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JURNAL BISNIS DAN EKONOMI

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DAFTAR ISI

Pedoman Penulisan

Indeks Artikel

PENERIMAAN AUDITOR TERHADAP UNDER-REPORTING TIME

Ceacilia Srimindarti
UNISBANK Semarang
ceaciliasrimindarti@gmail.com

Elen Puspitasari
UNISBANK Semarang
elenmeiranto@yahoo.com

Abstract

This study seeks to analyze the relationship between the factors that affect the auditor′s acceptance of under-reporting time. Auditor′s who worked in Public Accounting in Indonesia is an object in this study using questionnaire-based survey that was sent. The data have been collected and analyzed using SPSS. Expectancy theory and the theory of goal setting is the basic theory used to explain the behavior of auditors underreporting time in accepting. The results of this study found that locus of control variables have a positive and significant impact on acceptance of under-reporting time, while the variable of organizational commitment auditor has no influence on the acceptance of under-reporting time. Adversely affect the auditor′s expertise acceptance under-reporting time. These results indicate that the internal factors affecting the acceptance of individual auditor′s under-reporting time.

Keywords: locus of control, auditor′s expertise, organizational commitment, acceptance of under-reporting time, expectancy theory and the theory of goal setting.

1.   PENDAHULUAN

1.1. Latar Belakang Masalah

Auditor wajib melaksanakan tugas-tugasnya dengan kesungguhan, kecermatan dan kepedulian profesional yang meliputi ketelitian dalam memeriksa kelengkapan kertas kerja, mengumpulkan bahan bukti audit yang memadai dan menyusun laporan audit yang lengkap (Arens dan Loebbecke, 1996). Auditor harus bertindak secara rasional dengan mengikuti prosedur yang sistematis untuk membuat penilaian dan opini atas dasar bukti yang relevan dan memadai (Mautz dan Sharaf, 1985). Auditor yang profesional adalah auditor yang harus menghindari kelalaian dan ketidakjujuran. Seorang auditor dituntut untuk melakukan tugas dengan tingkat ketelitian yang masuk akal, keahlian, dan kehati-hatian dalam setiap kasus guna memenuhi tanggung jawab profesional (Otley dan Pierce, 1995).

Pada kondisi persaingan bisnis yang semakin ketat seperti pada saat ini, auditor harus selalu mempertahankan kinerjanya agar kualitas audit tetap terjaga. Auditor harus melakukan pekerjaan sesuai dengan standar professional (standar auditing), sehingga kepercayaan terhadap auditor bisa dipertahankan (McDaniel, 1990). Standar tersebut terdiri dari standar umum, standar pekerjaan lapangan, standar pelaporan dan kode etik akuntan. Standar auditing merupakan pedoman bagi auditor dalam menjalankan tanggung jawab profesionalnya. Standar tersebut harus dipatuhi oleh seluruh anggota dan akuntan publik yang beroperasi sebagai auditor independen (Arens dan Loebbecke, 1995). Standar ini disebut sebagai Pernyataan Standar Auditing (PSA).

Kenyataan dalam praktek di lapangan menunjukkan bahwa banyak auditor melakukan penyimpangan terhadap kode etik dan standar audit (Irawati dkk, 2005). Penyimpangan tersebut dapat mempengaruhi audit yang

dilakukan bahkan dapat menyebabkan kegagalan audit (Donnelly et al., 2003). Penyimpangan atau ketidakpatuhan terhadap PSA akan menyebabkan terjadinya dysfunctional audit yang sangat tidak diinginkan, salah satunya adalah under-reporting time, yaitu melaporkan waktu yang dibutuhkan untuk audit lebih pendek daripada waktu yang sesungguhnya. Perilaku ini terjadi karena auditor tidak melaporkan dan tidak membebankan seluruh waktu yang digunakan untuk melakukan tugas audit tertentu. Tindakan ini dilakukan auditor dengan cara mengerjakan program audit dengan menggunakan waktu personal, dan tidak melaporkan waktu lembur yang digunakan dalam pengerjaan program audit (Lightner et al., 1982). Berbagai tindakan under-reporting time yang dilakukan oleh auditor telah ditemukan oleh para peneliti, yaitu Lightner et al., (1982), Outley dan Pierce (1995), Malone dan Roberts (1996), Sososutikno (2003), dan Maryanti (2005).

Berbagai bukti empiris dari penelitian-penelitian yang telah dilakukan sebelumnya menunjukkan adanya masalah penerimaan under-reporting time yang dihadapi profesi akuntan publik dalam rangka memenuhi tanggungjawab profesinya. Penelitian terdahulu telah mengidentifikasi faktor-faktor lingkungan yang memiliki andil terhadap under-reporting time, misalnya tekanan waktu dan gaya supervisor (Donnelly et al., 2003), namun penelitian tersebut lebih memfokuskan faktor di luar individu auditor sebagai penyebab under-reporting time. Belum banyak penelitian yang menguji faktor-faktor yang berasal dari individu auditor sebagai penyebab under-reporting time. Padahal faktor individu dapat menjadi salah satu faktor yang sangat berpotensi di dalam mempengaruhi auditor untuk memilih under-reporting time (Donnelly et al., 2003).

Salah satu faktor internal individu auditor yang telah digunakan secara luas dalam penelitian perilaku untuk menjelaskan perilaku manusia dalam seting organisasi adalah Locus of Control (Rotter, 1966). Beberapa penelitian menunjukkan adanya hubungan positif antara individu dengan locus of control eksternal dan keinginan untuk menggunakan ketidakjujuran atau manipulasi untuk mencapai tujuan personal (Gable dan Dangello, 1994). Hasil penelitian empiris yang menguji hubungan antara locus of control dan under-reporting time menunjukkan adanya hubungan positif antara locus of control eksternal dan penerimaan auditor terhadap under-reporting time (Donnelly et al., 2003; Irawati dkk., 2005; Maryanti, 2005). Sementara Malone dan Roberts (1996) tidak menemukan hubungan antara locus of control dan under-reporting time.

1.2. Perumusan Masalah Penelitian

Malone dan Roberts (1996) menyatakan bahwa belum banyak penelitian yang memasukkkan faktor pada individu diantara auditor yang secara signifikan mempengaruhi penerimaan auditor terhadap under-reporting time. Penelitian-penelitian di Indonesia yang menguji under-reporting time masih belum banyak dilakukan. Penelitian yang telah dilakukan selama ini lebih difokuskan pada cakupan sampel yang terbatas, seperti yang telah dilakukan oleh Sososutikno (2003) pada auditor yang bekerja di Badan Pemeriksa Keuangan dan Pembangunan (BPKP). Selain hal tersebut, variabel yang diuji lebih difokuskan pada faktor-faktor eksternal auditor. Mengingat pentingnya memahami faktor individu auditor dalam menerima under-reporting time (Kelly dan Margheim, 1990) menjadikan suatu motivasi yang kuat untuk melakukan penelitian tentang perbedaan individu auditor pada locus of control, keahlian auditor dan komitmen organisasi yang mempengaruhi penerimaan auditor terhadap under-reporting time dengan menggunakan kajian teori expectancy dan goal setting.

2. RISET EMPIRIS, KAJIAN TEORITIS DAN RUMUSAN HIPOTESIS

2.1. Riset Empiris

Beberapa tindakan under-reporting time di lapangan yang berhasil ditemukan oleh para peneliti, antara lain penelitian dari Lightner et al., (1982) dengan menggunakan teori expectancy menemukan bahwa sejumlah akuntan secara signifikan melakukan under-reporting time. Temuan penelitian tersebut menunjukkan bahwa lebih dari 65 persen auditor yang menjadi responden melakukan audit tanpa melaporkan waktu yang sesungguhnya. Survey terhadap auditor senior kantor akuntan publik enam besar di Irlandia yang dilakukan oleh Outley dan Pierce (1995) menunjukkan bahwa 89 persen responden melaporkan telah melakukan beberapa bentuk perilaku

pengurangan kualitas audit dan mengestimasi bahwa rata-rata 12,2 persen bentuk penyimpangan yang terjadi adalah (under-reporting time) atau melaporkan waktu audit dengan total waktu yang lebih pendek daripada waktu yang sebenarnya.

Sososutikno (2003) melakukan riset empiris di Indonesia dengan responden auditor senior BPK dan BPKP menemukan bahwa ketika auditor melakukan pelaksanaan audit telah terjadi perilaku under-reporting time dan perilaku tersebut mengurangi kualitas audit. Hasil penelitian tersebut menunjukkan bahwa tekanan anggaran waktu memiliki pengaruh signifikan terhadap under-reporting time. Penelitian lainnya dilakukan oleh Maryanti (2005) yang melakukan survei terhadap auditor yang bekerja di Kantor Akuntan Publik di pulau Jawa. Hasilnya menunjukkan Locus of Control tidak terbukti berpengaruh pada under-reporting time, sedangkan variabel kinerja, keinginan untuk keluar, dan komitmen organisasi berpengaruh secara positif dan signifikan.

Irawati dkk., (2005) melakukan survei tentang under-reporting time terhadap auditor yang bekerja di Kantor Akuntan Publik wilayah Jakarta. Hasilnya menunjukkan auditor dengan Locus of Control eksternal dan memiliki keinginan keluar yang tinggi lebih mungkin menerima under-reporting time, sehingga dapat disimpulkan bahwa faktor penyebab penerimaan under-reporting time adalah faktor internal individu auditor (Irawati, dkk. 2005; Donnelly et al., 2003). Literatur perilaku organisasi menyatakan bahwa persepsi dan respon individual dalam mempertahankan pekerjaan dipengaruhi oleh perbedaan individual atau faktor internal individu (Donnelly et al., 2003). Trevino (1986) menyatakan bahwa perilaku tidak etis yang dilakukan individu organisasi dapat diakibatkan oleh faktor-faktor internal individu.

