making the investment decision. The higher financial performance measured by ROA, the better the assets productivity in generating profitability is as well. The increase in profit will be responded positively by investors to invest their funds in the company, which will increase the company value reflected by share price.

REFERENCES

Alghifari, Erik Syawal, Sigit Triharjono, and Yuyu Siti Juhaeni. (2013). "Effect of Return on Assets (ROA) Against Tobin's Q: Studies in Food and Beverage Company in Indonesia Stock Exchange Years 2007-2011" *International Journal of Science and Research (IJSR)*, 2(1), 722-725.

Anggraini, Fr. Reni Retno. (2006). "Pengungkapan Informasi Sosial dan Faktor-Faktor yang Mempengaruhi Pengungkapan Informasi Sosial dalam Laporan Keuangan Tahunan (Studi Empiris pada Perusahaan-Perusahaan yang Terdaftar di Bursa Efek Jakarta". *Simposium Nasional Akuntansi 9 Padang.*

Aniela, Yoshi. (2012). "Peran Akuntansi Lingkungan dalam Meningkatkan Kinerja Lingkungan dan Kinerja Keuangan Perusahaan". *Berkala Ilmiah Mahasiswa Akuntansi* 1 (1).

Arafat, M. Yasser, Warokka Ari, and Siska Ratna Dewi. (2012). "Does Environmental Performance Really Matter? A Lesson From the Debate of Environmental Disclosure and Firm Performance". *Journal of Organizational Management Studies*, 2012, 2-16.

Badan Pusat Statistik. (2015). *Direktori Industri Manufaktur Indonesia.* Direktori, Jakarta: Badan Pusat Statistik.

Bursa Efek Indonesia. *Tercatat: Laporan Keuangan & Tahunan. Retrieved from* http://www.idx.co.id/id-id/beranda/perusahaantercatat/laporankeuangandantahunan.aspx.

Cuganesan, Suresh, Leanne Ward, and James Guthrie. (2007). Legitimacy Theory: A Story of Reporting Social and Environmental Matters Within the Australian Food and Beverage Industry. *In 5th Asian Pacific Interdisciplinary Research in Accointing (APIRA) Conference.* 8-10.

Djuitaningsih, Tita, and Erista Eka Ristiawatil. (2011). "Pengaruh Kinerja Lingkungan dan Kepemilikan Asing terhadap Kinerja Finansial Perusahaan" *Jurnal Akuntansi Universitas Jember*, 10 (2), 31-54.

Emerson, Jay, Daniel C. Esty, Christian Kim, Tanja Srebotnjak, Marc A. Levy, Valenetina Mara, Alex de Sherbinin, and Malanding Jaitah. (2010). *Environmental Performance Index.*

New Haven: Yale Center For Environmental Law and Policy.

Hansen, Don R., and Maryanne M. Mowen. (2009). *Akuntansi Manajerial*. 8th. Vol. 2. Jakarta: Salemba Empat.

Hariati, Isnin, and Yeney Widya P. (2015). "Pengaruh Tata Kelola Perusahaan Dan Kinerja Lingkungan Terhadap Nilai Perusahaan". *Jurnal Ilmiah Mahasiswa FEB* 3 (2).

Iqbal, Mohammad, Sutrisno T, Prihat Assih, and Rosidi. (2013). "Effect of Environmental Accounting Implementation and Environmental Performance and Environmental Information Disclosure as Mediation on Company Value". *International Journal of Business and Management Invention* 2 (10), 55-67.

Iriyanto, Felecia Novita, and Ika Paskah Nugroho. (2014). "Pengaruh Kinerja Lingkungan terhadap Praktik Pengungkapan Sustainability Report dan Kinerja Ekonomi". *Dinamika Akuntansi, Keuangan dan Perbankan* 3 (1), 46-57.

Ismail, Tubagus, Ewing Yuvisa Ibrani, and Fachlia Ulmi. (2011). "Pengaruh Eco-Control terhadap Kinerja Ekonomi dengan Kinerja Lingkungan sebagai Variabel Intervening". *Simposium Nasional Akuntansi XIV Aceh.*

Johansson, Helena, and Luisa Orre. (2008). "The Link Between Corporate Environmental Performance and Corporate Financial Performance". *Thesis*. Stockholm. Stockholms School of Economics.

Kementerian Lingkungan Hidup. *Download: Hasil Penelitian PROPER.* Retrieved from http://proper.menlh.go.id/ on December 6, 2015.

Mutiarani, Aulia. (2015). *Tingkat Pencemaran Udara Indonesia Tertinggi Ketiga di Dunia, Bagaimana Cara Mengatasinya?*. Retrieved from http://www.kompasiana.com/auliamutiarani/tingkat-pencemaran-udara-indonesia-tertinggi-ketiga-di-dunia-bagaimana-cara-mengatasinya_551b90dfa33311b228b65a0d.

Nuryanti, Tira Novi, Nurlely, and Yuni Rosdiana. (2015). "Pengaruh Akuntansi Lingkungan terhadap Kinerja Lingkungan (Pada Perusahaan Tekstil Bandung)". *Prosiding Penelitian SPeSIA Akuntansi.*

Pérez-Calderón, E, P Milanés-Montero, and F. J. Ortega-Rossell. (2012). "Environmental Performance and Firm Value: Evidence from Dow Jones Sustainability Index Europe". *International Journal of*

Environmental Research 6 (4), 1007-1014.

Pertiwi, Tri Kartika, and Ferry Madi Ika Pratama. (2012). "Pengaruh Kinerja Keuangan Good Corporate Governance Terhadap Nilai Perusahaan Food And Beverage". *Jurnal Manajemen dan Kewirausahaan* 14 (2), 118-127.

Purnomo, P.K., & Widianingsing, L.P. (2012). "The Influence of Environmental Performance on Financial Performance with Corporate Social Responsibility (CSR) Disclosure as a Moderating Variable: Evidence from Listed Companies in Indonesia". *Review of Integrative Business and Economics Research,* 1(1), 57-69.

Putri, Cintamy Prananti. (2013). "Analisis Pengaruh Rasio Profitabilitas terhadap Nilai Perusahaan Manufaktur Sub-Sektor Otomotif dan Komponen di Bursa Efek Indonesia". *Jurnal Akuntansi Unesa* 2 (1).

Rahmawati, Ala', and Tarmizi Achmad. (2012). "Pengaruh Kinerja Lingkungan terhadap Financial Corporate Performance dengan Corporate Social Responsibility Disclosure sebagai Variabel Intervening". *Diponegoro Journal of Accounting* (1) 2, 1-15.

Ratih, S. (2011). "Pengaruh Good Corporate Governance terhadap Nilai Perusahaan dengan Kinerja Keuangan sebagai Variabel Intervenning pada Perusahaan Peraih the Indonesia Most TrustedCompany-CGPI". 5(2). Retrieved from https://scholar.google.co.id, on Oktober 30, 2015

Rimba, Kusumadilaga. (2010). "Pengaruh Corporate Social Responsibility terhadap Nilai Perusahaan dengan Profitabilias sebagai Variabel Moderating (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia)". *Skripsi*.

Riyanto, Bambang. (2010). *Dasar-Dasar Pembelanjaan Perusahaan.* 4. Yogyakarta: BPFE.

Sarumpaet, Susi. (2005). The Relationship Between Environmental Performance and Financial Performance of Indonesian Companies. *Jurnal Akuntansi dan Keuangan* 7 (2), 89-98.

Setyawan, Benny, and Zulaikha. (2012). "Analisis Pengaruh Praktik Good Corporate Governance dan Manajemen Laba terhadap Corporate Environmental Disclosure". *Diponegoro Journal of Accounting* 1 (1), 1-13.

Sudaryanto, and Surya Raharja. (2011). Pengaruh Kinerja Lingkungan terhadap Kinerja Finansial Perusahaan dengan Corporate Social Responsibility Disclosure sebagai Variabel Intervening. Universitas Diponegoro.

Suratno, Ignatius Bondan, Darsono, and Siti Mutmainah. (2006). "Pengaruh Environmental Performance terhadap Environmental Disclosure dan Economic Performance (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Jakarta Periode 2001-2004)". *The Indonesian Journal of Accounting Research* (Simposium Nasional Akuntansi 9 Padang) 10 (2).

Titisari, Kartika Hendra, and Khara Alviana. (2012). "Pengaruh Environmental Performance terhadap Economic Performance". *Jurnal Akuntansi dan Keuangan Indonesia* 9 (1).

Tjahjono, Mazda Eko Sri. (2013). "Pengaruh Kinerja Lingkungan terhadap Nilai Perusahaan dan Kinerja Keuangan". *Jurnal Ekonomi* 4 (1).

Wardhani, Rulyanti Susi. (2013). "Pengaruh CSR Disclosure terhadap Nilai Perusahaan dengan Kinerja Keuangan sebagai Variabel Intervening (Studi Kasus Perusahaan Manufaktur yang Terdaftar di BEI)". *Jurnal Ekonomi Akuntansi dan Manajemen* 12 (1).

Weygandt, Jerry J., Donald E. Kieso, and Paul D. Kimmel. (2010). *Accounting Principle (Pengantar Akuntansi)*. 7. Vol. 2. Jakarta: Salemba Empat.

Wijaya, Anthony, and Nanik Linawati. (2015). "Pengaruh Kinerja Keuangan terhadap Nilai Perusahaan". *FINESTA* 3 (1), 46-51.

Wolfe, Joseph, and Antonio Carlos Aidar Sauaia. (2003). "The Tobin's Q As a Company Performance Indicator". *Developments in Business Simulation and Experential Learning* 30.

VALUE CHAIN STRATEGY ANALYSIS ON COMPETITIVE ADVANTAGE IMPROVEMENT IN HEALTHCARE INDUSTRY: CASE OF RUMAH SAKIT KHUSUS BEDAH CINTA KASIH TZU CHI

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Abstract

Cinta Kasih Tzu Chi Surgical Hospital or known as Rumah Sakit Khusus Bedah (RSKB) Cinta Kasih Tzu Chi is a hospital built based on humanism service. Referring to increasing of people awareness about the quality of health service and highly competitive on healthcare industry caused the hospital to improve its competitive advantage to get the market and handle the rivalry. Hence, the researcher had been motivated to conduct research the strategy of RSKB Cinta Kasih Tzu Chi with value chain activities approach supported with five forces porter and environmental analysis. Data collection methods are observation, interview, questionnaire, and literature review. The researcher arranged the result or response by method successive internal software to get the rating for each element of value chain activities. On primary activities of the value chain, it showed that implementation of post-service and point of service has been well applied and gave contribution in developing of competitive advantage, so do S2 on supporting activities. However, it requires improvement and development on pre-service for primary or collective structure and strategic resources for supporting activities.

Keywords: *Competitive advantage, Healthcare industry, Strategy, Value chain,*

INTRODUCTION

The implementation of the value chain strategy in the health service sector certainly follows the Value Chain Management process in the manufacturing industry. It is a strategy considered to build a competitive value for the health services sector and a superior level of community health generally as well. Value chain analysis of the hospital is a positive trend taken from the traditional sector into the manufacturing system operational health services. The integration of the value chain is a challenge for the healthcare industry to be applied. However, it does not mean impossible to do, even though the healthcare industry is not the primary industries of the value chain strategy.

The trend of the value chain strategy which is being developed nowadays on healthcare industry has several problems in fulfilling the request, specifically on response time. Various issues caused difficulty to adopt the integrated system through value chain analysis approach on the healthcare industry are: development of technology, lack on predicting the number of patients and medicine or medical tools needed, a lack of standardization, lack of capital and lack of training or education about the practice of integration of each element in the operational hospital.

Some environment or organization except the hospital is involved in the operational activities of the hospital itself as GPO (Group Purchase Organization). Furthermore, one of the additional causes is the limitation of data usage or information technology as well. A hospital is definitely may meet the problem of information technology development. However, if the hospital can apply some more strategy in supporting activities, especially the development of information technology, thus there will be an opportunity made a diversity of health services given to patients.

Hospitals find that there are several opportunities in improving their competitive positioning by noticing the integration of each element, one of the downstream value chain element, with high attention to service delivery timeliness medical services to the patients. Integration with the upstream value chain namely suppliers, it integrates to build a systematic relationship that can give additional value in the service delivery process to the patients. It is in line with McDonald and Srinivasan (2004) that innovation is carried out by the hospital is a fundamental key to improve adaptation of the hospital environment and competitive advantages.

RSKB Cinta Kasih Tzu Chi is the object of this research. It is a hospital founded by Buddha Tzu Chi Indonesia Foundation. The hospital is expected to provide excellent service to patients with the entire activity and adequate facilities. Hospital is classified as a service activity as the operation of the hospital including medical treatment, milling drug products and some other health services. Therefore to assess the performance of the hospital services have to be based on the aspects of the services provided by the RSKB Cinta Kasih Tzu Chi. The quality of service that would be well-formed from the whole series started from the activity of the fulfilment of the pre-service until the patients feel the value at the end, it is a form of getting medical treatment, more specific patient feel healing from their disease.

It is the same as another hospital, RSKB Cinta Kasih Tzu Chi owns several health services such as general poly, inpatient, HCU, Emergency Unit and so on. On the health unit, a hospital applies the value chain on their service to patients. After a decade RSKB Cinta Kasih Tzu Chi has been established, the hospital experienced significant development shown from the increasing number of the bed provided for patients as well as the number of employees and medical workers who have increased as well, this is indeed one of the impacts from the value chain applied by RSKB Cinta

Kasih Tzu Chi. It is not only profit oriented but also to serve a social function.

The RSKB Cinta Kasih Tzu Chi requires analysis of the value chain in viewing the entire effectiveness and efficiency of service through a series of activities in the process of the pre-service, point of services or post-service. Which services can give more value in the hospital development and which services caused more cost that does not significantly gives additional value to improve service to the patients. The hospital has been applying the value chain strategy, yet no evaluation or measurement for it. From the background above, the problem formulation in this research as follows: how about RSKB Cinta Kasih Tzu Chi's strategy based on value chain aspect; how about a rating of value chain element on RSKB Cinta Kasih Tzu Chi; and what the competitive advantages that can be focused by the hospital.

LITERATURE REVIEW

Strategy

Wheelen and Hunger (2012) stated that the company strategy is a comprehensive plan on the steps of the company to achieve the vision. Therefore, the strategy would increase the competitive advantages owned by the company and reduced the limitation to compete with other competitors. Mulyadi (2001) expressed the strategy is the pattern of the selected action by the company to achieve the desired vision, through the steps or mission. With the action pattern, the company will adjust its actions in accordance strategy. If the company implements a low cost that is carried out by pressing every company's expense, then the price offered to the market can attract the buyer's attention. The results obtained from the strategy are mostly competitive advantages based on the offer price is cheaper than the competitor. According to Donelly (1984), it must include all elements that can clarify the structure strategy specifically. It is necessary to provide a whole description and systematic to all community members that strategy will be carried out in line with the strategy formulation. Besides, the strategy arranged has target and limitation that communities may evaluate it, whether it is applied adequately or inadequately in the community, aside from several factors.

The concept of Value and Competitive Advantages

Value is a nominal that customers pay for goods or services desired and provided by the company. The value measurement by the company is a number of the results obtained from the sales or total income. It is evident that from the product price multiplied by the unit sold. Each generic strategies is intended to create the value that exceeds the costs arising from the whole of the activities in the delivery of products or services. Jacob (2006) stated that value is every activity that can improve the function and the market value of products or services and in line with the business condition. There is a requirement to enhance the value of every business process carried out by the company. According to Porter (1985), the value aside cost shall be used in analyzing the company's competitive position since the company deliberately involves the costs to realize the premium price through a different strategy. It means the value occurred from the entire activity may determine the competitive position of a company. Hence, the value occurred can manage the corporate sustainability to face competition in the market.

Barney and Clark (2007) based on the aspects of Resource-Based Value, to observe and identify the factors that may affect the company in the form the competitive advantage by identifying the company resources. The competitive advantage is needed to survive in the middle of the market and facing competition which is increasing performance improvement with various aspects. The competitive advantages may be taken through some marketing actions as well that can take advantage of the internet. Thus, it is going to attract customer and decide to make purchases. Marketing actions will increase the competitive advantages and can develop business. Sularto (2012) stated that the development of existing business should be offset by competitiveness through advertising with the technology or internet to facilitate the processing of information and influence buyer decision.

Value Chain

Porter (1985) stated that an entity is a collection of elements or activities to design, produce, market, deliver and support a product or service. Each activity or elements become a unity into the value chain. The company value chain and the performance from each activity is a reflection of the company’s history, company’s strategy and implementation which is specified by the company and the activities affected the economic aspects of the company. According to Hansen and Mowen (2000) value chain analysis is the strategic analysis tools used to explore and describe the competitive advantages, it is intended to identify customers value to increase, the strategy to reduced costs that occurs over the activities and also to know further about the relationship between the customers, suppliers and other companies in the industry.

Porter divides business activity into two parts; there are the main activities and supporting activities. The main activities related to the operations of the company that are transforming inputs into outputs and delivery. In addition, he proposed that value chain analysis as a combination between the whole nine operating and supporting activities made added value commonly for

https://doi.org/10.35760/eb.2018.v23i2.1819

the company. In line with the Kindangen and Bahtiar (2013), these support activities tend to incorporate the entire main activities across all the primary activities which are varied and diverse, and useful as well to divide primary activities into a series of value chains. The value chain is useful to explore how much-added value for a series of activities conducted by the company in delivering the goods or services to consumers by further. The main focus in the value chain is benefits which may be added to consumers, the linked process of each other that may deliver value and demand affected the inflow was made before.

The Porter's value chain analysis found by Michael Porter (1985) is a model analyzed the entire company activities to assess the competitive advantages that owned by the company. The company activity is classified into two categories, namely main activities and supporting activities. Main activities consist of Inbound Logistics, Operations, Outbound logistics, Marketing, and Service. Meanwhile, there are Procurement, Technology Development, Human Resources Management, and Firm Infrastructure in supporting activities to support the main activities

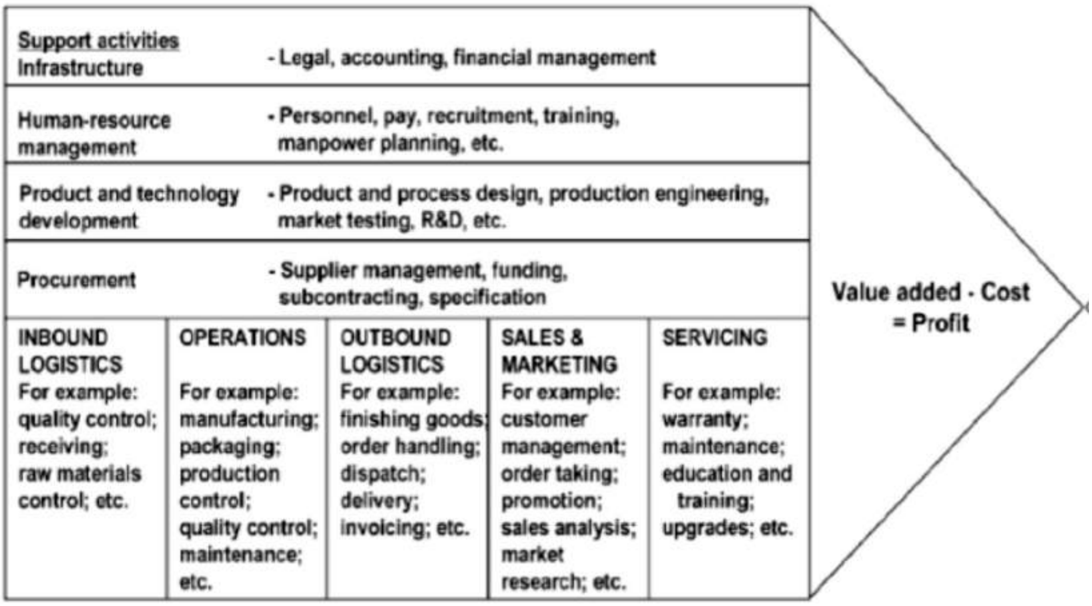

Figure 1: Value Chain

Source: Michael Porter (1985)

Value Chain in the Healthcare Industry

Porter (1996) defined the value as the profit or cost for patients and internal activity or other important activities to produce value for patients. The value for patients is the level of health produced per costs incurred in outcome comparison. Swayne et al. (2006) stated that value chain analysis on healthcare industry aims to increase the competitive advantages of the hospital based on the above internal environment analysis in hospital. Limitation in value chain analysis adaptation on healthcare industry is the coordination of the entire parties which involved, the spread of the strategic alliance information, information exchange, company trust, and strategy through value chain analysis approach to delivering maximum value added for customers with the lowest total cost (Burns et al., 2012).

The value chain in the healthcare industry focuses on the service activity to patients. Porter (1985) formulated the value chain in the healthcare industry for main activities include delivery services activity. The main activity in the healthcare is industry namely pre-service, point-of-service, and after-service activity. The service delivery activity is the activity regarded the operational hospital. Meanwhile, the support activities of the value chain in healthcare industry are organizational culture, organizational structure and human resource. The supporting activity is fundamental resources support the main activity. Hence, a final value obtained by patients can be improved. The value chain in the healthcare industry is a hospital conceptual strategy. Hence, the value of the competitive advantages can be analyzed carefully, and the development of each element on activity can be focused.

Service Delivery	**Pre-Service** Market/Marketing Research Target market Service offered the branding Pricing System Distribution/logistics Promotion	**The point-of-Service** Clinical operations a. Quality b. Process Innovation Marketing A. Variability Satisficati on	**After-Service** Follow up a. Clinical b. Marketing Billing Follow on a. Clinical b. Marketing	**Add value**
Support Activities	**Organizational Culture** (Shared Assumptions, Shared Values, Behavioral Norms)			**Add value**
	Organizational Structure (Function and division)			
	Strategic Resources (Financial, Human, Information, Technology)			

Figure 2: Hospital Value Chain

https://doi.org/10.35760/eb.2018.v23i2.1819

The Porter's Five Forces Analysis

There is a general analysis applied in analyzing the adopted strategy using a competitive approach based, namely Porter's Competitive Model. There is a general analysis applied in analyzing the adopted strategy using a competitive approach based, namely Porter's Competitive Model. Nowadays, the use of five forces Porter's Model involves the sustainability of environment process that can determine the competitive advantages of the company. Porter's Five forces Model as follows: 1) Competitive rivalry; 2) Bargaining power of suppliers; 3) Bargaining power of customers; 4)Threat of new entrants, and 5) Threat of substitute products or services. Hill and Jones (2007) stated that the strength of each five forces is the existence of proportional representation between the price and profit margin when weakness made as opportunities and the competitive advantages of the company is allowed as a threat. Therefore, the five forces describe the overall of a condition in the industry where the company response is a real strategy to anticipate every competitor movement on the tight competition

RESEARCH METHOD

The object of this research is RSKB Cinta Kasih Tzu Ch strategy, an element of value chain activities. As the aim is to analyze the main activities of the value chain applied and evaluated the value chain of supporting activities, the population is all patients and employees RSKB Cinta Kasih Tzu Chi. Samples on this research use the method purposive sampling with the number of respondents is 40 patients and 40 employees taken randomly. According to Sugiyono (2011, 91), the size of the sample worthy in research is between 30 until 500. Data collecting method are interview, observation, questionnaire, and literature study. The instrument or the variables are in line with the measurement or value chain indicator as follow the Service delivery activity (Primary activities). The indicators are the quality of services (SERVQUAL) from Parasuraman (tangible, empathy, responsiveness, assurance, reliability), to examine the phase of the service delivery activity at the hospital, such as pre-service, the point-of-service, and after-service, and supporting activities, such as organizational culture, organizational structure, and human resource as well.

On the elements of organizational culture, the researcher applies Robbins' indicator (1994), namely, personal initiative attitude, risk tolerance, direction, integration, management support, identity control, reward system, tolerance to conflict and patterns of communication. Meanwhile, on the elements of organizational structure, the researcher applied Robbins' indicator (2006), namely work specialization, departmentalization, the chain of command, the control range, centralization and decentralization, are arranged. On the elements of the strategic resources, the researcher traced several elements, such as

Cronbach's Alpha	N of items
,976	23

information technology, financial and human resources.

The researcher used Porter's Five Forces model and SWOT analysis in describing a qualitative explanation about hospital to determine the strategy optimization and data processing questioner by Method Successive Interval program with Likert Scale Summated Ratings (LSR) to make ranks from elements of the main activities and support activities that can describe value chain in order to give contributions to the competitive advantage in a hospital. The researcher took a questionnaire test, namely validity and reliability test to examine the validity and reliability of the questionnaire answers.

Cronbach's Alpha	N of items
,944	*26*

Table 1.
Positive Statement Scale
Source: Sugiyono (2007)

RESULTS AND DISCUSSION

Based on the calculation of 40 respondents response (patients) on the primary activities of the value chain at RSKB Cinta Kasih Tzu Chi, that three of instrument research through 23 statements or the indicator value exceeds from the tabler, it is 0,3120. Then the instrument research strategy based on the value chain said valid. Results of the calculation of the output SPSS reliability tests showed that the Cronbach's alpha value above 0.8. Therefore, this instrument can be stated very reliably.

Table 2. Reliability Statistics - Primary Activities
Source: Obtained primary data (2016)

Based on the calculation of 40 respondents response (patients) on the primary activities of the value chain at RSKB Cinta Kasih Tzu Chi, that three of instrument research through 26 statements or the indicator value exceeds from the tabler, it is 0,3120. Then the instrument research strategy based on the value chain said valid. Results of the calculation of the output SPSS reliability tests showed that the Cronbach's alpha value above 0.8. Therefore, this instrument can be stated very reliably.
Based on the results of the analysis and discussion, then the researcher formulated a summary as follows:

Table 3. Reliability Statistics - Supporting Activities
Source: Obtained primary data (2016)

The criteria	Score
Strongly Disagree	1
Disagree	2
Neither agree nor disagree	3
Agree	4
Strongly agree	5

The Five Forces Analysis

Based on business competition analysis with Porter's Five Forces, it is evident that the business competition in healthcare industry especially in Cengkareng, West Jakarta is exceedingly tight, as there are some other competitive hospitals around. Although they have different special service, recently, from one decade ago, there is establish some new competitors that can threaten the market of RSKB Cinta Kasih Tzu Chi. The bargaining power of customer offers an expanding patients management scope who is initially for Tzu Chi's patients merely, but still serves public patients and permanent patients from Tzu Chi Foundation. The bargaining power of supplier also high enough with the domination of multiple suppliers to put its products in RSKB Cinta Kasih Tzu Chi with a competitive price offer.

Internal and External Environment Analysis (SWOT)

From the internal and external environment analysis, there are some strengths and weaknesses identified in RSKB Cinta Kasih Tzu Chi. The strengths are their professional healthcare management and independent marketing channel, while the weakness is there is no down payment for inpatient care. Besides, it is not supported by some healthcare facilities, such as choosing inpatient care class, specialists polyclinic with less complete tools and lack of parking lot. The RSKB Cinta Kasih Tzu Chi have the opportunity to improve their competitive advantage in the competition as well. The hospital even have many cooperation partners, government regulation regarding the BPJS, Badan Penyelenggara Jaminan Sosial (Social Insurance Administration Organization) supported people to be treated easier, and increasing of people awareness about health services quality.

Although some threats that may affect the sustainability of business process of RSKB Cinta Kasih Tzu Chi, there are many replacement products or other alternative such as 24 hours clinic, puskesmas, Pusat Kesehatan Masyarakat (community health care), and technology development in the medical field as well. From the optimization strategy based on SWOT, it is evident that the best strategy is the combination of Strength and Opportunities (SO). It maximizes the most strength of competitive advantages, such as independent marketing channel in improving the opportunity, such as cooperating with a business partner.

The strategy analysis based on value chain activities

The description of rating from value chain implementation strategy as follows: 1) the primary activities element ranking based on the patients' perception from the highest to the lowest value is P3 (post-service elements) about 34,38%, P2 (Point of service) about 33,34%, and PI (Pre-service) about 32,38%; 2) the supporting activities element ranking based on the employees' perception from the highest value to the lowest value is S2 (Organizational Structure) about 34,86%, S3 (Strategic Resources) of 32,81%, and S1 (Organization Culture) about 32,33%.

CONCLUSION AND SUGGESTION

The conclusion is as follows: the management strategy applied by RSKB Cinta Kasih Tzu Chi is value chain activities on their independent marketing channel (DAAI TV). It is to provide specific information about the hospital in catching some wider potential patients and advancing health services based on the humanist and the Hospital Integrated Information System (HIIS) in the follow-up or recovery actions.

Rating of value chain activities of RSKB Cinta Kasih Tzu Chi on the primary activities from highest value to lowest value is post-service, point-of-service, and pre-service element. Meanwhile, the rating on supporting activities from the highest to the lowest value are organizational structure, human resource and organizational culture.

Based on the results of value chain activities rating, the competitive advantages that can be focused by RSKB Cinta Kasih Tzu Chi is humanist-based service, while the responsiveness on discharge process with providing additional services such as home care. RSKB Cinta Kasih Tzu Chi also has organizational structure control which can improve the clinical supervision and operations, and reporting procedures system in work environment to increase time response to the patients.

REFERENCES

Barney, J.B., & Clark, D., N. (2007). *Resources Based View Theory: Creating and Sustaining Competitive Advantage*. New York: Oxford University Press Inc.

Burns-Crisholm, M., & Spivey C. (2012). “The ‘Cost’ of Medication Nonadherence.” Journal of the American Pharmacist Association, 52 (6), 823-826.

Hansen D. R., Mowen., & Maryanne. (2000). *Management Accounting. (A Hermawa, Trans)*. Cincinatti: Ohio College Division, South-Western Pub.Co. (Original work published 1992).

Hill, C. W. L., & Jones, G. R. (2007). *Strategies Management Theory: An Integrated Approach*. Seventh Edition. New York: Houghton Mifflin Company.

Hunger J. D, & Wheelen, T. (2012). *Strategic Management and Business policy: Toward Global Sustainability*, 13th Edition. New York: Pearson Prentice Hall.

Jacob, B. A. (2005). “Accountability, Incentives and Behavior: The Impact of High-Stakes testing in the Chicago Public Schools”. *Journal of Public Economics*. (89), 761-796.

Jacob, George. (2006). *Cooperative Learning: Theory, Principle, and Techniques*, JF New Paradigm Education.