Penelitian di psikologi menyatakan bahwa perilaku individual menggambarkan personalitas individu tersebut dan faktor-faktor situasional saat itu ketika membuat keputusan tindakan tertentu (Koonce dan Mercer, 2005). Berdasarkan uraian di atas dapat disimpulkan bahwa kecenderungan auditor untuk memilih under-reporting time dalam pelaksanaan audit bisa juga berkaitan dengan berbagai faktor yang melekat pada individu auditor (Kelly dan Margheim, 1990).

2.2. Kajian Teoritis

Kajian teoritis dalam penelitian penerimaan auditor terhadap under-reporting time ini menggunakan dasar teori expectancy (Lightner et al., 1982) untuk menjelaskan hubungan antara keahlian auditor terhadap under-reporting time. Teori ini menyatakan bahwa motivasi merupakan faktor yang dominan dalam menjelaskan perilaku individu di organisasi (Campbell,1976) dengan asumsi bahwa individu akan memilih tindakan, tingkat usaha, dan pekerjaan yang memaksimalkan keinginan-ekspektasian mereka; dengan kata lain individu akan berusaha meminimalkan ekspektasi yang tidak diinginkan. Menurut teori ini terdapat tiga kombinasi yang mempengaruhi perilaku. Pertama, motivasi seorang individu merupakan fungsi dari ekspektasi usaha. Ekspektasi ini akan menentukan usaha yang akan mengarahkan pada perilaku yang diinginkan. Kedua, ekpektasi individu atas perilaku akan mengarahkan pada hasil atau ganjaran tertentu. Ketiga, pentingnya orientasi untuk setiap hasil atau ganjaran yang diharapkan. Dalam berbagai situasi perilaku individu dalam memilih atau melakukan sesuatu ditentukan oleh ekspektasi dan orientasi mereka.

Berdasarkan pada paparan teori expectancy, seorang auditor dalam memilih dan melakukan under-reporting time dapat dipengaruhi oleh ekspektasi individu auditor. Ekpektasi kemampuan auditor untuk melakukan program audit sesuai dengan prosedur audit merupakan faktor yang sangat penting dalam menentukan pilihan under-reporting time. Auditor yang memiliki persepsi mampu melaksanakan audit sesuai dengan program audit akan memilih untuk bertindak tidak under-reporting time. Pada pihak lain, auditor yang memiliki persepsi bahwa mereka tidak mampu melaksanakan audit sesuai dengan program audit akan termotivasi untuk menerima under-reporting time.

Menurut Teori Penetapan Tujuan (Goal Setting Theory-GST) individu memiliki beberapa tujuan, memilih tujuan, dan mereka termotivasi untuk mencapai tujuan-tujuan tersebut (Weiner, 1989). Teori ini mengasumsikan bahwa faktor utama yang mempengaruhi pilihan yang dibuat individu adalah tujuan yang mereka miliki. Kesadaran individu dalam memilih tujuan akan mempengaruhi motivasi melalui empat mekanisme. Pertama, tujuan yang

dimiliki akan menimbulkan usaha untuk mencapainya. Kedua, tujuan akan mengarahkan perhatian dan usaha untuk mencapai tujuan tersebut. Ketiga, tujuan akan meningkatkan usaha secara terus menerus. Keempat, tujuan akan mempengaruhi tindakan tidak langsung kearah penggunaan strategi dan ilmu pengetahuan yang relevan (Mitchell dan Daniels, 2003; Locke dan Latham, 2002; Pinder, 1998). GST menyatakan bahwa tujuan yang dimiliki auditor akan menentukan pilihan tindakan yang dilakukan auditor. Seorang auditor mungkin akan menerima dan melakukan under-reporting time dengan tujuan untuk tetap bisa bertahan dalam pekerjaan mereka. Sementara auditor lain memilih untuk tidak melakukan under-reporting time dengan tujuan untuk menghindari dampak negatif apabila perilaku tersebut terdeteksi oleh perusahaan.

Uraian yang disebutkan di atas memberikan dukungan teori terhadap dugaan bahwa faktor internal individu auditor dapat mempengaruhi penerimaan under-reporting time. Dukungan tersebut dijelaskan dengan mendasarkan pada tujuan dan harapan yang dimiliki oleh individu. Dengan demikian kecenderungan auditor untuk memilih dan menerima under-reporting time dalam pelaksanaan audit bisa juga berkaitan dengan berbagai faktor internal individu auditor. Salah satu faktor internal individu auditor adalah Locus of Control. Locus of Control merupakan suatu konsep yang dikembangkan oleh Rotter (1966) telah digunakan secara luas dalam penelitian perilaku untuk menjelaskan perilaku manusia dalam seting organisasi.

Rotter (1966) menyatakan bahwa individu-individu mengembangkan ekpektasi-ekspektasi mengenai kesuksesan mereka dalam situasi tertentu akan tergantung pada perilaku personal mereka atau dikendalikan oleh pihak diluar dirinya (Donnelly et al., 2003). Individu-individu yang cenderung menghubungkan hasil dengan usaha mereka sendiri atau individu percaya bahwa kejadian-kejadian berada di bawah pengendalian mereka mengacu pada locus of control internal. Sementara individu dengan locus of control eksternal percaya bahwa mereka tidak dapat mengendalikan kejadian-kejadian atau hasil yang mereka capai (Spector, 1982). Jadi secara internal atau secara eksternal individu dapat mengatasi situasi tertentu secara identik, tindakan-tindakan mereka akan memiliki pengaruh yang sangat berbeda pada kehidupan mereka (Donnelly et al., 2003).

Keahlian merupakan kinerja superior dalam tugas tertentu dengan menggunakan kemampuan sebagai ukuran operasional dalam auditing. Ashton (1990) mendefinisikan keahlian sebagai kemampuan yang dituntut untuk melakukan tugas tertentu dengan sebaik-baiknya. Menurut Arens dan Loebecke (1996) seorang auditor harus memiliki keahlian dengan latar belakang pendidikan formal auditing, dan pengalaman kerja yang cukup dalam profesi yang akan ditekuninya serta harus selalu mengikuti pendidikan-pendidikan profesi berkelanjutan. Seorang auditor juga dituntut untuk memenuhi kualifikasi teknis dan berpengalaman dalam bidang industri yang digeluti kliennya. Selain itu auditor juga harus mempunyai kemampuan memahami kriteria yang digunakan serta mampu menentukan jumlah bahan bukti yang dibutuhkan untuk mendukung kesimpulan yang akan diambil. Menurut teori psikologi kognitif, seorang profesional yang ahli memiliki kemampuan untuk melakukan pekerjaan secara lebih baik. Seorang ahli juga memiliki kemampuan untuk mengorganisasi informasi di memori secara lebih baik (Koonce dan Mercer, 2005). Auditor yang memiliki berbagai keahlian dan ketrampilan untuk melakukan pekerjaan audit akan mengalami konflik yang relatif sedikit berkaitan dengan pekerjaan mereka (Donnelly et al., 2003).

Komitmen organisasi yang dimiliki oleh individu juga diduga dapat mempengaruhi perilaku under-reporting time dalam organisasi, hal ini disebabkan karena individu yang memiliki komitmen organisasi tinggi akan bersedia bekerja lebih keras demi kepentingan organisasi (Robbins, 2003). Dalam seting akuntansi, komitmen organisasi yang dimiliki auditor diduga dapat mempengaruhi perbedaan penerimaan auditor terhadap under-reporting time. Hal ini disebabkan karena auditor yang memiliki komitmen organisasi tinggi akan lebih setia terhadap nilai dan tujuan organisasi sehingga mereka akan cenderung bertindak fungsional (Maryanti, 2005).

Komitmen organisasi adalah suatu keadaan dimana seorang auditor memihak pada suatu organisasi tertentu dan tujuan-tujuannya, serta berniat memelihara keanggotaan dalam organisasi itu (Robbins, 2003). Individu-individu yang memiliki komitmen organisasi akan memiliki tingkat loyalitas yang lebih baik. Mereka loyal terhadap organisasi karena mereka yakin dengan tujuan dan nilai-nilai organisasi. Berdasarkan pada keyakinan tersebut maka individu dengan komitmen organisasi tinggi bersedia melakukan pekerjaan melebihi apa yang seharusnya dikerjakan (Irawati dkk., 2005). Tingginya tingkat loyalitas akan mengakibatkan individu tersebut cenderung tidak

melakukan under-reporting time daripada auditor yang memiliki komitmen organisasi yang rendah (Malone dan Roberts, 1996). Bukti riset menunjukkan adanya hubungan negative antara komitmen organisasi dan penerimaan auditor terhadap under-reporting time (Malone dan Roberts, 1996). Temuan ini didukung oleh Maryanti (2005).

Sifat lingkungan kerja di auditing sangat membutuhkan keahlian sehingga kemampuan auditor dalam melaksanakan pekerjaan sesuai standar akan ikut menentukan penerimaan auditor pada under-reporting time. Menurut teori ekspektansi, Auditor yang memiliki persepsi mampu melaksanakan audit sesuai dengan program audit akan memilih untuk bertindak fungsional. Pada pihak lain, auditor yang memiliki persepsi bahwa mereka tidak mampu melaksanakan audit sesuai dengan program audit akan termotivasi untuk menerima under-reporting time. Auditor yang memiliki berbagai kemampuan akan memiliki persepsi mampu melaksanakan penugasan audit. Persepsi ini akan memperkecil kemungkinan terjadinya konflik yang berkaitan dengan pekerjaan sehingga auditor yang memiliki berbagai keahlian akan lebih berperilaku fungsional (Lightner et al., 1982).