Kindangen, J. G., & Bahtiar. (2011). *Penerapan Analisis Rantai Nilai dalam Akselerasi Pembangunan Pertanian di*

Sulawesi Utara. Bahan Seminar Inovasi Teknologi Pertanian Membangun Program Pembangunan Pertanian Propinsi Sulawesi Utara. Seminar Regional Inovasi Teknologi Pertanian, mendukung Program Pembangunan Pertanian Propinsi Sulawesi Utara. Sulawesi Utara: Balai Pengkajian Teknologi (BPTP).

Mcdonald, Robert E., & Nawasimhan S. (2004). “Technological Innovations in Hospitals: What Kind of Competitive Advantage Does Adaption Lead to?” *International Journal of Technology Management*. 10(10), 1-15

Mujiyana., S. L, & Mukhyi, M. A. (2012). “Pengaruh Penerapan Periklanan Di internet Dan Pemasaran Melalui E-mail Produk UMKM Di Wilayah Depok”. *J@TI Undip*, 7(3).

Porter, M. E. (1985). *Competitive Advantage*. (1), 1-15. New York: The Free Press.

Porter, M. E. (1996). *What is Strategy? Harvard Businesss Review*. New York: The Free Press.

Robbins, Stephen P. (2006). *Perilaku Organisasi. Edisi ke sepuluh*. Jakarta: PT. Indeks Kelompok Gramedia.

Robbins, Stephen P. (1994). *Teori dan Organisasi: Struktur, Desain & Aplikasi*. Edisi Ketiga. Jakarta: Arcan.

Sugiyono. (2007). *Statistika untuk Penelitian*. Bandung: Alfabeta.

Sugiyono. (2011). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta..

Swayne, L.E., Duncan, W.J., & Ginter P.M. (2006). *Strategic Management in Health Care Organizations*. United Kingdom: Blackwell Publishing

FAKTOR DETERMINASI FUNGSI INTERMEDIASI PERBANKAN SYARIAH DI INDONESIA

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ABSTRAK

Kondisi pertumbuhan ekonomi nasional belum berdampak signifikan terhadap peningkatan ekonomi masyarakat. Salah satu indikasinya dapat dilihat dari masih tingginya tingkat pengangguran terbuka tahun 2009 yang lalu. Hal ini terjadi karena keluhan pelaku bisnis yang merasakan sulitnya memperoleh suntikan modal dari perbankan sebagai sumber penting untuk peningkatan kapasitas produksi mereka. Sehingga fungsi intermediasi perbankan Indonesia masih perlu dipertanyakan. Khusus di perbankan syariah, keberperanan fungsi intermediasi dapat dilihat dari indikator Financing to Deposit Ratio (FDR). FDR perbankan syariah tahun 2009 menunjukkan penurunan dari tahun-tahun sebelumnya. Hal ini mengindikasikan adanya kesenjangan yang semakin jauh antara dana yang terkumpul dengan dana yang disalurkan melalui pembiayaan pada perbankan syariah. Sehingga dimungkinkan untuk membuat suatu penelitian mengenai analisa faktor-faktor apa yang dapat mempengaruhi fungsi intermediasi perbankan khususnya perbankan syariah. Penelitian ini bertujuan untuk mengindentifikasi faktor-faktor apa saja yang mempengaruhi fungsi intermediasi perbankan syariah di Indoensia. Alat analisis yang digunakan dalam penelitian ini adalah model "distributed-lag model". Dalam model ini analisa yang dilakukan adalah analisa regresi linier berganda, korelasi berganda, perhitungan nilai koefisien determinasi, dan uji hipotesis dengan T-test dan F-test. Kesimpulan adanya hubungan yang cukup signifikan antara NPF, SBIS, PDB dan IHSG secara bersama-sama terhadap FDR. Secara parsial, NPF memiliki hubungan yang cukup signifikan positif dengan FDR, sementara itu SBIS dan IHSG memiliki hubungan yang cukup signifikan negatif dengan FDR, dan untuk PDB tidak ada hubungan yang cukup signifikan dengan FDR. Dari beberapa variabel yang memiliki hubungan dengan FDR, ternyata IHSG dengan tingkat signifikan 0,905 atau 90,5%.

Kata kunci: *FDR, NPF, SBIS, PDB dan IHSG*

ABSTRACT

The condition of national economic growth has not had a significant impact on improving the community economy. One of the indications can be seen from the high level of open unemployment in 2009. This happened because of complaints from businessmen who felt the difficulty to obtain capital injection from bank as an important source for increasing their production capacity. So that, the intermediation function of Indonesian banking still needs to be questioned. Especially in syariah banking, the role of intermediation function can be seen from the Financing to Deposit Ratio (FDR) indicator. FDR of syariah banking in 2009 showed a degredation from previous years. It indicates a further gap between collected and channeled funds through financing in syariah banking. So it is possible to make a study about the analysis of factors that can affect the banking intermediation function, especially syariah banking. This study aims to identify the factors that influence the intermediation function of syariah banking in Indonesia. The analytical tool used in this study is the "distributed-lag model" model. In

https://doi.org/10.35760/eb.2018.v23i2.1826

this model the analysis carried out multiple linear regression analysis, multiple correlation, calculation of determination coefficient value, and hypothesis check with T-test and F-test. The conclusion is about the existence of a significant relationship between NPF, SBIS, GDP and CSPI in cooperation with FDR. Partially, NPF has a significantly positive relationship with FDR, meanwhile SBIS and IHSG have a significantly negative relationship with FDR, and for GDP there is no significant relationship with FDR. From several variables that have a correlation with FDR, it turns out IHSG with a significant level of 0.905 or 90.5%.

Keywords: *FDR, NPF, SBIS, GDP and CSPI*

PENDAHULUAN

Sulitnya mengurangi tingkat pengangguran atau menciptakan lapangan kerja baru merupakan cermin dari lambatnya gerak laju ekspansi usaha. Fenomena yang dijumpai adalah dimana para pelaku bisnis masih banyak mengeluhkan sulitnya memperoleh suntikan modal dari perbankan sebagai sumber dana penting untuk meningkatkan kapasitas produksi mereka. Sehingga fungsi intermediasi perbankan Indonesia masih perlu dipertanyakan. Khusus di perbankan syariah, fungsi intermediasi juga masih belum optimal. Hal tersebut dapat dilihat dari salah satu indikator yang memperlihatkan berperan atau tidaknya fungsi intermediasi perbankan syariah yaitu FDR (*Financing to Deposit Ratio*). FDR merupakan rasio pembiayaan yang disalurkan kepada debitur terhadap dana yang diterima oleh bank syariah. Tahun 2009, nisbah antara pembiayaan dan dana masyarakat yang dihimpun bank syariah menunjukkan penurunan yang cukup tajam. FDR tahun 2009 adalah sebesar 89,7 persen jauh dari FDR tahun 2008 yang mencapai angka 104,64 persen. Lebih lanjut lagi, dari jumlah pembiayaan yang ada porsi pembiayaan *murabahah* yang bersifat konsumtif lebih tinggi yaitu 56,8 persen dari pada pembiayaan *mudharabah* atau *musyarakah* yang bersifat pembiayaan modal kerja sebagai sumber pendapatan utama perbankan syariah.

Melihat kondisi tersebut, dimana perbankan umumnya dan perbankan syariah khususnya yang seharusnya menjadi media intermediasi antara pihak yang memiliki kelebihan dana dengan pihak yang membutuhkan dana bagi kelangsungan kehidupan ekonomi masyarakat suatu negara, ternyata belum dapat dirasakan oleh masyarakat umumnya. Sehubungan dengan itu penulis tertarik untuk melakukan penelitian terhadap faktor-faktor apa saja yang dapat berpengaruh terhadap fungsi intermediasi perbankan syariah.

KERANGKA TEORI

Ruang Lingkup Kegiatan Operasional Bank Syariah

Ditinjau dari fungsinya, terdapat beberapa definisi tentang bank antara lain adalah bahwa bank adalah industri jasa yang berfungsi sebagai mediator dari pihak yang memiliki kelebihan dana dengan pihak yang membutuhkan dana. Berdasarkan Undang-Undang No. 10 Tahun 1998 tentang Perubahan atas UU No. 7 Tahun 1992 tentang Perbankan, dinyatakan bahwa bank adalah badan usaha yang menghimpun dana dari masyarakat dalam bentuk simpanan dan menyalurkannya kepada masyarakat dalam bentuk kredit dan/atau bentuk-bentuk lainnya dalam rangka meningkatkan taraf hidup rakyat banyak. Selanjutnya bank syariah dapat didefinisikan sebagai bank yang melaksanakan kegiatan usahanya berdasarkan prinsip syariah. Yang dimaksud dengan prinsip syariah berdasarkan Undang-Undang Nomor 10 Tahun 1998 pasal 1 ayat 13 adalah aturan perjanjian berdasarkan hukum Islam antara bank dan pihak lain untuk penyimpanan dana dan/atau pembiayaan kegiatan usaha, atau kegiatan lainnya yang dinyatakan sesuai dengan syariah.

Adapun untuk operasional, bank syariah dapat mengembangkan berbagai macam produk yang sesuai dengan prinsip syariah. Secara garis besar pengembangan produk bank syariah dapat dikelompokkan dalam tiga kelompok, yaitu:

1. Produk Penghimpunan Dana

Penghimpunan dana di bank syariah dapat dilakukan dalam bentuk giro, tabungan dan deposito. Dalam pengembangannya, produk penghimpunan dana dapat dikembangkan dengan 2 (dua) prinsip, yaitu prinsip *wadi'ah*, dan prinsip *mudharabah*.

2. Produk Penyaluran Dana

Secara garis besar, produk-produk yang dikembangkan dalam menyalurkan dana yang terhimpun dapat dikelompokkan ke dalam empat kategori berdasarkan tujuan penggunaannya, yaitu (1) pembiyaan dengan prinsip jual beli, (2) pembiayaan dengan prinsip sewa, (3) pembiayaan dengan prinsip bagi hasil, dan (4) pembiayaan dengan akad pelengkap.

3. Produk Jasa

Bank dapat melakukan berbagai pelayanan jasa perbankan kepada nasabah dengan mendapat imbalan berupa sewa atau keuntungan. Jasa perbankan tersebut antara lain berupa *sharf* (jual beli valuta asing) dan *ijarah* (sewa) dalam bentuk penyewaan kotak simpanan (*safe deposit box*) dan jasa tata laksana administrasi dokumen (*custodian*).

Dari berbagai jenis kegiatan yang dapat dilakukan oleh bank tersebut di atas, dapat disimpulkan bahwa kegiatan bank syariah tidak hanya meliputi penghimpunan dana dan penyaluran dalam bentuk pembiayaan, tetapi memiliki lingkup kegiatan yang lebih luas. Namun kegiatan penghimpunan dana dan penyaluran dana dalam bentuk pembiayaan merupakan kegiatan bank yang utama berkaitan dengan fungsi bank sebagai media intermediasi. Fungsi intermediasi inilah yang akan berpengaruh terhadap peningkatan taraf hidup masyarakat banyak.

Ukuran Fungsi Intermediasi Perbankan Syariah

Ukuran fungsi intermediasi perbankan dalam penilaian kesehatan perbankan dari Bank Sentral tidak diatur dengan tegas. Yang diatur secara tegas adalah ketentuan Batas Maksimum Pemberian Kredit/Pembiayaan (BMPK) atau *Legal Lending Limit.* Ketentuan BMPK dimaksudkan adalah untuk mengendalikan risiko pemberian kredit kepada debitur tertentu baik kepada nasabah perorangan maupun badan hokum atau kepada pemegang saham bank tersebut. Ukuran yang digunakan adalah maksimum kredit yang dapat diberikan dikaitkan dengan modal yang dimiliki bank tersebut. Adapun besarnya proporsi aset bank yang harus terdiri dari pinjaman atau beberapa rasio pinjaman yang disalurkan terhadap dana yang dihimpun suatu bank, merupakan bagian dari *asset and liability management* suatu bank.

Optimalisasi *return of assets* dan risiko pembiayaan bermasalah, risiko likuiditas dan risiko lainnya tentu akan menjadi pertimbangan. Edward W. Reed dan Edward K. Gill (1989) dalam bukunya *Commercial Bank* menyatakan bahwa tidak ada jawaban pasti tentang besar maksimal portofolio pinjaman. Berapa besar proporsi aset bank yang harus terdiri dari pinjaman atau pembiayaan dalam bank syariah adalah suatu persoalan kebijakan bank secara keseluruhan dan selanjutnya merupakan dasar penentuan dalam kebijakan pembiayaan. Karena pinjaman biasanya merupakan aset yang paling menguntungkan yang dimiliki oleh suatu bank.

Faktor-Faktor yang Mempengaruhi Fungsi Intermediasi Bank

Pemberian pinjaman merupakan kegiatan bank yang sangat menentukan dalam fungsi intermediasinya. Namun karena pemberian pinjaman mempunyai peran penting, baik bagi bank maupun masyarakat, maka kebijakan penjaman harus dibuat dengan cermat. Pada umumnya menurut Edward W. dan Edward K. (1989) bahwa faktor yang disebut dibawah ini juga menentukan besar dari komposisi cadangan sekunder dan rekening investasi sebuah bank. Faktor-faktor yang paling menentukan menurut mereka adalah: (a) Posisi Modal, (b) Risiko dan Laba, (c) Stabilitas Ekonomi, (d) Pengaruh Kebijakan Moneter dan Fiskal, (e) SDM Bank yang Profesional, dan (f) Kebutuhan Kredit Setempat. Dari sisi bank syariah, faktor-faktor penentu dalam fungsi intermediasi tersebut akan dijelaskan sebagai berikut:

a. Posisi Modal

Modal bank bertindak sebagai penyangga untuk melindungi tabungan penabung. Besarnya modal dalam kaitannya dengan deposit mempengaruhi resiko yang dapat dipikul oleh sebuah bank. Bank yang memiliki struktur modal yang lebih besar dapat memberikan pinjaman dengan jatuh tempo yang lebih lama dan resiko kredit yang lebih besar.

b. Risiko dan Laba

Untuk kegiatan yang lebih berhasil bagi sebuah bank, selama bank mempertimbangkan faktor penting ini dalam merumuskan kebijakan pembiayaan. Sebagian bank mungkin memberikan tekanan lebih kepada pendapatan dibandingkan dengan bank lainnya. Bank yang memiliki kebutuhan laba yang lebih besar, dalam melaksanakan kebijakan pembiayaan lebih agresif dibandingkan dengan bank yang tidak menganggap laba sangat penting. Kebijakan yang agresif mungkin mengharuskan pemberian pembiayaan yang lebih besar pada produk *murabahah*, yang biasanya memberikan memberikan margin keuntungan yang lebih tinggi dengan risiko yang lebih rendah dibandingkan dengan pembiayaan modal kerja berupa produk *musyarakah* ataupun *mudharabah*.

c. Stabilitas Deposit

Naik turun dan jenis deposit harus dipertimbangkan oleh sebuah bank dalam meneruskan kebijakan pinjamannya. Setelah menetapkan cadangan yang cukup untuk cadangan primer dan sekunder bank, selanjutnya dapat memberikan pembiayaan. Walaupun kedua cadangan dimaksudkan untuk menjaga fluktuasi deposit yang dapat diperkirakan serta naik turunnya rekening karena kebutuhan yang tak terduga mengharuskan bank untuk mempertimbangkan stabilitas deposit dalam merumuskan kebijakan pembiayaan.

d. Kondisi Ekonomi

Kondisi ekonomi daerah yang dilayani oleh bank sangat berpengaruh dalam menentukan kebijakan pembiayaan suatu perekonomian yang stabil dan lebih mendukung kebijakan pinjaman yang lebih longgar dibandingkan dengan kondisi ekonomi yang mengalami perubahan musim dan siklus. Kondisi ekonomi yang penuh ketidakpastian mengandung risiko pembiayaan bermasalah yang lebih besar dibandingkan dengan kondisi ekonomi yang stabil. Perhatian harus diberikan pada perekonomian nasional. Kondisi para modal yang stabil dan dinamis juga merupakan alternatif bagi investasi maupun penerima pembiayaan.

e. Kebijakan Moneter dan Fiskal

Kemampuan bank memerikan pembiayaan dipengaruhi oleh kebijakan moneter dan fiskal. Jika kebijakan moneter dan fiskal bersifat ekspansi dan cadangan tambahan diberikan pada sistem perbankan komersial, kemampuan bank untuk memberikan pinjaman akan

https://doi.org/10.35760/eb.2018.v23i2.1826

meningkat. Dalam keadaan seperti ini bank dapat membuat kebijakan pinjaman yang lebih longgar daripada kalau keadaan sebaliknya. Penurunan suku bunga Sertifikat Bank Indonesia (SBI) sudah semestinya menurunkan suku bunga pinjaman bank konvensional, dan terhadap bank syariah penurunan suku bunga ini akan berdampak pada debiturnya yang mungkin akan lari untuk mendapatkan dana dari bank konvensional. Demikian pula dengan penerapan pajak pada simpanan bank dan transaksi di pasar modal.

f. Profesionalitas Sumber Daya Manusia Bank

Profesionalitas sumber daya manusia berperan penting dalam pembuatan kebijakan pembiayaan. Pejabat bank yang memiliki kemampuan dan berpengalaman yang banyak di bidang pembiayaan akan memberikan keputusan yang cepat dan tepat dalam pemberian pembiayaan. SDM bank yang professional juga akan menjamin layanan pemberian pembiayaan yang cepat dan tidak bertele-tele.

g. Kebutuhan akan Pembiayaan di Daerah Setempat

Alasan utama pembentukan bank atau pembukaan jaringan suatu adalah untuk melayani masyarakat setempat dan sekitarnya. Jika ini tidak dilakukan, maka tidak ada atau sedikit sekali alasan untuk membenarkan kehadirannya. Bank secara moral terlibat untuk memberikan pembiayaan kepada masyarakat yang mengajukan permohonan pinjaman yang sehat dan logis secara ekonomis.

Penelitian Sebelumnya

Rusmiyati, penelitian ini dilatarbelakangi oleh kecenderungan melambatnya laju pertumbuhan kredit karena belum pulihnya fungsi intermediasi perbankan akibat krisis yang melanda Indonesia tahun 1997, akibatnya perbankan enggan untuk menyalurkan kredit ke sektor industri dalam jumlah besar karena risiko yang tinggi. Kondisi ini menyebabkan investasi dan konsumsi tertekan sehingga akan mempengaruhi output nasional atau yang dikenal dengan produk domestik bruto. Adapun beberapa masalah yang dirumuskan dalam penelitian tersebut adalah menganalisa faktor-faktor apa saja yang mempengaruhi kredit dari jalur pinjaman, dan bagaimana pengaruh kredit tersebut terhadap output nasional. Dan hasil dari penelitian ini menunjukkan bahwa kredit dipengaruhi oleh suku bunga SBI (Sertifikat Bank Indonesia), DPK (Dana Pihak Ketiga), capital per asset, dan *lag* variable dependen. Variabel NPL (*Non Performing Loan*) yang dimasukkan dalam penelitian ini ternyata tidak signifikan berpengaruh pada tingkat sepuluh persen. Persamaan output nasional (PDB) dipengaruhi oleh dummy kebijakan ekspansif, dummy pemilu dan dummy krisis tahun 1998. Sedangkan variabel kredit tidak berpengaruh terhadap PDB karena kebijakan kredit belum mampu mempengaruhi kredit secara optimal karena belum pulihnya fungsi perbankan sebagai *financial intermediation*.

Lukman Hakim Hassan (2004) melihat Perbandingan Peranan Jalur Kredit pada Masa Sebelum dan Sesudah Krisis Ekonomi menggunakan model ketidakseimbangan kredit dan model VAR (*Vector Autoregression*). Model ketidakseimbangan kredit diestimasi dengan menggunakan fungsi *likehood* dan metode *maximum likehood*. Model ini terdiri dari model permintaan dan penawaran kredit. Model VAR dalam penelitian ini digunakan untuk melihat pengaruh jalur kredit dan M2 terhadap output. Dari penelitian ini didapati bahwa sebagian dari hasil estimasi yang dilakukan tidak sesuai dengan teori. Pada persamaan penawaran dan permintaan kredit variable yang sangat berpengaruh adalah suku bunga Sertifikat Bank Indonesia (SBI) dan Gross Donestic Produk (GDP).

Abdullah dan Suseno (2003) bahwa perbankan di daerah tidak menjalankan fungsi sebagai lembaga intermediasi dimana penyaluran kredit jauh lebih kecil dibandingkan dengan penyerapan dananya. Hal ini tercermin dari *Loan to Deposit Ratio* (LDR) perbankan di daerah yang sangat kecil. Kewenangan kantor cabang secara signifikan mempengaruhi nilai kredit yang disalurkan oleh kantor cabang bank. Meskipun perindividual kredit multiguna umumnya bernilai nominal relatif kecil, namun total proposal yang diajukan jauh lebih besar dibandingkan dengan jenis kredit lainnya. Sehingga dengan demikian secara keseluruhan jenis kredit ini memiliki nilai nominal besar dan sekaligus menegaskan bahwa kewenangan kantor cabang bank sangat mempengaruhi total penyaluran kredit di daerah. Rahman (2003) bahwa intermediasi perbankan melalui LDR dipengaruhi oleh NPL, SBI, IHSG dan PDB. Jadi dari paparan penelitian sebelumnya dapat ditarik suatu premis bahwa faktor-faktor yang dapat mempengaruhi fungsi intermediasi bank syariah yang tercermin dalam *Financing to deposit ratio*, yaitu:

a. *Non Performing Financing* (NPF)
b. Sertifikat Bank Indonesia Syariah (SBIS)
c. *Product Domestic Bruto* (PDB)
d. Indeks Harga Saham Gabungan (IHSG)

METODE PENELITIAN

Sampel Penelitian dan Data

Obyek penelitian dalam tesis ini adalah perusahaan-perusahaan yang bergerak di industri perbankan syariah dan beroperasi di Indonesia. Menurut data dari Statistik Perbankan Syariah yang diterbitkan Bank Indonesia, jumlah Bank Umum Syariah dan Unit Usaha Syariah yang beroperasi dari tahun 2005 sampai dengan 2009 adalah sebanyak 6 Bank Umum Syariah dan 25 Unit Usaha Syariah, sehingga berjumlah 31 Bank Syariah. Adapun jumlah populasi dan sampel dalam penelitian ini adalah sama yaitu sebanyak 31 bank syariah yang diambil secara acak "*non probability random sampling*", dengan menguji semua anggota populasi sebagai anggota sampel dalam penelitian. Hal ini disebabkan karena setiap anggota sampel memiliki peluang yang sama untuk diuji. Dalam pengambilan sampel seperti ini juga dikenal dengan "*non purposive sampling*".

Penelitian menggunakan sumber data sekunder yang secara spesifik mengacu pada data yang terdapat pada Statistik Ekonomi Keuangan yang diterbitkan oleh Direktorat Statistik Ekonomi dan Moneter – Kantor Pusat Bank Indonesia. Data yang akan dianalisa adalah data variabel-variabel ekonomi yang mempengaruhi fluktuasi *financing to deposit ratio* selama 5 (lima) tahun, yaitu dari tahun 2005 sampai dengan 2009.

Desain Penelitian dan Metode Analisis

Desain penelitian ini menerapkan kombinasi yang bertipe deskriptif atau *descriptive research* dan sebab akibat atau *causal research* (Wibisono, 2003:21). Penelitian ini dapat dikategorikan sebagai penelitian deskriptif karena riset ini mempunyai tujuan utama untuk menggambarkan karakteristik sebuah populasi atau fenomena yang sedang terjadi. Disamping itu juga termasuk dalam kategori penelitian sebab akibat karena dalam salah satu analisisnya berusaha untuk mengindentifikasi hubungan sebab akibat antara berbagai variabel.

Penelitian ini menggunakan model analisis regresi linier berganda (*multiple regression model*) dan data yang digunakan adalah penggabungan data antara data yang bersifat "*time series*" dengan yang bersifat "*cross-section"* atau yang dikenal dengan metode "*pooling*". Selanjutnya dalam analisis data ini, digunakan metode analisis "*time series*" yang mengukur secara rata-rata pengaruh yang ditimbulkan dari masing-masing variabel independen terhadap variabel dependen secara berurutan dari faktor periode (waktu), sehingga perlu adanya pengukuran secara berurutan antara-masing-masing variabel independen dengan variabel dependen, dimana periode yang telah lampau sangat berpengaruh sekali secara bersama-sama dan parsial terhadap periode yang akan datang. Adapun analisis ini dikenal dengan nama "*auto-regressive*" model atau dikenal juga dengan analisis "*distributed-lag model*" (Gujarat:1995). Persamaan umum regresi linier berganda adalah:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

Dimana:

Y = *Financing to Deposit Ratio* sebagai

a = Konstanta

b_1=Koefisien Regresi dari *Non Performing Finance*

X_1 = *Non Performing Finance* sebagai

b_2 = Koefisien Regresi dari Imbalan SBIS

X_2 = Imbalan SBIS sebagai

b_3 = Koefisien Regresi dari Produk Domestik Bruto

X_3 = Produk Dpmestik Bruto

b_4 = Koefisien Regresi dari IHSG

X_4 = IHSG sebagai Variabel

HASIL DAN PEMBAHASAN

Deskripsi Variabel

***Financing to Deposit Ratio* (FDR)**

FDR menggambarkan seberapa besar jumlah dana pihak ketiga yang disalurkan oleh bank syariah kepada masyarakat melalui pembiayaan. Variabel ini merupakan salah satu indikator untuk mengetahui seberapa besar fungsi intermediasi dapat terlaksana di perbankan syariah. Tabel 1 perkembangan FDR Perbankan Syariah secara kuartalan selama kurun waktu 2005 sampai dengan 2009.

Tabel 1. Perkembangan Financing to Deposit Ratio

Periode/ Tahun	2005	2006	2007	2008	2009
Q1	106%	107%	95%	100%	103%
Q2	107%	111%	101%	103%	100%
Q3	110%	109%	106%	103%	98%
Q4	98%	99%	100%	103%	90%

Sumber: Statistik Perbankan Syariah Bank Indonesia

Table 1 dapat diketahui bahwa rasio pembiayaan terhadap dana pihak ketiga di perbankan syariah mengalami fluktuasi naik turun. Awal periode 2005 dapat dilihat bahwa FDR bank syariah mengalami kenaikan yang cukup signifikan, hal ini berlanjut sampai dengan pertengahan tahun 2007. Pada pertengahan tahun 2007 sampai dengan periode akhir tahun 2009, FDR perbankan syariah menunjukkan penurunan dari periode ke periode.

Sertifikat Bank Indonesia Syariah (SBIS)

SBIS merupakan surat berharga yang dikeluarkan Bank Indonesia berdasarkan prinsip syariah yaitu dengan akad *ju'alah* yang diterbitkan melalui mekanisme lelang. SBIS diterbitkan guna penyediaan instrumen pasar terbuka untuk mengendalikan moneter dengan prinsip syariah. Untuk mendapatkan SBIS, bank syariah harus memenuhi FDR. SBIS mulai diberlakukan sejak bulan Maret 2008, sebelumnya instrument yang digunakan adalah Sertifikat Wadiah Bank Indonesia (SWBI). Berikut ini disajikan data-data SBIS dan SWBI dalam kurun waktu 2005 sampai dengan 2009.

https://doi.org/10.35760/eb.2018.v23i2.1826

Tabel 2. Perkembangan Sertifikat Bank Indonesia Syariah

Periode/ Tahun	2005	2006	2007	2008	2009
Q1	487	1.148	3.325	2.839	3.251
Q2	538	1.188	2.036	2.042	3.003
Q3	507	1.046	1.311	413	3.095
Q4	2.395	2.357	2.599	2.824	4.341

Sumber: Statistik Perbankan Syariah Bank Indonesia

Tabel 2 terlihat bahwa dari tahun 2005 sampai dengan 2009 nilai SBIS secara rata-rata mengalami kenaikan terutama pada kuartal keempat setiap tahunnya. Hal ini menunjukkan bahwa peran Bank Indonesia dalam rangka menstabilkan moneter dengan instrument SBIS terhadap uang beredar cukup tinggi, sehingga secara proporsional dapat menekan laju inflasi.

Non Performing Financing (NPF)

NPF merupakan nilai pembiaayan yang tidak lancar yang secara terjadi akibat ketidakstabilan ekonomi. Berikut ini data jumlah NPF bank syariah di Indonesia selama kurun waktu 2005 sampai dengan 2009 secara kuartal.

Tabel 3. Perkembangan Non Performing Financing Bank Syariah
(dalam milyar rupiah)

Periode/ Tahun	2005	2006	2007	2008	2009
Q1	359,14	683,63	1.193,86	1.237,00	2.019,00
Q2	549,13	767,54	1.423,36	1.442,00	1.851,00
Q3	696,41	1.007,87	1.633,34	1.554,00	2.547,00
Q4	429,11	971,22	1.131,20	1.509,00	1.882,00

Sumber: Statistik Perbankan Syariah Bank Indonesia

Tabel 3 menunjukka nilai pembiayaan tidak lancar (NPF) bank syariah dari tahun ke tahun menunjukkan peningkatan. Hal ini terjadi karena faktor inflasi yang berpengaruh terhadap tingkat pengembalian pembiayaan yang disalurkan oleh perbankan syariah.

Produk Domestik Bruto (PDB)

PDB merupakan jumlah produk dan jasa yang dihasilkan oleh suatu negara tanpa memisahkan produk yang dihasilkan dalam negeri atau luar negeri. Berikut data perkembangan PDB Indonesia selama kurun waktu 2005 sampai dengan 2009.

Tabel 4. Perkembangan Produk Domestik Bruto (dalam milyar rupiah)

Periode/ Tahun	2005	2006	2007	2008	2009
Q1	426.612	448.485	475.642	469.642	527.710
Q2	436.121	457.637	488.421	519.359	540.353
Q3	448.598	474.904	506.833	538.567	561.265
Q4	439.484	466.101	493.332	518.935	547.543

Sumber: Statistik Perbankan Syariah Bank Indonesia

Tabel 4 diatas dapat diketahui bahwa PDB Indonesia selama 2005 sampai dengan tahun 2009 menunjukkan peningkatan dari tahun ke tahun. Hal ini mengindikasikan bahwa perekonomian Indonesia semakin membaik. Namun apabila dianalisa dengan SBIS dan NPF yang juga meningkat, dapat disimpulkan bawa tidak adanya hubungan yang cukup kuat secara signifikan terhadap indicator SBIS dan NPF, karena seharusnya bila terjadi peningkatan risiko pembiayaan perbankan syariah dengan tingkat inflasi yang tinggi maka akan terjadi penurunan yang cukup signifikan terhadap pertumbuhan PDB.