Penelitian tentang faktor-faktor yang memiliki andil terhadap under-reporting time penting dilakukan karena berbagai kejadian kegagalan audit telah menghasilkan peningkatan tuntutan pengguna laporan keuangan terhadap kualitas audit dan profesionalisme auditor dalam melaksanakan pekerjaan audit (Donnelly et al., 2003). Trevino (1986), menyatakan bahwa perbedaan berbagai faktor yang berasal dari individu karyawan dapat mempengaruhi perilaku individual dalam menghadapi dilema termasuk keputusan penerimaan auditor terhadap under-reporting time. Penelitian ini juga penting karena temuan faktor-faktor yang memiliki andil terhadap under-reporting time merupakan suatu langkah awal dalam menentukan faktor-faktor yang mempengaruhi under-reporting time secara aktual (Donnelly et al., 2003).

1.3. Rumusan Hipotesis

Pengaruh Locus of Control **terhadap** Under-reporting time

Penelitian ini akan menguji pengaruh locus of control eksternal terhadap penerimaan under-reporting time. Teori yang digunakan untuk menjelaskan pengaruh ini adalah goal setting theory (Locke dan Latham, 1990) yang menyatakan bahwa tujuan yang dimiliki oleh individu akan mempengaruhi perilaku kerja. Individu-individu akan memilih perilaku tertentu sesuai dengan tujuan yang dimiliki dan komitmen mereka terhadap tujuan tersebut. Individu-individu dengan locus of control lebih mudah terlibat dengan penerimaan under-reporting time. Perilaku ini dipilih apabila mereka tidak mendapatkan dukungan untuk mempertahankan pekerjaan. Keyakinan bahwa individu tidak bisa mengendalikan hasil dengan menggunakan usaha sendiri akan mendorong individu untuk lebih menerima tindakan under-reporting time.

H1: Locus of Control berpengaruh positif terhadap penerimaan Under-reporting time**.**

Pengaruh Keahlian Auditor terhadap Under-reporting time

Dalam lingkup pekerjaan auditing, seorang auditor yang memiliki berbagai keahlian akan memiliki idealisme yang tinggi sehingga akan bertindak lebih professional dan taat aturan. Tindakan ini dilakukan auditor dengan tujuan untuk bisa bertahan dalam pekerjaan mereka. Selain itu, auditor dengan bekal kemampuan dan ketrampilan yang tinggi akan mengalami konflik yang relatif sedikit berkaitan dengan program kerja audit yang ditetapkan dibandingkan auditor dengan kemampuan yang lebih rendah. Oleh karena itu, auditor yang memiliki berbagai keahlian diharapkan akan menunjukkan penerimaan yang lebih rendah terhadap penerimaan under-reporting time.

H2: Keahlian auditor berpengaruh negatif terhadap penerimaan under-reporting time

Pengaruh Komitmen Organisasi terhadap Under-reporting time

Individu dengan komitmen organisasi tinggi akan bekerja sesuai dengan standar meskipun berada dalam situasi yang menekan. Komitmen pada organisasi merupakan alat prediksi yang sangat baik untuk beberapa perilaku penting, diantaranya adalah perputaran pegawai, kesetiaan pegawai kepada nilai organisasi dan keinginan

untuk melakukan pekerjaan melebihi apa yang seharusnya dikerjakan (Irawati dkk., 2005). Malone dan Roberts (1996) menyatakan bahwa auditor dengan komitmen organisasi yang lebih rendah akan cenderung melakukan perilaku disfungsional jika dibandingkan dengan auditor yang memiliki komitmen organisasi tinggi. Individu dengan komitmen organisasi yang tinggi akan lebih tidak terlibat dengan under-reporting time. Hal ini dilakukan dengan tujuan untuk tetap mempertahankan keanggotaan dalam organisasi tempat mereka bekerja. Sehingga diturunkan hipotesis sebagai berikut:

H3: Komitmen organisasi berpengaruh negatif terhadap penerimaan under-reporting time
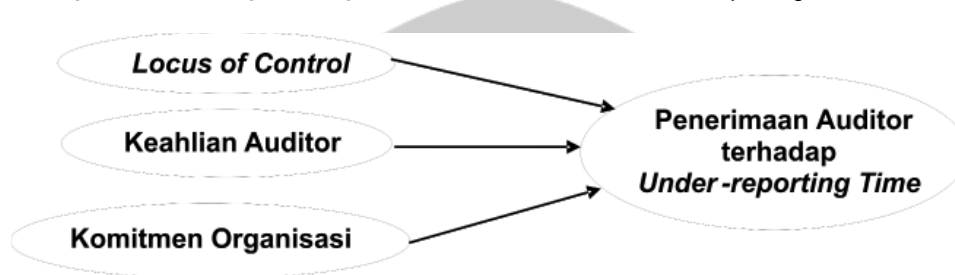
Gambar 1. Kerangka Pemikiran

3. METODE RISET

3.1. Populasi dan Sampel

Populasi dalam penelitian ini adalah Auditor yang bekerja pada Kantor Akuntan Publik di Indonesia. Untuk menentukan sampel yang diambil dalam penelitian ini, digunakan metode penyampelan bertujuan; dengan kriteria Auditor telah bekerja pada Kantor Akuntan Publik (KAP) yang bersangkutan minimal 1 tahun. Alasan dilakukannya kriteria ini karena auditor yang bekerja kurang dari satu tahun belum memiliki kewenangan mengambil keputusan sebab umumnya mereka masih menjadi asisten dan segala keputusan ditentukan oleh supervisornya.

3.2. Data dan Sumber Data

Data yang digunakan dalam riset ini adalah data primer yang diperoleh dari penyebaran kuesioner kepada para auditor berdasarkan populasi dan penentuan sampel yang telah ditentukan (3.1). Pengumpulan data melalui penyebaran kuesioner diperoleh secara langsung tertuju kepada para auditor dengan mendatangi kantor KAP; melalui mail survey; dan bantuan penghubung (contact person) yang mempunyai akses pada sejumlah KAP di Indonesia.

3.3. Definisi Operasional Variabel Penelitian

Variabel yang digunakan dalam penelitian ini adalah: Locus of Control, Komitmen Organisasi, Keahlian Auditor, dan Penerimaan Under-reporting time.

Locus of Control

Riset ini menguji pengaruh variabel locus of control (LoC) eksternal terhadap penerimaan under-reporting time. Variabel LoC diukur dengan menggunakan pertanyaan dari Spector (1982). Instrumen ini terdiri dari enam belas pertanyaan. Teknik pengukuran menggunakan skala Likert point 1–7. Skor locus of control yang lebih tinggi menggambarkan kepribadian eksternal, sedangkan skor yang lebih rendah menggambarkan kepribadian internal. Pertanyaan nomor 1, 2, 3, 4, 7, 11, 14 dan 15 dinilai dengan skor terbalik.

Komitmen Organisasi

Variabel Komitmen Organisasi diukur dengan menggunakan pertanyaan yang dikembangkan oleh Mowday et al., (1979). Instrumen ini terdiri dari sembilan pertanyaan. Teknik pengukuran menggunakan skala Likert point 1–7. skor yang lebih tinggi menggambarkan Komitmen Organisasi yang tinggi.

Keahlian Auditor

Variabel Kualitas Auditor diukur dengan menggunakan pertanyaan yang dikembangkan dari Chao dan Georgia (1994). Instrument ini terdiri dari lima pertanyaan, teknik pengukuran menggunakan skala Likert point 1–7. Skor yang lebih tinggi menggambarkan kualitas yang tinggi, sedangkan skor yang rendah menggambarkan kualitas yang rendah.

Penerimaan Under-reporting time

Variabel dependen dalam penelitian ini menggunakan Under-reporting time. Variabel ini diukur dengan menggunakan empat item pertanyaan yang dikembangkan oleh Donnelly et al., (2003). Skor yang rendah menunjukkan penerimaan yang rendah terhadap under-reporting time, sedangkan skor yang tinggi menggambarkan penerimaan yang tinggi terhadap under-reporting time.

3.4. Alat Analisis

Data dianalisis dengan menggunakan regresi untuk menguji hipotesis. Uji terhadap model dalam penelitian ini meliputi uji koefisien determinasi dan uji pengaruh simultan (F test).