Indeks Harga Saham Gabungan (IHSG)

IHSG merupakan indeks gabungan dari seluruh jenis saham yang tercatat di bursa efek. Indeks ini diterbitkan oleh bursa efek. Berikut data perkembangan IHSG kuartalan selama periode 2005 sampai dengan 2009.

Tabel 5. Perkembangan Indeks Harga Saham Gabungan

Periode/ Tahun	2005	2006	2007	2008	2009
Q1	1.080	2.323	1.831	2.447	1.407
Q2	1.122	1.310	2.139	2.349	2.027
Q3	1.079	1.535	2.359	1.833	2.468
Q4	1.163	1.806	2.746	1.355	2.534

Sumber: Bapepam, Bank Indonesia

Tabel 5 menunjukkan bahwa perkembangan indeks harga saham gabungan (IHSG) dari tahun 2005 sampai dengan 2009 secara rata-rata mengalami fluktuatif yang cukup signifikan namun secara umum angka indeks mengalami peningkatan. Dilihat dari sudut pandang dinamika investasi di pasar modal, peningkatan angka indeks memberikan indikasi bahwa iklim investasi jangka panjang bagi pihak investor cukup baik.

Hipotesis

Hasil statistik pada Tabel 6 memperlihatkan bahwa hanya variabel NPF sebagai determinasi *financing to*

https://doi.org/10.35760/eb.2018.v23i2.1826

deposit ratio. Penulis menduga keterbatasan data atau pendek nya rentang waktu menyebabkan estimasi model tidak begitu baik, faktor lain bisa saja variabel SBIS, PDB dan IHSG tidak berpengaruh langsung terhadap *financing to deposit ratio*. FDR merupakan penyaluran dana ke masyarakat sehingga katanlah kenaikan IHG dan PDB atau SBIS belum tentu ada dampak pada aktivitas ekonomi secara langsung yang berujung pada pembiayaan dampak dari aktivitas ekonomi masyarakat.

Tabel 6. Uji Hepotesis

Model		T	Sig.
1	(Constant)	-1.147	.269
	NPF	2.303	.036
	SBIS	-.501	.624
	PDB	.453	.657
	IHSG	-.122	.905

a. Dependent Variable: FDR

Koefisien determinasi sebesar 0,467 menunjukkan bahwa korelasi atau hubungan antara *financing to deposit ratio* dengan Non Performing Finance (NPF), Sertifikat Bank Indonesia Syariah (SBIS), Pendapatan Domestik Bruto (PDB) dan Indeks Harga Saham Gabungan (IHSG) adalah tidak terlalu lemah karena angka tersebut masih dibawah 0,5. Ke empat variabel dalam model tesrsebut adalah signifikan jika di uji secara bersama, artinya ke empat variabel tersebut merupakan determinan dari FDR (lihat Tabel 7).

Tabel 7. Uji F dan Koefisien Determinasi

Model	R	R Square	F	Sig.
1	.683[a]	,467	3.288	.040[a]

a. Predictors: (Constant), IHSG, NPF, SBIS, PDB

b. Dependent Variable: FDR

SIMPULAN DAN SARAN

Salah satu indikator yang dapat memperlihatkan fungsi intermediasi perbankan syariah tersebut adalah rasio pembiayaan yang disalurkan terhadap dana pihak ketiga yang diterima atau bisa diistilahkan dengan *financing to deposit ratio* (FDR). Alat uji yang digunakan dalam penelitian ini adalah uji regresi linier berganda. Setelah melakukan beberapa serangkaian pengujian secara empiris, maka terdapat beberapa hasil kesimpulan bahwa secara bersama-sama variabel faktor NPF, SBIS, PDB, dan IHSG berpengaruh signifikan dengan FDR. Uji secara parsian hanya variabel NPF mempunyai pengaruh signifikan terhadap FDR. Ada dugaan ke tiga variabel lain tidak signifikan dikarenakan masih terbatasnya time series data penelitian atau bisa juga dikarenakan ke tiga variabel tersebut bukan merupakan pengaruh langsung ke FDR. Keterbatasan ini bisa menjadi topik penelitian selanjutnya.

DAFTAR PUSTAKA

Abdullah, Piter, dan Suseno. (2003). Fungsi Intermediasi Perbankan di Daerah : Pengukuran dan Identifikasi Faktor-Faktor yang Mempengaruhi. *Buletin Ekonomi Moneter dan Perbankan,* 3(4).

Edward W. Reed, and Edward K. Gill. (1989). *Commercial Bank*, Fawith Editia, New Jersey: Prentice Hall Inc.

Hassan, L. H. (2004). Perbandingan Peranan Jalur Kredit Pada Masa Sebelum dan Ketika Krisis Ekonomi. *Perbandingan Peranan Jalur Kredit,* 36.

Rahman (2003). Analisis Faktor-Faktor yang Mempengaruhi Fungsi Intermediasi Perbankan di Indonesia Tahun 1998-2002. *Tesis.* Yogyakarta. Program Magister Manajemen Universitas Islam Indonesia.

Bank Indonesia. Statistik Ekonomi Keuangan Indonesia, Retrieved from www.bi.go.id

Bank Indonesia. Statistik Perbankan Syariah, Retrieved from www.bi.go.id

Badan Pusat Statistik. Produk Domestik Bruto, Retrieved from www.bps.go.id

https://doi.org/10.35760/eb.2018.v23i2.1826

HEALTH ASSESSMENT OF GOVERNMENT BANKS IN INDONESIA USING RISK-BASED BANK RATING

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Abstract

Health of a bank can be defined as the ability of a bank to conduct banking operational normally and be able to satisfy all its obligations well by means of accordance with the applicable banking regulations. The health assessment is very important to a bank, because the bank managing public funds entrusted to the bank. Accordance with PBI 13/1/PBI/2011 numbers that have been set on January 5, 2011 and was implemented by the bank in July 2011, CAMELS method is no longer used as a method to measure the health of a bank. CAMELS method was replaced by RGEC method (Risk profile, Good Corporate Governance, Earnings, and Capital) to measure and assess the health of a bank. This research conducted on the four Government Banks (Bank Mandiri, BNI, BTN, and BTN) from the year 2009-2012 with comparative descriptive method. The results of Risk Profile factor that use analysis tool of NPL to measure Credit Risk showed that Bank Mandiri, BNI, BRI into category of healthy bank, while BTN decreased slightly in the rankings in 2012 from a healthy bank into fairly healthy bank. Meanwhile the assessment results of liquidity risk that calculated use analysis tool of LDR showed that Bank Mandiri and BNI into category of very healthy bank, BRI tend to stable with healthy bank category, but BTN into category of poorly bank. The result of self-assessment Good Corporate Governance showed that four Government Banks have been successfully implemented Good Corporate Governance very well. The result of Earnings factor that use analysis tool of ROA showed that four Government Banks as healthy bank. The result of Capital factor that use analysis tool of CAR generally showed that four Government Banks into category of very healthy bank.

Keywords*: Health of Bank, Assessment, Government Bank, RGEC, Good Corporate Governance*

INTRODUCTION

Bank can be defined as a company which is engaged in finance that means banking activity always related to finance. A bank cannot be separated from financial problems (Kashmir, 2008:25). Banking health assessment conducted every period. The healthy banks by rating or the bank whose health continues to increase so does not matter because that is what is expected and continue to keep it maintained. But for the constantly unhealthy bank, it must get briefed or even sanctions in accordance with applicable regulations.

The experience of the global financial crisis has prompted the need to improve the effectiveness of risk management and good corporate governance. An understanding of the principles of good corporate governance has been used as a reference by the countries in the world, including Indonesia. The principles needed to achieve continuous performance with regard to the parties concerned. The principles of Good Corporate Governance issued by international organizations OECD (Organization for Economic Co-operation and Development) includes six terms.

From now on according to PBI No. 13/1/PBI/2011 that has been set on January 5, 2011 and was implemented by the bank in July 2011, then CAMELS method is no longer used as a method to measure the health of a bank. To replace CAMELS method is RGEC method (Risk profile, Good Corporate Governance, Earnings, and Capital) to measure and assess the health of a bank. This method also commonly called Risk-Based Bank Rating. Related research to analysis of the health of the bank with Risk-Based Bank Rating is still very rarely.

Based on previous research which related to the assessment of banks used another methods beside Risk-Based Bank Rating, results showed that Risk-Based Bank Rating can be used to measure and assess the health of banks. So, in this research, the authors will discuss how analysis health assessment of Government Banks in Indonesia with Risk-Based Bank Rating from the year 2009 until 2012. With Limitation of this research restricted to the analysis health assessment of government in Indonesia with Risk-Based Bank Rating on Bank Mandiri, BNI, BRI, and BTN for year period 2009-2012.

LITERATURE REVIEW

Types of Bank

According to Kashmir (2002:23) in Indonesian Law No. 10 of 1998 on banking, the bank is business entities that raise funds from the public in the form of savings and distributing them to the public in the form of credit and or other forms in order to improve standard of living of the people. According Kuncoro (2002:68), the definition of a bank is a financial institution whose principal business is to collect funds and distribute those funds back into the community in the form of credit and provide services in payment traffic and circulation of money.

According to Indonesian Law No. 10 of 1998 dated 10 November 1998 on banking, it can be concluded that the banking business covers three activities, namely collecting funds, distributing funds, and provide other banking services. Activities to collect and distribute funds are the main activities of banks, while provide other banks services only the support activities. Activities to raise funds, in the form of raising funds from the public in the form of giro, savings and deposits. Usually bank give attractive remuneration such as interest and gifts as a stimulus for the people. Distribution funds activities, in the form of lending to the public. While other banking services provided to support the smooth operation of the primary. Bank first established by Prof. Dr Ali Afifuddin, SE.

The main banking activity is to collect funds from the public as it is known in the banking world as funding activities. Collect funds here the intention is raise funds by buying funds from the public. Bank using variety of strategies so that people want to invest the funds in the form of saving.

According to Law no. 7 of 1992 concerning Banking as amended by Law No. 10 of 1998, Bank is a business entity which collects funds from the public in the form of saving, and distribute it to the public in order to improve the living standard of the people. According to the function, banks in Indonesia are divided into two types, that is central bank, and commercial bank. According to ownership, banks in Indonesia are divided into three types: (1) government bank; private bank, and cooperative bank. According to the law, banks in Indonesia are divided into four types: company limited bank, firms bank, individual enterprise bank, and cooperative bank. Meanwhile according to the form of operational activities, banks in Indonesia divided into three types: (1) conventional bank, (2) sharia bank, and (3) rural bank.

Health of Bank

Health of a bank can be defined as the ability of a bank to conduct banking operational normally and be able to satisfy all its obligations well by means of accordance with the applicable banking regulations (Triandaru and Budisantoso, 2008:51). Under Law No. 10 of 1998 on the Amendment Law No. 7 of 1992 on banking, coaching and supervision of banks conducted by Bank Indonesia. The law further provides that:

1. Banks are required to maintain the health of banks in accordance with the provisions.
2. In giving credit or financing, and other business activities, banks are required to take the ways that do not harm the interests of the bank or the customer.

1. Banks are required to submit to Bank Indonesia, all information, and an explanation of the business according to the procedure established by Bank Indonesia.
2. Upon request of Bank Indonesia, the bank is required to provide an opportunity for inspection of the books and records of existing, and shall provide the necessary assistance in order to obtain the truth of any information, documents, and explanations that are reported by the bank concerned.

3. Bank Indonesia shall conduct inspection of bank, either periodically or at any time if necessary, Bank Indonesia may assign public accounting for and on behalf of Bank Indonesia to conducts an examination of the bank.
4. Bank shall submit to Bank Indonesia the balance sheet, income statement and explanation, and other periodic reports, in the time and form establish by Bank Indonesia. Balance Sheet and the annual income statement have to be audited first by a public accountant.
5. Banks are required to announce the balance sheet and income statement within the time set by Bank Indonesia.

The financial performance is a picture of the success achieved by company can be seen from the financial ratios by using the information from income statement and balance sheet. Bank performance is an illustration of the health of banks. Bank performance will be measured through Bank Indonesia regulations No.13/1/PBI/2011 on general bank rating consisting of risk profile (R), good corporate governance (G), earnings (E), and capital (C). his regulation requires commercial bank to conduct self-assessment of health of bank by using the approach of Risk (Risk-based Bank Ratings / RBBR) both individually and on a consolidated basis. General principles which the basis for assessing health of bank are as follows risk oriented, proportionality, materiality & significance, and comprehensive & structured.

RGEC Method or Risk-Based Bank Rating

RGEC method is the method used to measure the health of a bank. In accordance to PBI Regulation 13/1/PBI/2011 has been set on January 5, 2011 and was implemented on bank in July 2011, CAMELS method is no longer used as a method to measure the health of a bank and was replaced by RGEC method (Risk profile, Good Corporate Governance, Earnings, and Capital) to measure and assess the health of a bank. Also called Risk-Based Bank Rating.

Risk

Credit risk is the risk due to failure of customers or other parties in fulfilling obligations to the Bank in accordance with agreements having been agreed (Bank Indonesia Regulation No. 13/23/PBI/2011). In this study used to measure credit risk ratio of Non-Performing Loan (NPL) by Bank Indonesia based on Enclosure of Leaflet from Bank Indonesia No. 13/24/DPNP dated October 25, 2011, Non-Performing Loans are loans classified as substandard, bad loans, and doubtful.

Here are the rankings of the results of the assessment NPL ratio (Non- Performing Loans) of a conventional bank:

- **Ranked One,** loans policies issued by the bank management to support the operations of the bank that safe and health still very good.
- **Ranked Two,** loans policies issued by the bank management to support the operations of the bank that safe and health still good.
- **Ranked Three,** loans policies issued by the bank management to support the operations of the bank that safe and health still fairly good.
- **Ranked Four,** loans policies issued by the bank management to support the operations of the bank that safe and health has been less good.
- **Ranked Five,** loans policies issued by the bank management to support the operations of the bank that safe and health has been not good.

Liquidity Risk

Liquidity reflects the bank's ability to fulfill deposit withdrawals and other liabilities. A bank is said to have adequate liquidity potential when that bank can obtain the necessary funds quickly and at a reasonable cost (Greuning and Iqbal, 2011: 143). To measure liquidity, this research uses the ratio of Loan to Deposit Ratio (LDR). LDR shows how far the bank's ability to pay back the withdrawal of funds by depositors to relying on loans as a source of liquidity (Dendawijaya 2009:116).

LDR is calculated from the ratio between total financing provided by the bank with customer deposit. Total financing is financing that provided to customer (excluding loans to other banks). Customer deposit are giro, savings and deposits (excluding interbank). LDR is one of the indicators used to assess the ability of bank liquidity in the withdrawal of large amounts. Here are the rankings of the results of the assessment LDR (Loan to Deposit Ratio) of a conventional bank:

- **Ranked One,** the overall liquidity performance is very good. The liquidity ability to address the needs of liquidity and implementation risk management is very strong.
- **Ranked Two,** the overall liquidity performance is good. The liquidity ability to address the needs of liquidity and implementation risk management is strong.
- **Ranked Three,** the overall liquidity performance is fairly good. The liquidity ability to address the needs of liquidity and implementation risk management is adequate.
- **Ranked Four,** the overall liquidity performance is less good. The liquidity ability to address the needs of liquidity

and implementation risk management is weak.

- **Ranked Five,** the overall liquidity performance is not good. The liquidity ability to address the needs of liquidity and implementation risk management is very weak.

Good Corporate Governance

Good Corporate Governance is a structure made by stakeholders, shareholders, commissioners and managers to prepare corporate objectives and the means to achieve these objectives and monitor performance (Zarkasyi, 2008:35). Good Corporate Governance has five kinds of purposes (Sutojo and Aldridge, 2005:5-6). These five purposes are as following: (1) protecting the rights and interests of shareholders, protecting the rights and interests of stakeholders of non-shareholder, (3) increase the value of the company and the shareholders, (4) improving the efficiency and effectiveness of work Board of Directors and management company, and (5) improving the quality of the relationship with the Board with Directors of the company's senior management.

On the face of Good Corporate Governance implementation in commercial banks are not different from other companies, but not so. In many respects the behavior of managers and owners of the bank are the main factors that require attention in the implementation of Good Corporate Governance. In many ways the concept of Agency Theory is often used in the implementation of corporate governance cannot be fully used in the banking industry. Therefore, it should be examined how the implementation of Good Corporate Governance in the banking industry should be done (Susillo, 2007).

Bank Indonesia has just issued 3rd Enclosure of Leaflet from Bank Indonesia No. 15/15/DPNP Dated April 29th, 2013 in terms of Good Corporate Governance implementation for conventional bank to replace the rules of Bank Indonesia that is PBI No. 8/14/PBI/2006 which requires banks to conduct internal self-assessment (internal self-assessment) to Good Corporate Governance implementation. Although banks perform a self-assessment against of Good Corporate Governance implementation standards by Bank Indonesia, however, the assessment is done by competent external parties, such as The Indonesian Institute for Corporate Governance (IICG) and The Indonesian Institute for Corporate Directorship (IICD).

Good corporate governance assessment standards in every Conventional Bank using the rules of Bank Indonesia that is PBI No. 8/14/PBI/2006, not from 3rd Enclosure of Leaflet from Bank Indonesia No. 15/15/DPNP Dated April 29th, 2013 in terms of Good Corporate Governance implementation for conventional bank. This is because the result of Good Corporate Governance self-assessment in accordance with 3rd Enclosure of Leaflet from Bank Indonesia No. 15/15/DPNP Dated April 29th, 2013, the result will be published in the annual report of each state bank in the upcoming period. There are the rankings of the results of the Good Corporate Governance self-assessment on a conventional bank:

Table 1. Good Corporate Governance Composite Value

Composite Value	Composite Predicate
Composite Value < 1,5	Very Healthy
1,5 ≤ Composite Value < 2,5	Healthy
2,5 ≤ Composite Value < 3,5	Fairly Healthy
3,5 ≤ Composite Value < 4,5	Poorly
4,5 ≤ Composite Value < 5	Unhealthy

Source: Bank Indonesia

Earnings

In this research, earnings factor will be measured using ROA (Return on Assets) based on Enclosure of Leaflet from Bank Indonesia No. 13/24/DPNP dated October 25, 2011. Here are the rankings of the results of the assessment ROA (return on assets) of a conventional bank:

- **Ranked One,** ability of bank management to the overall profit of the total assets owned very high.
- **Ranked Two,** ability of bank management to the overall profit of the total assets owned high.
- **Ranked Three,** ability of bank management to the overall profit of the total assets owned adequate.
- **Ranked Four,** ability of bank management to the overall profit of the total assets owned low.
- **Ranked Five,** ability of bank management to the overall profit of the total assets owned very low.

Capital

Capital is capital adequacy criteria. Used to determine the ability of the adequacy of commercial banks in support of their activities efficiently. According to (Greuning and Iqbal, 2011:213) capital is part of the bank's funding sources which can be used directly to raise another fund, bank capital as a protection to absorb shocks from loss of business. Shortage of capital is a common symptom experienced by banks in developing countries. Shortage of capital can be sourced from two things, the first is due to the small amount of capital, the second because the quality is fairly bad. Assessment of capital standardized of Bank Indonesia conducted by calculating CAR (capital adequacy ratio).

CAR is a ratio that shows how much risky bank assets (Dendawijaya 2009:121). Here are the rankings of the results of the assessment of CAR of a conventional bank:

- **Ranked One,** reflects the level of capital is significantly higher than the prevailing provisions of CAR and expected to remain at this level for the next twelve months.
- **Ranked Two,** reflects the level of capital is higher than the prevailing provisions of CAR and expected to remain at this level for the next twelve months.
- **Ranked Three,** reflects the level of capital is slightly above the prevailing provisions of the CAR and expected to remain at this level for the next twelve months.
- **Ranked Four,** reflects the level of capital is slightly under the prevailing provisions of the CAR and expected to remain at this level for the next twelve months.
- **Ranked Five,** reflects the level of capital is lower than the prevailing provisions of CAR and expected to remain at this level for the next twelve months.

Data Analysis Techniques

The results of calculations for each ratio, will be determined composite ranking for each component and the overall composite ranking criteria for determination accordance with the regulations of Bank Indonesia. For the assessment of risk, earnings and capital, can use the basis of SE BI No.6/23./DPNP of 2004 with reference to the annual report published by each Government Bank from 2009 until 2012.

Meanwhile, for the Good Corporate Governance assessment in this research will be based on the Good Corporate Governance report contained in the annual report published by each Conventional Government Bank from 2009 until 2012. Good Corporate Governance assessment standards in each Government Banks still use the rules of Bank Indonesia, that is PBI. 8/14/PBI/2006 not from new basic assessment in accordance with 3rd Enclosure of Leaflet from Bank Indonesia No. 15/15/DPNP Dated April 29th, 2013 in terms of the implementation of Good Corporate Governance for a conventional bank. This is because the result of Good Corporate Governance self-assessment in accordance with 3rd Enclosure of Leaflet from Bank Indonesia No. 15/15/DPNP Dated April 29th, 2013, the result will be published in the annual report of each state bank in the upcoming period. There are rangkings are determined on health of conventional banks based on the Risk-Based Bank Rating ratio:

Table 2. Health Ranking of Conventional Bank

Factor	Rangkings				
	1	2	3	4	5
Risk (Loan)	NPL ≤ 2	2 < NPL ≤ 3%	3% < NPL ≤ 6%	6 < NPL ≤ 9%	NPL > 9%
Risk (Liquidity)	LDR ≤ 75%	75% < LDR ≤ 85%	85% < LDR≤100%	100% < LDR ≤ 120%	LDR > 120%
GCG	GCG < 1,5	1,5 ≤ GCG< 2,5	2,5 ≤ GCG <3,5	3,5 ≤ GCG < 4,5	4,5 ≤ GCG < 5
Earnings	ROA > 1,5%	1,25%<ROA≤ 1,5%	0,5% < ROA≤1,25%	0 < ROA ≤ 0,5%	ROA ≤ 0%
Capital	CAR ≥ 12%	9% ≤ CAR< 12%	8% ≤ CAR <9%	6% < CAR < 8%	CAR ≤ 6%

Source : Bank Indonesia

After calculation of each ratio, then make the determination of composite ranking as follows which is the same as the CAMELS method:

a) **The First Composite Ranking,** indicating that the bank as **very healthy** and able to overcome the negative influence of economic conditions and the financial industry.

b) **The Second Composite Ranking,** reflects that the banks classified as **healthy** and able to overcome the negative influence of economic conditions and the financial industry, but the bank still has minor weaknesses that can be overcome by the action routine.

c) **The Third Composite Ranking,** reflects that the bank is **fairly healthy,** but there are some weaknesses that can causes to deteriorate the composite ranking, which can happen if the bank does not immediately take corrective action.

d) **The Fourth Composite Ranking,** reflects that the bank was classified as **poorly** and sensitive to the negative influence of economic conditions and the financial industry, or the bank has serious financial weakness, or a combination from condition of several factors that not satisfy. If there is no effective corrective action, potentially experiencing difficulties endangering its survival.

e) **The Fifth Composite Ranking,** reflects that the banks classified as **unhealthy** and very sensitive to the negative influence of economic conditions and the financial industry as well as experiencing difficulties endangering its survival.

Overview of Previous Research

As reference materials and comparison in this research, following is a review some previous research in accordance with discussion of problems in the research to be carried out.

Table 3. Previous Research

No	Author	Title	Result	Similarities / Differences
1	Atiek Setyo Rini (2006)	Effect of Banking Performance Based On CAMEL Analysis To Income Prediction Study on Banks Listed on the Bursa Efek Jakarta	The results is t-statistic showed that the variables significantly to earnings growth in the range of α = 5% - 10% is LDR and BOPO, while the other three variables are CAR, ROA, and ROE do not have a significant effect on earnings growth. From these research also explained that CAMEL analysis can predict earnings bank listed on Bursa Efek Jakarta.	Difference : Author does not test the variables that significantly influence α = 5% - 10%
2	Hendra Wiryawan (2007)	Evaluation of Bank's financial Performance Before And After The Implementation of Good Corporate Governance approaches Liquidity Ratios, Earning Ratios, Profitability	Variable KAP, LR, LDR significantly affect the health of banking. But partially, variable CAR, ROA, ROA effect on financial performance improvement for the better after the implementation of Good Corporate Governance. After the adoption Good Corporate	Difference : The author does not focused research on the improvement of performance before and after the implementation of Good Corporate Governance.

https://doi.org/10.35760/eb.2018.v23i2.1827

		Ratios and Asset Quality Ratios Study Case at PT Bank Niaga, Tbk	Governance, Bank Niaga performance ratio not show sustained improvement yet.	
3	Vivi Vebriyanti (2008)	Analysis CAMEL Method as Assessment Indicators of Bank Health on PT. Bank Rakyat Indonesia (Persero), Tbk	Assessment health of bank include CAMEL factors, consisting of Capital, Asset Quality, Management, Earnings, Liquidity as a unit, so that the assessment must be done thoroughly to these factors in order to obtain valid results.	Similarity : Author also does a thorough assessment methods such as CAMEL method. But in this research author uses Risk-Based Bank Rating which a renewal of CAMELS method.
4	Suluk Waseso Segoro (2009)	Evaluation Before and After The Implementation of Good Corporate Governance On PT. Bank Mandiri (Persero), Tbk	Variables of ROA and BOPO significantly affected after the implementation of Good Corporate Governance and partial, variable LDR, ROE, and CAR effect on improvement of financial performance for the better after the implementation of Good Corporate Governance. After the adoption Good Corporate Governance, performance trend ratio of Bank Manadiri not show sustained improvement yet.	Difference : Author is not research which variable that affect the performance of banks after the implementation of GCG.

RESEARCH METHOD

This research used descriptive comparative research, research that is comparing. The data used in this research are secondary data. This data was obtained from the company or other sources associated with the company. The analysis data tools used are risk, good corporate governance (GCG), earnings and capital. For risk, there are:

Credit risk with non-performing loan ratio (NPL):

(Non-Performing Loan Ratio : Total Loans) X 100%

Liquidity risk with loan to deposit ratio (LDR):

(Total Loans : Total Customer Deposit) X 100%

For good corporate governance (GCG), use good corporate governance assessment standards in every conventional bank using the rules of Bank Indonesia that is PBI No. 8/14/PBI/2006.

For earnings, there is return on asset ratio (ROA):

(Annual net income : Average total assets) X 100%

For capital, there is capital adequancy ratio (CAR):

(Total Capital : Total assets) X 100%

After calculation of each ratio, then make the determination of composite ranking for each component and the overall composite ranking criteria for determination accordance with the regulations of Bank Indonesia. For the assessment of risk, earnings and capital can use the basis of SE BI No.6/23./DPNP of 2004 with reference to the annual report published by each Government Bank from 2009 until 2012.

Meanwhile, for the Good Corporate Governance assessment in this research will be based on the Good Corporate Governance report contained in the annual report published by each Conventional Government Bank from 2009 until 2012. Good Corporate Governance assessment standards in each Government Banks still use the rules of Bank Indonesia that is PBI. 8/14/PBI/2006. After calculation of each ratio, then make the determination of composite ranking as follows which is the same as the CAMELS method.

RESULT AND DISCUSSION

Health Assessment of Government Bank Using Risk-Based Bank Rating Risk Profile

Based on the table above, explanation of each bank NPL of the year 2009-2012 (table 4). Developments NPL (Non Performing Loan) ratio of Bank Mandiri shown improvement from 2009 to 2012. This means provision of credit policies that have been issued by management team of Bank Mandiri to support the sustainability of Bank Mandiri operational activities safe and excellent. Health ranking of BNI results viewed from the performance of NPL (Non Performing Loan) ratio in 2009 to 2012 was a generally shown

https://doi.org/10.35760/eb.2018.v23i2.1827

fairly healthy rankings, despite an improvement in the ranking to be healthy in 2012.

Great effort done continuous by management team of BRI to improve NPL ratio conditions. This is indicated by change in the condition of the bank from fairly healthy to be healthy bank, then became very healthy bank based on the results of NPL ratio valuation from 2009 to 2012. Health Ranking of BTN seen from the results of NPL ratio assessment from 2009 to 2012 generally in healthy category, although in 2012 BTN has decreased from the category of healthy to be fairly healthy.

Table 4. Result Assessment of Risk Profile Ratio (in Millions Rupiah)

Year	Bank	Non Performing Loan	Total Loan	Loan (NPL)	Loan (NPL) %
2009	Bank Mandiri	7.899.898	175.259.777	0,045075363	4,51%
	BNI	5.872.609	155.980.065	0,037649741	3,76%
	BRI	7.526.998	192.235.545	0,039155079	3,92%
	BTN	1.690.486	65.098.097	0,025968286	2,60%
2010	Bank Mandiri	6.499.298	219.262.620	0,029641614	2,96%
	BNI	5.620.098	167.401.244	0,033572618	3,36%
	BRI	9.781.624	228.691.057	0,042772219	4,28%
	BTN	1.763.543	71.092.768	0,024806222	2,48%
2011	Bank Mandiri	6.958.245	298.988.258	0,023272636	2,33%
	BNI	5.703.326	158.223.131	0,036046095	3,60%
	BRI	6.522.422	283.583.198	0,02300003	2,30%
	BTN	1.418.867	63.563.684	0,022321976	2,23%
2012	Bank Mandiri	7.224.900	370.570.356	0,019496703	1,95%
	BNI	5.483.926	193.050.166	0,028406741	2,84%
	BRI	7.424.166	318.000.752	0,023346379	2,33%
	BTN	2.835.387	81.410.763	0,034828159	3,48%

Source: Secondary Data were Processed

Liquidity Risk

Health ranking of Bank Mandiri viewed from the performance of LDR (Loan to Deposit Ratio) is generally very healthy even in 2012 decreased ranking to be healthy with LDR value of 83,6%. Health ranking of BNI when viewed from the calculation of LDR (Loan to Deposit Ratio) generally shown BNI still in the category of very healthy, despite in 2012 decreased ranking from very healthy to be healthy with the results of LDR assessment of 77,04%.