4. HASIL DAN PEMBAHASAN

Jumlah kuesioner yang dikirimkan dan yang dapat digunakan dalam penelitian ditampilkan dalam Tabel.1:

Tabel 1. Rincian Penerimaan dan Pengembalian Kuesioner

Keterangan	Jumlah	Prosentase
Kuesioner yang dikirim	850	100%
Kuesioner yang tidak kembali	(609)	71,5%
Kuesioner yang tidak lengkap	(5)	0,5%
Kuesioner yang digunakan	236	28%

Sumber: Data yang diolah

Adapun profil 236 responden yang berpartisipasi dalam penelitian ini ditunjukkan pada Tabel 2. sebagai berikut:

Tabel 2. Profil Responden

Keterangan	Jumlah	Prosentase
Gender: Pria	124	52,54
Wanita	112	47,46
Pendidikan: D3/ Diploma	51	21,61
S1/ Sarjana	167	70,76
S2	12	5,08
S3	6	2,54
Lama bekerja: 0-3 tahun	80	33,90
4-6 tahun	74	31,36
7-10 tahun	61	25,85
> 10 tahun	21	8,89
Posisi di KAP: Partner	4	1,69
Manajer	6	2,54
Senior/ Supervisor	106	44,92
Staff/ Junior	120	50,85

Sumber: Data yang diolah

Uji model dalam penelitian ini meliputi uji koefisien determinasi dan uji pengaruh simultan (F test). Uji koefisien determinasi digunakan untuk menguji goodness-fit dari model regresi. Hasil regresi dengan OLS menunjukkan besarnya nilai adjusted R^2 sebesar 0,057 yang berarti variabilitas variabel penerimaan under-reporting time yang dapat dijelaskan oleh variabilitas variabel locus of control, keahlian auditor, dan komitmen organisasi sebesar 5,7%; sedangkan sisanya dijelaskan oleh variabel lainnya yang tidak dimasukkan dalam model regresi.

Setelah dilakukan uji koefisien determinasi kemudian dilakukan uji pengaruh simultan (uji F). Uji pengaruh simultan dilakukan untuk mengetahui apakah variabel locus of control, keahlian auditor, dan komitmen organisasi secara bersama-sama mempengaruhi variabel penerimaan under-reporting time. Uji ini dapat dilihat pada nilai F test sebesar 5.765 dan signifikan pada 0,001 yang berarti variabel locus of control, keahlian auditor, dan komitmen organisasi secara simultan mempengaruhi variabel penerimaan under-reporting time.

Hipotesis 1 (H1) yang menyatakan bahwa locus of control mempunyai pengaruh positif terhadap penerimaan under-reporting time secara statistik dapat diterima. Hasil pengujian hipotesis 1 (H1) menunjukkan taraf signifikan lebih kecil dari 0,05. Penerimaan ini dilakukan karena auditor yang memiliki locus of control meyakini bahwa hasil yang diperoleh lebih banyak ditentukan oleh faktor di luar dirinya seperti peluang, keberuntungan, serta nasib dan bukan dari usahanya sendiri. Berdasarkan teori penetapan tujuan (GST), seorang auditor yang mempunyai locus of control cenderung menerima under-reporting time apabila tidak mendapatkan dukungan dari lingkungan untuk mempertahankan pekerjaan.

Temuan penelitian ini memberikan dukungan empiris terhadap teori penetapan tujuan (GST) yang menyatakan individu akan memilih perilaku tertentu sesuai dengan tujuan yang mereka miliki dan seberapa besar komitmen mereka terhadap tujuan tersebut (Lock dan Latham, 1990). Individu dengan locus of control eksternal lebih mudah terlibat dengan penerimaan under-reporting time. Perilaku ini dilakukan individu apabila tidak mendapatkan dukungan untuk bertahan dalam pekerjaan. Individu yang meyakini bahwa mereka tidak dapat melakukan kontrol

terhadap hasil yang mereka peroleh untuk bisa bertahan dalam pekerjaan akan lebih terlibat dengan perilaku under-reporting time. Demi mencapai tujuan pribadi untuk bertahan dalam pekerjaan, mereka akan menerima under-reporting time. Dengan kata lain, adanya keyakinan untuk tidak bisa bertahan dengan menggunakan usaha sendiri akan mendorong individu untuk lebih menerima tindakan under-reporting time. Temuan riset ini konsisten dengan temuan Donnelly et al., (2003) dan Irawati dkk (2005).

Hipotesis 2 (H2) menyatakan bahwa keahlian auditor berpengaruh negatif terhadap penerimaan under-reporting time. Hipotesis ini secara statistik dapat diterima. Hasil pengujian hipotesis 2 (H2) menunjukkan taraf signifikan lebih kecil 0,05. Nilai tersebut menunjukkan bahwa keahlian auditor berpengaruh terhadap penerimaan under-reporting time. Menurut teori expectancy, seorang auditor yang ahli memiliki harapan bahwa auditor relatif tidak akan menemui kesulitan menjalankan tugasnya sesuai dengan standar yang ditetapkan. Dengan kata lain seorang auditor yang ahli memiliki kemampuan untuk melakukan tugas sesuai dengan tuntutan pekerjaan sehingga auditor akan cenderung menolak (tidak menerima) under-reporting time. Dengan kemampuan yang dimilikinya, seorang auditor yang ahli dapat mengendalikan hasil yang diperoleh tanpa harus terlibat dengan under-reporting time.

Hasil pengujian hipotesis 3 (H3) menunjukkan signifikan lebih besar dari 0,05. Hasil ini menunjukkan bahwa komitmen organisasi tidak berpengaruh terhadap penerimaan under-reporting time. Hasil ini mengindikasikan semakin tinggi tingkat komitmen organisasi yang dimiliki oleh individu auditor, maka tidak mempengaruhi kecenderungan mereka untuk menolak periaku under-reporting time. Hasil ini tidak memberikan dukungan empiris terhadap teori penetapan tujuan (GST) yang menyatakan bahwa individu akan memilih perilaku tertentu sesuai dengan tujuan yang mereka miliki dan seberapa besar komitmen mereka terhadap tujuan tersebut (Locke dan Latham, 1990).

Individu yang memiliki komitmen organisasi tinggi merasa yakin dan pasti terhadap tujuan organisasi, mereka akan berusaha mempertahankan keanggotaan dalam organisasi, dan bersedia bekerja keras demi organisasi. Demi mencapai tujuan untuk mempertahankan keanggotaan dalam organisasi maka individu dengan komitmen organisasi tinggi akan tidak menerima under-reporting time. Tidak terdukungnya teori penetapan tujuan (GST) dalam penelitian ini, karena ada kemungkinan komitmen organisasi tidak memiliki pengaruh langsung terhadap penerimaan perilaku disfungsional, sesuai dengan pendapat Donnelly et al., (2003) yang menyatakan bahwa komitmen organisasi memiliki pengaruh terhadap penerimaan under-reporting time secara tidak langsung akan tetapi melalui kinerja dan keinginan untuk keluar dari organisasi.

5. PENUTUP

5.1. Kesimpulan

Berdasarkan analisis yang telah dilakukan pada paparan sebelumnya dapat ditarik kesimpulan sebagai berikut: Hipotesis 1 (H1) diterima. Hasil ini menunjukkan bahwa locus of control eksternal berpengaruh positif dan signifikan terhadap penerimaan under-reporting time. Hasil penelitian mendukung bahwa locus of control akan mempengaruhi penerimaan under-reporting time pada auditor yang bekerja di Kantor Akuntan Publik. Seorang auditor yang mempunyai locus of control cenderung menerima under-reporting time apabila tidak mendapatkan dukungan dari lingkungan untuk mempertahankan pekerjaan. Hipotesis 2 (H2) diterima. Hasil ini menunjukkan bahwa keahlian auditor berpengaruh negatif terhadap penerimaan under-reporting time. Seorang auditor yang ahli dapat mengendalikan hasil yang diperoleh tanpa harus terlibat dengan under-reporting time Hipotesis 3 (H3) ditolak. Hasil ini menunjukkan bahwa komitmen organisasi tidak berpengaruh terhadap penerimaan under-reporting time.

5.2. Keterbatasan dan Saran

Responden yang bersedia untuk berpartisipasi dalam penelitian ini mayoritas adalah staf auditor pada Kantor Akuntan Publik dan tergolong junior dan memiliki masa kerja kurang dari 1 tahun (Tabel 2.). Oleh karena itu, hal tersebut sekiranya menjadi keterbatasan dalam penelitian ini. Berdasarkan analisis data dan simpulan yang

disampaikan sebelumnya, maka dapat disampaikan saran bagi para peneliti di masa yang akan datang untuk mempertimbangkan auditor yang memiliki posisi senior dan memiliki masa kerja lebih dari 5 tahun, sehingga akan lebih mencerminkan penerimaan under-reporting time oleh para auditor di Indonesia. Variabel lain dapat ditambahkan dalam penelitian selanjutnya, seperti moral auditor dan kinerja auditor dengan menggunakan metode eksperimen yang kiranya lebih mampu mencerminkan perilaku yang sesungguhnya dari penerimaan auditor terhadap under-reporting time.

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THE COMPARISON OF PERFORMANCE AMONG NINE BIGGEST BANKS IN INDONESIA BEFORE AND AFTER THE IMPLEMENTATION OF INDONESIA BANKING ARCHITECTURE

Krisna Wijaya
Independent Commissioner, Bank Mandiri

Roberto Akyuwen
Senior Lecturer, Finance Education and Training Center Yogyakarta
E-mail: robertoakyuwen@yahoo.com

Abstract

Like in many countries, banking industry in Indonesia is more dynamic in the last decade. Level of market competition among banks tends to increase continuously. This phenomenon has encouraged banks to create the more advanced products and services to fulfill the growing needs of modern banking customers. As the monetary authority, Bank Indonesia has launched the Indonesia Banking Architecture to manage these dynamics. IBA is a fundamental framework of banking system and provides a direction for banking operational in Indonesia within 5 to 10 years. It is expected that IBA will create conducive environment which will enable banks to improve their performance. This research is aimed to compare and analyze the performance of nine biggest banks in Indonesia before and after the implementation of IBA in 2004. The performance indicators used are including ROA, ROE, NIM, CAR, LDR, and NPL. The data on these indicators are collected in the period of 2000-2009. The period of 2000-2004 is considered as before the implementation of IBA, while 2005-2009 is defined as after the implementation of IBA. The main tool of analysis used in this research is the mean equality test.