In general, the health condition of BRI from 2009 until 2012 seen from LDR value show that BRI tend to be stable with healthy bank category. With good BRI liquidity performance, the ability of BRI liquidity to overcome the needs of liquidity and risk management relatively strong. And for Health condition of BTN based on the results of LDR assessment from 2009 to 2012 shown that BTN poorly category (table 5).

Table 5. Result Assessment of Risk Profile Ratio (In Millions Rupiah)

Year	Bank	Total Loan	Total Customer Deposit	Liquidity (LDR)	Liquidity (LDR) %
2009	Bank Mandiri	175.259.777	277.591.688	0,631358159	63,14%
	BNI	155.980.065	221.868.450	0,703029498	70,30%
	BRI	192.235.545	221.518.636	0,867807551	86,78%
	BTN	65.098.097	64.972.541	1,001932447	100,19%
2010	Bank Mandiri	219.262.620	301.008.156	0,728427505	72,84%
	BNI	167.401.244	225.435.422	0,742568504	74,26%
	BRI	228.691.057	261.543.562	0,874389931	87,44%
	BTN	71.092.768	69.274.654	1,02624501	102,62%
2011	Bank Mandiri	298.988.258	384.728.603	0,777140706	77,71%
	BNI	158.223.131	225.652.219	0,701181365	70,12%
	BRI	283.583.198	384.264.345	0,73798988	73,80%
	BTN	63.563.684	61.970.015	1,025716776	102,57%
2012	Bank Mandiri	370.570.356	442.837.863	0,836808202	83,68%
	BNI	193.050.166	250.569.509	0,770445561	77,04%
	BRI	318.000.752	385.113.845	0,825731809	82,57%
	BTN	81.410.763	80.667.983	1,009207866	100,92%

Source: Secondary Data were Processed

https://doi.org/10.35760/eb.2018.v23i2.1827

Good Corporate Governance

In terms of assessment of the performance of Bank Mandiri Good Corporate Governance from 2009 until 2012, it can be seen that the ranking of health in general is very healthy although in 2012 has decreased from very healthy to be healthy. For Health of BNI when seen from the results of Good Corporate Governance self-assessment from 2009 until 2012 in general tend to be stable with very healthy category (table 6).

Health condition of BRI when viewed from the results of self-assessment of Good Corporate Governance from 2009 until 2012 in generally is very healthy bank. For Based on the results of self-assessment of BTN Good Corporate Governance from 2009 to 2012 shown BTN is a very healthy bank.

Table 6. Good Corporate Governance Results

Year	Bank	Good Corporate Governance
2009	Bank Mandiri	1,1
	BNI	1,13
	BRI	1,35
	BTN	1,56
2010	Bank Mandiri	1,1
	BNI	1,4
	BRI	1,45
	BTN	1,23
2011	Bank Mandiri	1,1
	BNI	1,25
	BRI	1,3
	BTN	1,15
2012	Bank Mandiri	1,5
	BNI	1,3
	BRI	1,31
	BTN	1,35

Source: Secondary Data

Earnings

Health of Bank Mandiri seen from performance ROA (Return on Assets) from 2009 to 2012 generally indicates Bank Mandiri in the category of very healthy bank. Health condition of BNI when viewed from the results of performance ROA (Return on Assets) shown no significant fluctuations. Changes in the value of BNI ROA ratio from 2009 to 2012 remained stable.

From the results of ROA assessment on BRI from 2009 until 2012, in general BRI health condition classified as very healthy bank. BTN health conditions when seen from the results of assessment ROA ratio from 2009 to 2012 generally in very healthy condition although the value is not as big as that achieved by BRI.

Table 7. Result Assessment of Earnings (In Million Rupiah)

Year	Bank	Annual Net Income	Average Total Asset	Earnings (ROA)	Earnings (ROA) %
2009	Bank Mandiri	8.293.453	364.516.090	0,022751953	2,28%
	BNI	6.975.109	273.096.754	0,025540798	2,55%
	BRI	6.664.962	275.992.797	0,024149043	2,41%
	BTN	1.369.062	90.784.674	0,015080321	1,51%
2010	Bank Mandiri	9.630.501	411.016.708	0,023430923	2,34%
	BNI	7.210.897	281.461.127	0,025619513	2,56%
	BRI	8.507.751	325.943.612	0,026101911	2,61%
	BTN	1.489.075	88.259.664	0,016871524	1,69%
2011	Bank Mandiri	20.504.268	551.891.704	0,037152702	3,72%
	BNI	7.461.308	299.058.161	0,024949354	2,49%
	BRI	12.855.412	450.560.230	0,028532061	2,85%
	BTN	1.522.260	89.121.459	0,017080735	1,71%
2012	Bank Mandiri	16.512.035	635.618.708	0,025977893	2,60%
	BNI	8.899.562	333.303.506	0,026701075	2,67%
	BRI	16.298.886	462.078.650	0,035272969	3,53%
	BTN	1.863.202	111.748.593	0,016673158	1,67%

Source : Secondary Data were Processed

Capital

The healhty ranking of Bank Mandiri when viewed from performance of CAR (Capital Adequacy Ratio) is generally very stable and into category of very healthy bank. This suggests that Bank Mandiri capital levels are significantly higher than the prevailing provisions of CAR and expected to remain at this level for the next twelve months. And BNI health condition when seen from the results of performance appraisal CAR (Capital Adequacy Ratio) in general from 2009 to 2012 still in a stable condition.

While the results of assessment of BRI CAR from 2009 to 2012 shown the tend to be stable with a very healthy bank category. Therefore the level of capital held by BRI from 2009 to 2012 was significantly higher than the prevailing provisions of CAR and expected to remain at this level for the next twelve months. Health rangking of BTN when seen from the results of assessment CAR from 2009 to 2012 generally indicates a healthy condition. Therefore health ranking achieved by BTN when seen from the results of the assessment reflects BTN capital levels significantly were higher than the prevailing provisions of CAR and expected to remain at this level for the next twelve months.

Table 8. Result Assessment of Capital Ratio (In Millions Rupiah)

Year	Bank	Total Capital	Total Asset	Capital (CAR)	Capital (CAR) %
2009	Bank Mandiri	26.428.898	187.684.077	0,140815878	14,08%
	BNI	36.442.051	171.658.211	0,212294249	21,23%
	BRI	22.186.523	164.382.436	0,134968939	13,50%
	BTN	7.809.416	44.786.853	0,174368492	17,44%
2010	Bank Mandiri	34.371.877	254.519.563	0,13504611	13,50%
	BNI	35.787.624	167.275.476	0,213944237	21,39%
	BRI	29.853.501	223.414.435	0,133623868	13,36%
	BTN	8.098.685	45.868.574	0,176562825	17,66%
2011	Bank Mandiri	54.084.246	352.519.994	0,153421783	15,34%
	BNI	32.691.914	185.403.030	0,176328909	17,63%
	BRI	41.815.988	279.602.642	0,149555053	14,96%
	BTN	6.968.366	46.373.034	0,150267632	15,03%
2012	Bank Mandiri	61.947.504	400.189.948	0,154795252	15,48%
	BNI	39.190.799	235.143.102	0,166667866	16,67%
	BRI	52.341.349	328.168.214	0,159495487	15,95%
	BTN	9.433.162	53.321.389	0,176911408	17,69%

Source: Secondary Data were Processed

Based on the result, we can see the summary of each bank ratio as following:

Table 9. Summary of Research Results

Year	Bank	Loan (NPL)	Liquidity (LDR)	GCG	Earning (ROA)	Capital (CAR)
2009	Bank Mandiri	4,51%	63,14 %	1,1	2,28 %	14,08 %
	BNI	3,76%	70,30%	1,13	2,55%	21,23%
	BRI	3,92%	86,78%	1,35	2,41%	13,50%
	BTN	2,60%	100,19%	1,56	1,51%	17,44%
2010	Bank Mandiri	2,96%	72,84%	1,1	2,34%	13,50%
	BNI'46	3,36%	74,26%	1,4	2,56%	21,39%
	BRI	4,28%	87,44%	1,45	2,61%	13,36%
	BTN	2,48%	102,62%	1,23	1,69%	17,66%
2011	Bank Mandiri	2,33%	77,71%	1,1	3,72%	15,34%
	BNI	3,60%	70,12%	1,25	2,49%	17,63%
	BRI	2,30%	73,80%	1,3	2,85%	14,96%
	BTN	2,23%	102,57%	1,15	1,71%	15,03%
2012	Bank Mandiri	1,95%	83,68%	1,5	2,60%	15,48%
	BNI	2,84%	77,04%	1,3	2,67%	16,67%
	BRI	2,33%	82,57%	1,31	3,53%	15,95%
	BTN	3,48%	100,92%	1,35	1,67%	17,69%

Source: Secondary Data were Processed

	Very Healthy
	Healthy
	Fairly Healthty
	Poorly Healthy
	Unhealthy

CONCLUSIONS AND SUGGESTIONS

Based on the research results of the previous chapter about the health assessment of government banks using Risk-Based Bank Rating, then a few things which author conclude the following. From the measurement of NPL ratio to the four Government Banks from year 2009-2012, it can be concluded that Bank Mandiri, BNI, BRI continues to improve the condition of their NPLs in order to achieve as a healthy bank category, while BTN previously for three consecutive years have NPL stable value, decreased slightly in the rankings in 2012 from a healthy bank into fairly healthy bank. While the assessment results of LDR, it can be concluded that BTN is in a state quite vulnerable compared to the three other banks, because of the results of the LDR assessment, BTN categorized as poorly bank and for four consecutive years from 2009 - 2012 has not shown any improvement. From the results of self-assessment Good Corporate Governance, then in general the four Government Banks have been successfully implemented Good Corporate Governance very well, where Bank Mandiri get the highest value for three consecutive years from 2009-2011. The health condition of the four Government Banks when viewed in terms of the results of ROA assessment from the year 2009-2012 can be generally stated as the healthy banks, where BRI which has the highest ROA value. In terms of CAR assessment year 2009-2012, the Government Banks are generally into the category of very healthy bank, where BNI has the highest CAR value.

REFERENCES

Bank Indonesia. (2007). *Surat Edaran Bank Indonesia no.9/24/DPbS tanggal 30 Oktober 2007 tentang penilaian kesehatan bank syari'ah*

Bank Indonesia. (2010). *Peraturan bank Indonesia No.12/19/PBI/2010 Tentang Giro Wajib Minimum Bank Umum Pada Bank Indonesia Dalam Rupiah dan Valuta Asing.*

Bank Indonesia. (2011). *Peraturan Bank Indonesia Nomor 13/1/PBI/2011*. Retrieved from http://www.bi.go.id/web/id/Peraturan/Perbankan/pbi_130111.htm

Bank Indonesia. (2011). *Lampiran Surat Edaran Bank Indonesia Nomor 13/24/DPNP tanggal 25 Oktober 2011*.

Bank Indonesia. (2012). *Surat Edaran Bank Indonesia Nomor 15/15/DPNP tanggal 29 April 2013*. Retrieved from http://www.bi.go.id/web/id/Peraturan/Perbankan/SE_15_15DPNP.htm

Dendawijaya, Lukman. (2009). *Manajemen Perbankan* (Edisi Kedua). Bogor: Ghalia Indonesia.

Kashmir (2008). *Analisis Laporan Keuangan*. Jakarta: PT.Raja Grafindo Persada.

Sutojo, Siswanto dan E. John Aldridge. (2005).

Good Corporate Governance: Tata Kelola Perusahaan Yang Sehat. PT. Jakarta: Damar Mulia Rahayu.

Rini, Atiek Setyo. (2006). *Pengaruh Kinerja Perbankan Berdasarkan Analisis CAMEL Terhadap Prediksi Laba. Skripsi*. Program Studi Manajemen Keuangan Fakultas Ekonomi Malang. Universitas Brawijaya.

Segoro, Suluk Waseso. (2009). *Evaluasi PT. Bank Mandiri Persero, Tbk sebelum dan sesudah penerapan Good Corporate Goverment. Skripsi*. Program Studi Manajemen Keuangan Fakultas Ekonomi .Malang: Universitas Brawijaya.

Susillo, Leo J. dan Karlen Simarmata. (2007). *Good Corporate Governance Pada Bank: Tanggung Jawab Direksi dan Komisaris Dalam Melaksanakannya*. Bandung: PT. Hikayat Dunia.

Triandaru, Sigit dan Totok Budisantoso. (2008). *Bank Dan Lembaga Keuangan Lain.* Jakarta: Salemba Empat.

Van Greuning, Hennie., dan Zamir Iqbal. (2011). *Analisis Risiko Perbankan Syariah.* Jilid 1. Jakarta: Salemba Empat

Vebriyanti, Vivi. (2008). *Analisis Metode CAMEL Sebagai Indikator Penilaian Tingkat Kesehatan Bank Pada PT Bank Rakyat Indonesia (Persero), Tbk. Skripsi*. Program Studi Manajemen Keuangan .Malang. Universitas Brawijaya

Wiryawan, Hendra. (2007). *Evaluasi kinerja Bank Niaga Sebelum dan Sesudah Penerapan Good Corporate Governance. Skripsi*, Program Studi Manajemen Keuangan. Malang. Universitas Brawijaya.

Zarkasyi, Moh. Wahyudin. (2008). *Good Corporate Governance Pada Badan Usaha Manufaktur, Perbankan, dan Jasa Keuangan Lainnya*. Bandung: Alfabeta.

https://doi.org/10.35760/eb.2018.v23i2.1827

THE EFFECT OF FINANCIAL STABILITY, EXTERNAL PRESSURE, PERSONAL FINANCIAL NEED, FINANCIAL TARGETS, INEFFECTIVE MONITORING AND AUDIT QUALITY ON DETECTING FRAUD FINANCIAL STATEMENT IN PERSPECTIVE OF FRAUD TRIANGLE

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ABSTRACT

The purpose of this study was to determine whether financial stability, external pressure, personal financial need, financial targets, ineffective monitoring, and audit quality affect the financial statement fraud by collecting empirical evidence. The object of research is the companies from sector property and real estate which listing on the Indonesia Stock Exchange, with research period in 2010-2012. The samples in this study were selected based on purposive sampling method with a total sample of 14 companies. The analysis technique used in this research is multiple regression analysis using SPSS. These results indicate that the variable external pressure, personal financial need and audit quality effect on the financial statements fraud, meanwhile variables financial stability, financial targets, ineffective monitoring had no effect on the financial statements fraud. Variables financial stability, external pressure, personal financial need, financial targets, ineffective monitoring and audit quality simultaneously effect on the financial statements fraud.

Keyword: *Financial Statement Fraud, Fraud Triangle*

INTRODUCTION

Development of business and industry is growing in Indonesia. It is marked by the emergence of new companies in several sectors which the company is not a small company. Development of business and industry lead to competition in the world of business and industry will be more competitive.

Financial statements have a very important role as the basis for decision-making. Auditors have an important role in providing confidence in the fairness of an entity's financial statements. In a financial statement audit designed to provide assurance that the financial statements did not have material misstatements and provide reasonable assurance about management accountability over the assets of the company (Koroy, 2008:22). Kusumawardhani (2013) argued that the behavior of financial statement fraud is important to the attention so fraud can be detected and can be removed. Various causes that led to the fraud that can be summed up into three factors which lead to fraud are (1) pressure, (2) opportunity and (3) Rationalization. The third factor is exactly what is often called the fraud triangle.