Keywords: bank, Indonesia Banking Architecture, performance.

1. INTRODUCTION

In our modern life, banks are defined as institutions that issue deposit liabilities that are checkable and extend loans to commercial businesses or individuals. These two characteristics often used to differentiate banks from the other financial institutions. But, of course, banks do many other things too. The word bank itself is derived from the Italian word "banca", which refers to the "table, counter, or place of business of a money changer. Banks also issue time and savings deposits and offer many other types of loans including mortgages and consumer loans. Recently, many of them also provide electronic fund transfers, debit cards, international trade-related payments, credit cards, leasing, trust services, financial guarantees, and advisory and accounting services.

The banking sector is considered to be an important source of funding for most business. Bank runs have both microeconomic and macroeconomic effects (Dornbusch, Fischer, and Startz, 2004: 415). The former takes the form of disintermediation. Having lost deposits, banks are no longer able to make loans to support business investment and purchases of private homes. The latter takes the form on an increase in the currency-deposit ratio, and therefore, a drop in the money multiplier. Unless the central bank offsets this by increasing the monetary base, the macroeconomic effect is a drop in the money supply. A run on a bank occurs when depositors rush to try to withdraw cash because they believe others will also try to do so.

A bank success depends on many factors, but especially important is its ability to attract funds by offering deposit liabilities. Three categories of deposits are transactions deposits, savings deposits, and time deposits. Because deposits are the main source of bank funds, banks continually strive to increase deposits. In recent decades, banks have developed other non-deposit sources of funds such as repurchase agreements or borrowings. A bank success is also depends on local and regional factors, such as the population and economic vitality of the bank's service area, and its ability to attract deposits away from competing financial institutions or from banks in other geographical regions.

In the context of assets, a bank must decide how best to use its funds to meet its objectives, especially maximizing profits. Stockholders want to see that the bank's management does not lose sight of this goal. However, banking can be a risky business and the management and stockholders will also want to minimize the risks faced in the pursuit of profits. The bank will try to diversify its portfolio to ensure a considerable margin of liquidity and safety. Safety is very important because banks are highly leveraged institutions. Their assets are overwhelmingly supported by borrowed funds, which are either deposit or non-deposit liabilities. Most, if not all banks, hold a mix of loans (including business loans, consumer credit, and mortgages), government securities, corporate and foreign bonds, and other assets. In addition to these interest-earning assets, banks also hold reserve (cash) assets to help meet their liquidity and safety objectives. Another reason that banks hold reserve assets is to fulfill the central bank's requirement.

Bank's concern about liquidity are generated in part by the nature of their sources of funds. Checkable deposits, for example, which are obviously payable on demand, can and often do fluctuate widely. Non-deposit liabilities have the potential to fluctuate even more. If a bank's solvency is questioned or if another depository institutions offers more attractive rates, a bank can quickly lose some non-deposit funds that are usually placed for a relatively short time period. When deposits and non-deposit liabilities fall, even the most solvent bank must have a cushion of liquidity to enable it to meet these withdrawals. Such liquidity needs can be satisfied by holding some highly liquid assets and non-interest bearing cash reserves.

As banks regulator, a central bank uses its policies and instruments to encourage an appropriate competitive environment in banking industry. It is assumed that this environment will be able to improve banks performance. Al-Obaidan (2009: 70) has concluded that central bank's policies affect the economic efficiency of the banking industry in the Gulf Cooperation Council (GCC). GCC member countries are including Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (UAE). The monetary stability allows management of commercial banks to allocate resources more efficiently as reflected by the significant and positive relationship between technical efficiency and monetary stability. Also, monetary stability allows management of commercial banks to rely on market prices to maximize the output level for given resources. Consequently, banks that operate in a relatively more stable price environment have higher scale efficiency than their counterparts that operate in economies with higher inflation rates.

Brissimis and Delis (2010) has examined the role of bank liquidity, capitalization, and market power as internal factors influencing bank's reaction in terms of lending and risk-taking to monetary policy impulses. Heterogeneity in the response of banks to a change in monetary policy is an important element in the transmission of this policy through banks. The ultimate impact of a monetary policy is a better bank performance. Brissimis and Delis (2010: 34-35) found that bank-level responses to policy rate changes in the United States of America (USA) and Euro are often far from the average. As banks have a special role in the financing of economic activity, their heterogeneity behavior is of particular importance to researchers and policy-makers alike. Banks with healthier balance sheets and market power follow different strategies from the ones with weaker balance sheets, and in some cases they seem to take advantage of the market. However, when it comes to risk-taking and profitability, it is well-known that during sudden episodes of financial turmoil, the balance sheet strength of even the healthiest banks quickly deteriorates and those banks exposed to high risks may become insolvent.

Based on his research on the monetary policy and bank performance in Nigeria, Nwezeaku (2010) emphasized that policy formulation and implementation inconsistencies appear to hinder the full impact of monetary policy on

the economy. Meanwhile, Ioannidu (2005) has examined whether monetary policy responsibilities alter the central bank's role (the Federal Reserve System) as a bank supervisor. He found that the indicators of monetary policy affect the supervisory actions of the Fed, but do not affect the actions of the Comptroller of the Currency and the Federal Deposit Insurance Corporation.

According to Tran (2010: 312), it is clear that although the financial system is coping with the global financial crisis, the soundness of the Vietnamese banking system has become stronger than what it was decades ago. Its current health is partially due to the continuous reform process of the banking legal environment. In this innovation, the digestion of international standards of supervision and intervention mechanisms, capital adequacy requirements, and flexible and timely monetary policy are decisive factors that have improved the soundness and performance of the banking sector. Thus, in the future, the banking legal environment should continuously be reformed in accordance with the market principles and international standards on capital adequacy and supervision requirements. Tran has used both financial variables and non-financial variables to analyze bank performance. Financial variables are including capital structure and solvency, management, profitability, bank size, and growth. Meanwhile, the non-financial variables are consisting of customer satisfaction, leadership, and technology.

From the emprical facts, it appears that the monetary policy provide by the central bank can and does benefit the performance of banks. But, in some circumstances, it impacts negatively on bank performance when it does not operate very flexibly and in a timely manner when the economy needs its activation. So, effects of monetary policy instruments on the performance of banks vary greatly in different periods of time. In several developing countries, the monetary policy has impacted positively on the performance of banks in recent years. However, Tran (2010) has indicated that this effect is not statistically significant in case of Vietnam because the nature of monetary policy and its effects on the stability of the economy as well as on bank performance are still controversial. There are also many reseaches on the issue of monetary policy and bank performance. Some of it are Duygun-Fethi and Pasiouras (2001), Kosmidou and Zopounidis (1008), Mishkin (2008), Neely and Wheelock (1997), Said and Tumin (2011), Scholtens (2000), and Tarawneh (2006).

Most developing countries have been taking different plans and strategies to their financial sector (Tarawneh, 2006: 103). Commercial banks are the most dominant financial institutions in any country. In Indonesia, Bank Indonesia has launched a strategic policy called the Indonesia Banking Architecture (IBA) in 2004. This research is undertake base on the curiosity of whether the implementation of IBA was succeed in increasing the performance of nine biggest bank currently operates in Indonesia. Because these nine banks have dominated banking industry, there was a strong indication that Bank Indonesia attempts to maintain a competitive environment has resulted in a non-competitive environment. Furthermore, in his recent research, Budiwiyono (2011: 292) has concluded that the performance of banking industry in Indonesia was not influenced by IBA. The average performance of 121 banks was not different between the period of 2000-2004 and 2005-2009. However, he mentioned that there was a great possibility for the improvement of individual bank's performance after the implementation of IBA.

Understanding the transmission mechanism is crucial for monetary policy. The special role of banking institutions in this mechanism has been studied extensively both at theoretical and empirical level. The existing evidence shows that banks alter their lending behavior in specific ways following a change in monetary policy. But does this reaction involve only changes, as studied in the bulk of the literature? And do all banks in the market respond uniformly to monetary policy changes? This research tries to answer these questions by analyzing empirically the response of nine biggest banks in Indonesia over the period 2000-2009 in terms of their performance following a strategic and fundamental monetary policy.

2. LITERATURE REVIEW AND HYPOTHESES

The relationship among monetary policy, inflation, and productivity remains unsolved although many researchers have conducted empirical researches on it. This issue is not only interesting empirically, but it also has profound policy implications. Hence, it is important to examine how central bank's policies that maintain monetary

stability over a certain period have influenced the performance of the commercial banking industry. Different to the previous research, this research has used six different indicators to identify the performance difference in nine biggest banks in Indonesia before and after the implementation of IBA.

The primary reason the banking system is regulated is to preserve its safety and soundness and ensure the fair and efficient delivery of banking services to the public. From the regulator's perspective, continuous oversight is needed to ensure that banks are operated prudently and in accordance with standing statutes and regulations. Regulation involves the formulation and issuance of specific rules to govern the structure and conduct of banks.

In establishing the statutes and regulations that have contributed to the evolution of the structure of the banking system, the regulatory agencies in a country, including Bank Indonesia, were guided by several considerations. It was assumed that a large number of small banks would encourage competition and efficiency, which would result in conduct or behavior by banks that was beneficial to the public and society at large. According to Burton and Lombra (2006: 235), the more competitive the market, the greater the risk of failure of an individual bank from the presure of intense competition. Although the public would be provided with the largest quantity of financial services at the lowest prices, more banks could fail in a highly competitive environment.

On the reverse, a structure characterized by a few large banks would result in limited competition, inefficiencies, and fewer benefits for the public in the form of lower prices and improved quality and quantity of financial services. Fewer banks would fail in a non-competitive market because banks could charge higher prices for their services and earn higher profits. Nevertheless, with only a few large banks, the failure of just one bank could have major ramifications throughout the economy. With many small banks, the failure of one bank would not be catastrophic. In short, regulators attempt to balance all of these considerations by encouraging bank behavior that is beneficial to society while ensuring the safety and soundness of the financial system.

It is rational that regulators were interested in monitoring and influencing, if not controlling, the structure of the market of banking services. Regulators, in particular, used their powers to control entry into the market, mergers among existing banks, and branching in an effort to maintain many small banks and so-called competitive environment while protecting small banks from excessive competition. Unfortunately, regulator's attempts to maintain a competitive environment often resulted in a non-competitive environment. Even though there were many banks, each bank was shielded from competition.

The bank's management decisions involve what kinds of loans to make, what the prime rate should be, what interest rate to be offer on one-year time deposits, and so forth. These decisions reflect an interaction between the bank's liquidity, safety, and earnings objectives and the economic and financial environment within which the bank operates. It is useful to visualize bank management as having to face and deal with several types of risks and uncertainties including credit or default risk, interest rate risk, liquidity risk, and exchange rate risk.

A primary function of a bank loan officer is to evaluate or assess the default risk associated with lending to particular borrowers, such as firms, individuals, and domestic and foreign governments. The loan officer gathers all of the relevant information about potential borrowers including balance sheets, income statements, credit checks, and how the funds are to be used. As consequence, the loan officers must also be aware that they are making decisions about whether to fund a loan under conditions of asymmetric information. If the bank funds less-desirable loans, the result is an adverse selection problem, which increases the risk of default.

After the loan is made, it may be difficult to guarantee that the loan is used only for the stated purpose, not for a more risky venture. This so-called moral hazard problem results from the fact that once borrowers get the funds, they may have an incentive to engage in a riskier venture. This incentive occurs because higher-risk ventures pay a higher return. The borrowers are now risking the bank's funds. The asymmetric information, adverse selection, and the incentive to engage in riskier ventures are usually facts of life.

Bank managers must also manage interest rate risk. A positive spread today can turn into a negative spread later when the cost of liabilities exceeds the return on assets. Banks can use financial futures, options, and swaps

to manage interest rate risk. Adjustable (variable) rate loans can also be used to hedge interest rate risk. The aim, of course, is to preserve a profitable spread and to shift the interest rate risk onto the borrower.

The cost of bank loans varies for different types of borrowers at any given point in time and for all borrowers over time. Interest rate is higher for riskier borrowers, and rates are also higher on smaller loans because of the fixed costs involved in making and servicing loans. If a firm can qualify as a prime credit because of its size and financial strength, it can borrow at the prime rate, which at one time was the lowest rate banks charged. Rates on other loans are generally scaled up from the prime rate, but loans to very large, strong customers are made at rates below prime.

Bank rates vary widely over time depending on economic conditions and central bank's policy. When the economy is weak, then loan demand is usually slack, inflation is low, and the central bank makes plenty of money available to the system. As a result, rates on all types of loans are relatively low. Conversely, when the economy is booming, loan demand is typically strong, the central bank restricts the money supply, and the result is high interest rates.

Brigham and Houston (2004: 625) mentioned that the terms on a short-term bank loan to a business are spelled out in the promissory note. The key elements contained in most promissory notes are (1) interest only versus amortized; (2) collateral; (3) loan guarantees; (4) nominal, or stated, interest rate; (5) frequency of interest payments; (6) maturity; (7) discount interest; (8) add-on basis installment loans; and (9) other cost elements.

Like other intermediaries, banks need to manage liquidity risk. A fairly large p proportion of bank liabilities are payable on demand. Checkable deposits and savings deposits are two prominent examples. Banks must be prepared to meet unexpected withdrawals by depositors and to accommodate unexpected loan demands by valued customers. The resulting need for liquidity can be satisfied by holding some highly liquid assets or by expanding particular types of liabilities.

Some banks maintain stocks of foreign exchange that are used in international transactions and to service customers who need to buy or sell foreign currencies. This phenomenon are undertaken more often, because banking has become more international in scope. If the exchange rate between two currencies changes, the value of the stocks of foreign exchange will also change. A bank, like any holder of foreign exchange, is subject to an exchange risk. Banks and other holders of foreign exchange now use exchange rate forward, futures, option, and swap agreements to hedge this risk.

The business of banking, perhaps, is beginning to sound somewhat more complex and challenging than you originally envisioned. Banks are facing increasing competition from other financial institutions and other non-financial corporations in a global environment. They have confronted a volatile economic and regulatory environment. Most analysts ascribed the better performance by banks to their more diversified portfolios and to their environment. Banks have shored up capital due to new regulations. These factors led to record profit levels and high bank stock valuations.

The major challenge facing banks in this new millennium is competition from other intermediaries and other non-financial companies that have taken in increasing share of intermediation. These non-banks face less regulation and often lower costs. Costs may be lower because non-banks are less regulated than banks with regard to what they can do and where they can locate. In addition, non-banks do not face reserve requirements, nor do they have to maintain full-service branches. Banks must increasingly adapt to a changing industry to maintain profits as well as to maintain market share. It is not surprise that banks are merging with other financial services firms including savings and loans, securities firms, and insurance companies, as well as expanding into areas previously prohibited to banks.

The aims of this research are related to a long tradition in the literature of the transmission mechanism that accords banks a special role. Many proponents suggest that the effect of monetary policy on aggregate demand through interest rates may be enhanced by financial market imperfections and the existence of imperfect substitutability between loans and securities in bank portfolios and also as a means of borrowing for firms. The corresponding impact on performance of banks is less investigated. This seems odd since changes in policy rates

can affect bank profitability, given that banks can borrow short at lower rates and use these funds to invest in longer-term projects at higher rates. A decrease in interest rates reduces agency costs or may cause banks to relax their lending standards, raising credit risk, and thus non-performing loans.
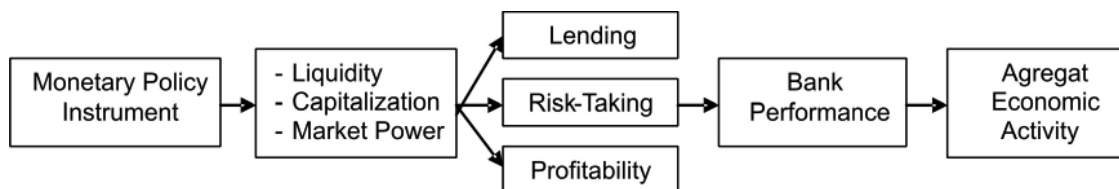

Figure 1. Transmission of Monetary Policy through Banks

Therefore, central banks are increasingly considered with avoiding price bubbles and minimizing incentives for banks to take on very high risks. However, in a low interest rate environment, banks have incentives to take on higher risks in search for yield. A major concern for the empirical analysis is the fact that banks respond quite heterogeneously to monetary policy changes and this may also have implications for their risk-taking and performance.

The common assumption which underpins much of the bank financial performance research and discussion is that increasing financial performance will lead to improved functions and activities of the banks. It can be argued that there are three principal factors to improve financial performance for financial institutions including banks. They are the institution size, its asset management, and the operational efficiency. In general, the financial performance of banks and other financial institutions has been measured using a combination of financial ratios analysis, benchmarking, measuring performance against budget or a mix of these methodologies (Avkiran, 1995 in Tarawneh, 2006: 102). As it known in accounting literature, there are limitations associated with use of some financial ratios. However, Tarawneh (2006) has used return on assets (ROA) ratio with interest rate income size to measure the performance of Omani commercial banks. He also used together asset management, the bank size, and operational efficiency to investigate the relationships among them and the financial performance.

In addition, much of the current bank performance literature describes the objective of financial organizations as that of earning acceptable returns and minimizing the risk taken to earn this return. There is a generally accepted relationship between risk and return, that is, the higher the risk the higher the expected return (Brigham and Houston, 2004: 170). Therefore, traditional measures of bank performance have measured both risks and returns.

The increasing competition in the national and international banking markets, the change towards monetary unions, and the new technological innovations herald major changes in banking environment. These phenomenons also challenge all banks to make timely preparations in order to enter into new competitive financial environment. The concept of efficiency can be regarded as the relationship between bank's outputs and the corresponding inputs used in their operation. In the financial management literature, efficiency is treated as a relative measure which reflects the deviations from maximum attainable output for a given level of input.

Many researchers have been too much focus on asset and liability management in the banking sector. They are strongly suggests that risk management issues and its implications must be concentrated by the banking industry. There is a need for a greater risk management in relation to more effective portfolio management, and this requires a greater emphasis upon the nature of risk and return in bank asset structure, and greater diversification of assets in order to spread and reduce the bank's risks.

According to Kosmidou and Zopoundis (2008: 80), the efficiency of the banking system has been one of the major issues in the new monetary and financial environment. The efficiency and competitiveness of financial institutions cannot easily be measured, since their products and services are of an intangible nature. Many researchers have attempted to measure the productivity and efficiency of the banking industry using outputs, costs, and performance.