However, the detection of fraud in the financial statements is not easy, as, in recent decades occurred several financial scandals which involve large companies and public accounting firms. One of the largest ever cases involved Enron Corporation with Arthur

Andersen public accountant firm. Enron is one of the major companies in the energy sector. Besides Enron, there are several international companies involved in financial scandals such as Xerox, Walt Disney, World Com, Merck and Tyco. Novianty (2008) stated financial scandals such as financial statement frauds also had occurred in Indonesia, which are the Kimia Farma and Lippo Bank with the involvement of public accounting firm.

Cressey's theory that is quoted by Skousen et al., (2009) states fraud triangle is usually used to detect fraud which occurred in the financial statements. Fraud triangle consists of three components: pressure, opportunity, and rationalization. Then, this concept was adopted in SAS No.. 99. The purpose of the disclosure of the SAS 99 is as auditors guidance for detecting fraud in financial reporting and improve the ability to detect fraud with assesing risk factors for fraud corporate .

Development of financial statement fraud detection methods have been carried out previously by Skousen et al. (2009). This research was presented by enlarging each of the variables then they are developed into several proxies. According to Skousen et al., (2009) the components contained in the fraud triangle can not be observed directly, but it is necessary for the developing and the proxy to measure. According to SAS No.. 99 pressures that led to the fraud in the financial statements can be classified into four types, there are: financial stability pressure, external pressure, personal financial need and financial targets. Meanwhile the opportunities are classified into 3 types, there are: nature of the industry, ineffective monitoring, and organizational structure. Rationalization is the last part of the fraud triangle, and also the most difficult component to be measured in fraud detection.

Measurement of fraud in the financial statements can use various methods. To measure the fraud that occurred in the financial statements of one proxy that is used earnings management. In fraud detection role of the external auditor is not less important, because the auditor must provide reliable financial reports and avoid fraudulent in order to not mislead the users of financial statements.

Fraud in the financial statements that are not detected can developed into problems that harm in the future. This study was intended to detect fraud in the financial statements using the method analysis of fraud triangle. Research which is conducted by Skuosen et al. (2009) have succeeded in developing the research model to detect fraud using analytical methods fraud triangle.

Statement of Problem

Based on this background, the main problems in this study can be formulated as follows: Is variable that consists from financial stability, external pressure, personal financial need, financial targets, ineffective of monitoring, and audit quality partially or simultaneously affect the detection of fraud financial statements? How the analysis of the effect from variable financial stability, external pressure, personal financial need, financial targets, ineffective of monitoring, and audit quality on financial statements fraud detection?

LITERATURE REVIEW

Fraud

According to Anthony and Govindarajan (2005) fraud refers to misstatement of a material fact and it has done by one party to others with the purpose of deceiving, make others parties feel safe to rely on a fact that adverse him. Whereas according to Elliot and Willingham (1980) in the research by Nguyen (2008) indicates that fraud financial statement is same with fraud management: “fraud financial statement that deliberates by manager can make financial loss to investor and creditor.” The definition above indicates that fraud has wide definition as can be seen from fraud category. Anthony and Govindarajan (2005) indicates based on case law, fraud action must comply with five conditions such as: (1) misstatement, (2) material fact, (3) intention, (4) dependence which can be justified, and (5) damage or loss.

Financial Statement Fraud

The definition of fraud financial stament according to American Institute Certified Public Accountant (AICPA) (2002) is an intentional act or omission that the result is in a material misstatement that misleading to financial statements. According to AICPA fraud in financial statement is associated with several schemes, namely:

1. Manipulation, falsification, or changes of accounting records, supporting documents from financial statements
2. Mistake or deliberate omission in the significant information to the financial statements.
3. Conduct intentionally abuses the principles relating to the number, classification, manner of presentation, or disclosure.

Fraud Triangle Theory

Fraud triangle theory is an idea of the cause of cheating, the first is indicated by Cressey (1953). This theory has gotten with conducted a series of interviews with 113 people who had been sentenced for committing money embezzlement company which is called "trust violatators" or "breach of trust". The first is pressure, it can be a variety of lifestyle, economic demands and others. This one includes matters which related to financial and nonfinancial that make person have a pressure to do fraud. The second is opportunity, it is an opportunity that could lead to fraud. The presence of opportunities arise because fraud perpetrators believe that their activity will not be detected. Opportunity can occur because of weak internal control like less on management control. Skousen et al., (2009) states the last is rationalization, which is a component from fraud triangle as the most difficult to measure. Rationalization is closely connected with personality and character of a person. It is an essential element of fraud, where the preparators look for justification over their actions.

Earnings Management

Earning management is fraud practice made by managers who involve themselves in the process of financial report with changing it in order to make a profit for themselves. Setiawati (2002) in the research by Guna and Herawaty (2010) state that earnings management as management intervention in the process of financial report with the goal of benefit. Management parties have their own reasons to perform earning management. Earnings management devided into two forms: positive and negative. Positive earning management is earnings management which aims to increase earning or overstate, to increase effectiveness of company operations. Meanwhile, the negative earning management is earning management which aims to decrease earning or understate, to decrease tax paid by a company.

RESEARCH METHOD

This research is designed to see the effect of financial stability, external pressure, personal financial need, financial targets, ineffective monitoring and audit quality on detecting financial statement fraud in perspective of fraud triangle in property and real estate companies Population of this reseacrh is all property and real estate companies which listed on IDX period 2010 – 2012. The sampling technique is conducted by using purposive sampling method in order to obtain samples in accordance with specified criteria.

The data used in this research is secondary data. Secondary data is the data that has been processed previously by others and has been in the form of publications. The secondary data used in this research is the company's annual financial statements, journals, research and books related to this research Data collection methods used in this research is a method of documentation and literature.

This study aims to analyze the relationship between the independent variables which are components of the fraud triangle with fraud financial statements. This research uses numbers as an indicator of answer the problems in this study, so this study use quantitative methods to answer the problems. This study consists of 7 (seven) variables: one dependent variable and six independent variables. The definitions and operationals of each variable will be explained in detail as follows.

Tabel 1. Variables & Operationalization

Variables	Definition	Measurement
Financial Statement Fraud (Y)	Intentional material statement in the financial statements, proxied by earnings management. Calculatedbased on discretionary accruals (DA) (modified Jones).	$TACC_{it}=Ni_{it}- CFO_{it}$ $TACC_{it}/TA_{it-1}=\beta1(1/TA_{it}-$ $+ \beta2(\Delta Rev_t/TA_{it}-1-\Delta Rect/TA_{it}-$ $1)+\beta3(PPE_t/TA_{it-1})+e$ $NDACC_{it}=\beta1(1/TA_{it}-$ $1)+\beta2(\Delta Rev_t/TA_{it-1}-\Delta Rec_t/TA_{it}-$ $1)+\beta3(PPE_t/TA_{it-1})$ $DACC_{it}=TACC_{it}/TA_{it}-NDACC_{it}$
Financial stability (X1)	Describe the financial condition of the company in a stable condition is proxied by the ratio of the asset changes	(Total $Assets_t$ - Total $Assets_{t-1}$) : Total $Assets_t$
External Pressure (X2)	The pressure felt by the management in fulfilling the requirements or of third parties, the leverage ratio	Total Debt : Total Assets
Personal Financial Need (X3)	Company's condition is affected by the financial condition company's proxied by the ratio of stock ownership insiders.	The number of shares owned by insider/Number shares outstanding
Financial Targets (X4)	The achievement of expected by the company within a specified profitability on assets	EBIT : Total Assets
Ineffective Monitoring (X5)	Circumstances which the company does not have an effective monitoring system to monitor the performance of the company, proxied by the	Members of audit commitee

	number of members of the audit committee company.	
Audit Quality (X6)	Proxied by auditor reputation. Big Four auditors produce higher quality audits than non-Big Four auditors	Using dummy 1 for the company being audited Big Four audit firm and 0 if the company is udited Four audit fi

Hypothesis proposed in this reseacrh is:

H_1: Financial stability with proxy the percentage change in total assets (ACHANGE) effect on detecting financial statement fraud.

H_2: External pressure with proxy leverage (LEV) effect on detecting financial statement fraud.

H_3: Personal financial need with proxy percentage of insider shareholding (OSHIP) effect on financial statement fraud.

H_4: Financial targets with proxy ratio Return on Assets (ROA) effect on detecting financial statement fraud

$H_{5:}$ Ineffective monitoring of with proxy the number of audit committee members (AUDITSIZE) effect on detecting financial statement fraud

H_6: Quality audits with proxy reputation auditors (REP_AUD) effect on detecting financial statement fraud.

H7: Financial stability, external pressure, personal financial need, financial targets, ineffective monitoring and audit quality effect on Total Assets detecting financial statement fraud.

Analysis Method

The analysis technique used in this research is multiple linear regression which consists of one dependent variable and six independent variables:

$$DACC_{it} = \beta_0 + \beta_1 ACHANGE + \beta_2 LEV + \beta_3 OSHIP + \beta_4 ROA + \beta_5 AUDCSIZE + \beta_6 Q\_AUD + \varepsilon i$$

Description:

ß0 = Coefficient constant regresion

ß1,2,3,4,5 = Regression coefficient of each proxy

DACCit = Discretionary accruals forcompany i in year t

ACHANGE = Ratio of change in total assets in 2010-2011

AUDCSIZE = Number of audit committee members

ROA = Return On Aset ratio

LEV = Leverage Ratio

OSHIP = Ratio of share ownership by insiders

Q_AUD = Audit quality

ε = Error

To see the effect of independent variables on the dependent variable in each tested by statistic t. Meanwhile, to see the effect of independent variables to the dependent variable simultaneously uses test statistical F.

RESULT AND DISCUSSION

Financial Stability as a Variable for Detecting Financial Statement Fraud

Based on the hypothesis testing partial financial stability variables are proxied by the ratio of change in assets (ACHANGE) has a significance value of 0.825 is greater than the alpha value of 0.050, it indicates that the variable does not affect the financial stability of financial reporting fraud. Changes in the value of assets owned by the company will provide financial stability good for companies, but still occurs fraud in companies that have good financial stability. In addition to supply one of the greatest assets of the company property is undeveloped land. Along with the development value of land and buildings will increase the tax liability company owned land. So as to reduce the tax value of the company made earning management.

External Pressure as a Variable for Detecting Financial Statement Fraud

The results of the statistical test results show that the partial pressure of external variables that proxy the leverage ratio (LEV) has a significance value of 0.039 is less than the alpha value of 0.050 so that the pressures of external variables affect the financial statement fraud. High leverage ratio indicates the possibility that the company will face greater bankruptcy. Companies with high leverage levels will continue to be considered by creditors in order to maintain the distributed debt can go back in time, so flexibility in the management of cheating will be reduced.

Personal Financial Needs as a Variable for Detecting Financial Statement Fraud

Based on the test results of variable personal financial need that proxied by shares ownership by insiders (OSHIP) has a significance value of 0.029. This value is smaller than the alpha value of 0.05 so that the variables personal financial needs affect to financial statement fraud. Lifestyle managers can also be a pressure for managerial. Managers who have a extravanza lifestyle will tried to earn a great income to meet the needs of high. If the managerial has a large number of shares in the company, this will encourage the managerial commit fraud in order to obtain funds to fulfill their needs.

Financial Targets as a Variable for Detecting Financial Statement Fraud

Financial target variable is proxied by the ratio of return on assets has significance value of 0.095, the value is greater than the alpha value of 0.05, it indicates that the variable financial targets (ROA) has no effect on the fraudulent financial statements (DACC). Financial targets will be pressure for management to always show good performance. Target companies most often used is based on the company's profit. Interested parties such as investors want higher profits to obtain dividends. And also the pressure to obtain the bonus will increasingly provide pressure for managerial to commit financial statements fraud.

Ineffective Monitoring as a Variable for Detecting Financial Statement Fraud

Ineffective monitoring variable that proxied by the number of audit committee members (AUDCSIZE) also has significance value bigger than the alpha value is 0.222 which indicates that the variable has no effect on the ineffective monitoring of financial statements fraud. . In this study, the audit committee is not performing its duties and its role well, because even though the company has an audit committee, but was unable to detect financial statement fraud. This indicates that the formation of an audit committee is mandatory or just to follow the regulations.

Audit Quality as a Variable for Detecting Financial Statement Fraud

Variable audit quality (Q_AUD) based on partial test results has a significance value of 0.002 is less than the alpha value of 0.050. That suggests that audit quality variable affect financial statement fraud variable. Auditors from the big four public accounting firm have the knowledge and experience better than public accounting firm non-big four so that the financial statements were audited by the auditors from big four public accounting firm audit will result in a better quality compared with the audited financial statements by public accounting firm non-big four. Big four public accounting firm has better independent that have the low tolerance for fraudulent practices.

CONCLUSION AND SUGGESTION

This study aims to examine the elements of the fraud triangle and consisting of financial stability, external pressure, personal financial need, financial targets, ineffective monitoring and audit quality in detecting financial statement fraud in companies from property and real estate sector which listed in Indonesia Stock Exchange . From seven hypotheses proposed, four hypotheses accepted and the other three hypotheses rejected. Based on the results of research got result that the partial variables external pressure, personal financial need and audit quality effect on financial statements fraud. Meanwhile, the variable financial stability, financial targets and ineffective monitoring had no effect on the financial statements fraud.

Simultaneously variables financial stability, external pressure, personal financial need, financial targets, ineffective monitoring and audit quality affect the financial statement fraud.

REFERENCES

American Institute of Certified Public Accountants, (2002). *Statement on Auditing Standards (SAS) No. 99." Consideration of Fraud in Financial Statement Audit"*. New York: AICPA

Anthoni, Robert N dan Vijay Govindarajan. (2009). *Management Control Sistem*. Edisi Ke Sebelas, Jilid Dua. Jakarta: Salemba Empat.

Cressey, D. R. (1953). *Other People's Money*. Montclair, NJ: Patterson Smith, 1-300.

Guna, Wi and A Herawaty, (2010). "Pengaruh Mekanisme Good Corporate Governance, Independensi Auditor, Kualitas Audit dan Faktor Lainnya Terhadap Manajemen Laba". *Jurnal Bisnis dan Akuntansi*, 12 (1), 55

Koroy, Tri Ramaraya. (2008). "Pendeteksian Kecurangan (Fraud) Laporan Keuangan oleh Auditor Eksternal". *Jurnal Akuntansi dan Keuangan,* 10(1), 22-33

Kusumawardhani, Prisca dan Rohmawati Kusumaningtias. (2013). "Deteksi Financial Statement Fraud Dengan Analisis Fraud Triangle Pada Perusahaan Perbankan Yang Terdaftar Di BEI". *Jurnal Unesa*, 1(3), 5.

Nguyen, Khanh. (2008). *Financial Statement Fraud: Motives Methodes, Cases and Detection*. Florida: Dissertation.com

Novianty, Suzy. (2008). "Skeptisisme Profesional Auditor Dalam Mendeteksi Kecurangan". *Jurnal Akuntansi dan Keuangan*, 5(1), 102-125

Skousen, Christoper J, Smith Kevin R, Wright Charlotte J (2009). *Detecting And Predicting Financial Statement Fraud: The Effectiveness Of The Fraud Triangle And SAS No. 99*. Retrieved from www.ssrn.com.