There are variations of bank performance measurement. Many banks experience dramatic changes in profits from one period to the next or relative to what stock analysts expect (MacDonald and Koch: 2006: 52). United States of America commercial banks reported record aggregate profits every year throughout the 1990s and early 2000s. The same situation also happened in banking industry in many developing countries. The 1990s evidenced improved asset quality with fewer loan defaults, higher interest income on assets relative to interest expense on liabilities, and significantly greater non-interest income relative to non-interest expense. In 2000s, there have been largely earnings events rather than solvency events.

Commercial banks, like other financial intermediaries, facilitate the flow of funds from surplus spending units (savers) to deficit spending units (borrowers). Their financial characteristics largely reflect government-imposed operating restrictions and peculiar features of the specific markets served. Because their function is primarily financial, most banks own few fixed assets and thus exhibit low operating leverage. Most bank liabilities are payable on demand or carry short-term maturities so depositors can renegotiate deposit rates as market interest rates change. As a result, interest expense changes coincidentally with short-run changes in market interest rates creating significant asset allocation and pricing problems. Banks operate with less equity capital than non-financial companies, which increases financial leverage and the volatility of earnings.

Analyzing commercial bank performance should started from the financial statements (MacDonald and Koch, 2006: 54). These include the bank's balance sheet and income statement. A bank's balance sheet presents financial information comparing what a bank owns with what it owes and the ownership interest of stockholders. Balance sheet figures are stock values calculated for a particular day or point in time. As such, values on the balance sheet represent the balance of cash, loans, investments, and premises owned by the bank on a particular day.

Meanwhile, a bank's income statement reflects the financial nature of banking, as interest on loans and investments represents the bulk of revenue. The income statement starts with interest income, and then subtracts interest expense to produce net interest income. The other major source of bank revenue is non-interest income. After adding non-interest income, banks subtract non-interest expense, or overhead costs. Although banks constantly try to increase their non-interest income and reduce non-interest expense, the non-interest expense usually exceeds non-interest income such that the difference is labeled the bank's burden. The next step is to subtract provisions for loan and lease losses. The resulting figure essentially represents operating income before securities transactions and taxes. Next, realized gains or losses from the sale of securities are added to produce pretax net operating income. Subtracting applicable income taxes, tax-equivalent adjustments, and any extraordinary items yields net income.

For the past year, most of bank's top manager would quote either their bank's return on equity (ROE) or return on assets (ROA) as the performance indicators. If these measures were higher than peers, they would drop phrase "high-performance bank" in their conversation. But, of course, for a bank to report higher returns, it must either take on more risk, price assets and liabilities better, or realize cost advantages compared with peers. By definition ((MacDonald and Koch, 2006: 69):

$$ROE = \frac{Net\ income}{Average\ total\ equity} \qquad (2.1)$$

ROE model above simply relates ROE to ROA and financial leverage then decomposes ROA into its contributing elements. ROE equals net income divided by average total equity and, thus, measures the percentage return on each dollar of stockholder's equity. It is the aggregate return to stockholders before dividends. The higher the return the better, as banks can add more to retained earnings and pay more in cash dividends when profits are higher.

$$ROA = \frac{Net\ income}{Average\ total\ assets} \qquad (2.2)$$

ROA equals net income divided by average total assets and, thus, measures net income per dollar of average assets owned during the period. ROE linked to ROA by the equity multiplier (EM), which equals average total assets divided by total equity. A bank's EM compares assets with equity such that large values indicate a large amount of debt financing relative to stockholder's equity. EM thus measures financial leverage and represents both a profit and risk measure.

$$ROE = \frac{Net\ income}{Average\ total\ assets}\ x\ \frac{Average\ total\ assets}{Average\ total\ equity} = ROA\ x\ EM \qquad (2.3)$$

The fundamental objective of bank management is to maximize shareholder's wealth. This goal is interpreted to mean maximizing the market value of a bank's common stock. Wealth maximization, in turn, requires that managers evaluate the present value of cash flows under uncertainty with larger, near-term cash flows preferred when evaluated on a risk-adjusted basis. Profit maximization appears to suggest that the bank manager simply invest in assets that generate the highest gross yields and keep costs down. But, profit maximization differs from wealth maximization. To obtain higher yields, a bank must either take on increased risk or lower operating costs. Greater risk manifests itself in greater volatility of net income and market value of stockholder's equity. Wealth maximization requires the manager to evaluate and balance the trade-offs between the opportunity for higher returns, the probability of not realizing those returns, and the possibility that the bank might fail.

A bank's profitability will generally vary directly with the riskiness of its portfolio and operations. Although some risks can be sought out or avoided, others are inherent in the prevailing economic environment and specific markets served. Even though management can control the credit evaluation procedure, returns to the bank vary with returns to its customers, and these returns are heavily dependent on local economic condition. Interest rate is one of the important factor in influencing a bank's risk in term of credit quality. Net interest margin (NIM) is a ratio of net interest income (NII) to total earning assets. NII itself is the interest income minus interest expense.

$$NIM = \frac{Net\ interest\ income}{Average\ earning\ assets} \qquad (2.4)$$

The Federal Reserve Board has identified six types of risk. They are credit risk, liquidity risk, market risk, operational risk, reputation risk, and legal risk (MacDonald and Koch, 2006: 74-75). Credit risk is associated with the quality of individual assets and the likelihood of default. It is the potential variation in net income and market value of equity resulting from non-payment or delayed payment by borrowers to the bank. Liquidity risk is the current and potential risk to earnings and the market value of stockholder's equity that results from a bank's inability to meet payments or clearing obligations in a timely and cost-effective manner. Market risk is resulting from adverse movements in market rates or prices. Operational risk refers to the possibility that operating expenses might vary significantly from what is expected, producing a decline in net income and bank value. Legal risk is the risk that unenforceable contracts, lawsuits, or adverse judgments could disrupts or negatively affect the operations, profitability, condition, or solvency of the bank. Reputation risk is the risk that negative publicity, either true or untrue, can adversely affect a bank's customer base or bring forth costly litigation.

In the context of credit risk, loans are designated as non-performing when they are placed on non-accrual status or when the terms are substantially altered in a restructuring. Non-accrual means that banks deduct all interest on the loans that was recorded but not actually collected. Banks have traditionally stopped accruing interest when debt payments were more than 90 days past due. However, the interpretation of when loans qualified as past due varies widely. Non-performing loan (NPL) is loan for which an obligated interest payment is past due. Many banks did not place loans on non-accrual if they were brought under 90 days past due by the end of the reporting period. This permitted borrowers to make late partial payments and the banks to report all interest as accrued, even

when it was not collected. On occasion, banks would lend the borrower the funds that were used to make the late payment.

The impact of this practice on financial statements is twofold. First, NPLs are understated on the balance sheet, so that credit risk is actually higher than it appears. Second, interest accrued but not collected increases net interest income (NII), thus overstating NIM, ROA, and ROE.

The other important risk to recognize by a bank's manager is capital or solvency risk. Capital risk is not considered as a separate risk because all of the risks mentioned previously will, in one form or another, affect a bank's capital and hence solvency. It dose, however, represents the risk that a bank may become insolvent and fail. Thus, capital risk refers to the potential decrease in the market value of assets below the market value of liabilities, indicating economic net worth is zero or less. If such a bank were to liquidate its assets, it would not be able to pay all creditors, and would be bankrupt. In many cases, the capital risk is influence by an aggresive loan expansion by banks as showed by the high loan to deposit ratio (LDR). LDR is a commonly used statistic for assessing a bank's liquidity by dividing the banks total loans by its total deposits and expressed as a percentage. If the ratio is too high, it means that banks might not have enough liquidity to cover any unforeseen fund requirements. On the reverse, if the ratio is too low, banks may not be earning as much as they could be.

$$LDR = \frac{Total\ loans}{Total\ deposits} \tag{2.5}$$

The adequacy of bank capital levels is constantly debated. The issue of bank capital adequacy has long pitted regulators against bank management. Regulators, concerned mainly with the safety of banks, the viability of the insurance fund, and the stability of financial markets, prefer more capital. Bankers, on the other hand, generally prefer to operate with less capital. Capital is defined as funds subscribed and paid by stockholders representing ownership in a bank. Regulatory capital also includes debt components and lost reserves.

The common method used to measure the adequacy level of a bank's capital is the capital adequacy ratio (CAR). CAR measures the amount of a bank's core capital expressed as a percentage of its assets weighted credit exposures. CAR determines the bank's capacity to meet the time liabilities and other risks such as credit risk, operational risk, etc. In the simplest formulation, a bank's capital is the "cushion" for potential losses, and protects the bank's depositors and other lenders. Banking regulators in most countries define and monitor CAR to protect depositors, thereby maintaining confidence in the banking system. CAR is similar to leverage and in the most basic formulation it is comparable to the inverse of debt-to-equity leverage formulations. Unlike traditional leverage, however, CAR recognizes that assets can have different levels of risk.

$$CAR = \frac{Tier\ 1\ capital + Tier\ 2\ capital}{Risk\ weighted\ assets} \tag{2.6}$$

This research is aimed to test the six hyphotesis as follows:
1. ROA
   H_{01}: mean of ROA in the period of 2000-2004 is equal to the mean of ROA in the period of 2005-2009. $(H_{01}: \mu_{2000-2004} = \mu_{2005-2009})$
   H_{11}: mean of ROA in the period of 2000-2004 is not equal to the mean of ROA in the period of 2005-2009. $(H_{11}: \mu_{2000-2004} \neq \mu_{2005-2009})$
2. ROE
   H_{02}: mean of ROE in the period of 2000-2004 is equal to the mean of ROE in the period of 2005-2009.
   H_{12}: mean of ROE in the period of 2000-2004 is not equal to the mean of ROE in the period of 2005-2009.
3. NIM
   H_{03}: mean of NIM in the period of 2000-2004 is equal to the mean of NIM in the period of 2005-2009.
   H_{13}: mean of NIM in the period of 2000-2004 is not equal to the mean of NIM in the period of 2005-2009.

4. CAR

   H_{04}: mean of CAR in the period of 2000-2004 is equal to the mean of CAR in the period of 2005-2009.

   H_{14}: mean of CAR in the period of 2000-2004 is not equal to the mean of CAR in the period of 2005-2009.

5. LDR

   H_{05}: mean of LDR in the period of 2000-2004 is equal to the mean of LDR in the period of 2005-2009.

   H_{15}: mean of LDR in the period of 2000-2004 is not equal to the mean of LDR in the period of 2005-2009.

6. NPL

   H_{06}: mean of NPL in the period of 2000-2004 is equal to the mean of NPL in the period of 2005-2009.

   H_{16}: mean of NPL in the period of 2000-2004 is not equal to the mean of NPL in the period of 2005-2009.

3. RESEARCH METHOD

The main data used in this research is the performance of nine biggest banks in Indonesia. They are Bank Mandiri, Bank Rakyat Indonesia (BRI), Bank Negara Indonesia (BNI), Bank Tabungan Negara (BTN), Bank Central Asia (BCA), Bank CIMB Niaga, Bank Danamon Indonesia, Bank Panin, and Bank Internasional Indonesia (BII). The first four banks are categorized as the state-owned enterprise banks, while the other five banks are the private banks.

Six performance indicators which are identified from these nine banks include ROA, ROE, NIM, CAR, LDR, and NPL. The CAR used is credit and market risk CAR, while the net NPL is used to represents NPL. All data are collected in the period of 2000-2009 from Bank Indonesia and InfoBank magazine. In addition, the data on total assets of the nine banks in 2010 is also gathered from banking statistics.

This research utilizes test for descriptive statistics to analyze the secondary data. Type of descriptive statistics used is a mean equality test. This test is based on a single-factor, between-subjects, analysis of variance (ANOVA). The basic idea is that if the subgroups have the same mean, then the variability between the sample means (between groups) should be the same as the variability within any subgroup (within group).

Denote the i-th observation in group g as x_g, where i = 1, 2, ..., n_g for groups g = 1, 2, ... G. The between and within sums of squares are defined as

$$SS_B = \sum_{g=1}^{G} n_g \left(\bar{x}_g - \bar{x} \right)^2 \tag{3.1}$$

$$SS_W = \sum_{g=1}^{G} \sum_{i=1}^{n_g} \left(x_{i,g} - \bar{x}_g \right)^2 \tag{3.2}$$

where $\bar{x}_g$ is the sample mean within group g and $\bar{x}$ is the overall sample mean. The F-statistic for the equality of means is computed as

$$F = \frac{SS_B(G-1)}{SS_W(N-G)} \tag{3.3}$$

Where N is the total number of observations. The F-statistic has a F-distribution with G-1 numerator degrees of freedom and N-G denominator degrees of freedom under the null hypothesis of independent and identical normal distribution, with equal means and variances in each subgroup.

For tests with only two subgroups (G=2), like in this research, the t-statistic is also reported, which is simply the square root of the F-statistic with one numerator degree of freedom. The analysis of variance table shows the decomposition of the total sum of squares into the between and within sum of squares, where

$$Mean\ Sq. = \frac{Sum\ of\ Sq.}{df} \tag{3.4}$$

The F-statistic is the ratio

$$NIM = \frac{Net\ interest\ income}{Average\ earning\ assets}$$

(3.5)

4. RESULTS AND DISCUSSION

Every year, Bank Indonesia launches the list of ten biggest banks in Indonesia based on total assets. In 2010, total assets of the ten banks were Rp 1,948.23 trillion or equal to USD 207.26 billion. This amount is about 64.75 percent of total assets of banking industry in Indonesia. The total assets owned by each bank are presented in Table 1 below. By considering data inconsistency, Bank Permata is not involved further in analyzing the impact of IBA implementation on bank performance.

Table 1. Ten Biggest Banks in Indonesia in 2010

Name of Bank	Rank	Total Assets (Rp Trillion)	Percentage of Banking Industry (%)
Bank Mandiri	1	410.619	13.65
Bank Rakyat Indonesia	2	395.396	13.14
Bank Central Asia	3	323.345	10.75
Bank Negara Indonesia	4	241.169	8.02
Bank CIMB Niaga	5	142.932	4.75
Bank Danamon Indonesia	6	113.861	3.78
Pan Indonesia Bank	7	106.508	3.54
Bank Permata	8	74.040	2.46
Bank Internasional Indonesia	9	72.030	2.39
Bank Tabungan Negara	10	68.334	2.27
	Total	1,948.23	64.75

Source: Bank Indonesia.

In 2000-2004, the average ROA of Bank Mandiri was 2.12 percent and decreased to 1.96 percent in the period of 2005-2009. Meanwhile, in the same period, the average ROE was declined from 23.19 percent to 17.15 percent. The average CAR and NPL were also decreased from 26.66 percent to 19.93 percent and from 6.79 percent to 4.97 percent, respectively. The other two indicators had different results. The average NIM have improved from 3.25 percent in 2000-2004 to 4.82 in 2005-2009 and the average LDR have increased from 35.91 percent to 55.52 percent. The complete average performance of the nine biggest banks in Indonesia is presented in Table 2.

Table 2. The Average Performance of 9 Biggest Banks in Indonesia in 2000-2004 and 2005-2009

No.	Name of Bank	Average (Year)	ROA (%)	ROE (%)	NIM (%)	CAR (%)	LDR (%)	NPL (%)
1.	Bank Mandiri	2000-2004	2.12	23.19	3.25	26.66	35.91	6.79
		2005-2009	1.96	17.15	4.82	19.93	55.52	4.97
2.	Bank Rakyat Indonesia	2000-2004	2.75	32.74	8.33	15.47	60.86	3.62
		2005-2009	4.38	34.62	10.70	15.27	75.99	1.20
3.	Bank Negara Indonesia	2000-2004	1.37	24.39	3.32	15.74	41.93	10.21
		2005-2009	1.43	13.73	5.61	14.86	59.30	4.30
4.	Bank Tabungan Negara	2000-2004	-0.32	-18.22	2.06	11.80	54.23	2.72
		2005-2009	1.73	23.11	5.12	18.82	91.64	2.23
5.	Bank Central Asia	2000-2004	2.80	35.80	4.80	30.11	20.43	2.32
		2005-2009	3.48	29.19	6.45	18.79	46.03	0.30
6.	Bank CIMB Niaga	2000-2004	1.24	24.27	2.52	14.50	63.50	9.23
		2005-2009	2.02	16.55	5.80	16.02	86.85	2.24
7.	Bank Danamon Indonesia	2000-2004	2.31	23.81	4.54	34.25	45.39	4.96
		2005-2009	2.56	17.12	7.82	18.65	84.38	1.46
8.	Pan Bank Indonesia	2000-2004	1.91	9.98	5.34	38.49	80.24	12.36
		2005-2009	2.34	12.59	4.89	24.37	77.25	2.25
9.	Bank Internasional Indonesia	2000-2004	-1.05	-146.70	2.02	7.40	39.55	18.89
		2005-2009	1.12	12.63	5.23	19.88	70.04	2.30

According to the test for equality of means between two series, the increased of Bank Mandiri's average NIM between 2000-2004 and 2005-2009 was significant. The similar result also found for the average LDR as showed in Appendix 1 and Appendix 3. This means that the implementation of API was only able to improve two of six performance indicators of Bank Mandiri.

The different results were found in the case of Bank Rakyat Indonesia. Five of six average performance indicators have improved in the period of 2005-2009 if compared to the period of 2000-2004. CAR and LDR was the two indicators which were decreased in the similar period. However, from the test for equality of means between series (Appendix 3 and Appendix 4), it was found that LDR and NPL were the two indicators which have significant improvement. Thus, the implementation of API has only limited positive impact to the performance of Bank Rakyat Indonesia also.

As for Bank Negara Indonesia, three average performances have improved. They were ROA, NIM, and LDR. On the reverse, ROE, CAR, and NPL have decreased. From the three improved indicators, only two of them were found significant (Appendix 5 and Appendix 6), i.e. NIM and LDR. BNI's average NIM was increased from 3.32 percent in 2000-2004 to 5.61 percent in 2005-2009 and the average LDR was increased from 41.93 percent to 59.30 percent.

All of Bank Tabungan Negara's average performance indicators were improved in the period of 2005-2009 compared to 2000-2004. ROA, ROE, NIM, CAR, and LDR were increased, while NPL was decreased. But, as presented in Appendix 7, Appendix 8, and Appendix 9, only three average performance indicators were significant. They were NIM, CAR, and LDR. These empirical results revealed that the contribution of API implementation was also limited to the performance improvement of Bank Negara Indonesia and Bank Tabungan Negara.

As a private bank, four of six performance indicators of Bank Central Asia have improved after the implementation of API. They were ROA, NIM, LDR, and NPL. On the contrary, the average ROE and CAR were decreased in 2005-2009 compared to the period of 2000-2004. The test for equality of means between series in Appendix 10, Appendix 11, Appendix 12, and Appendix 13 shows that the improvement of four average performance indicators were statistically significant although relatively weak for ROA. These findings indicated that the implementation of API has had better impact on the private bank compared to the state-owned banks.

Table 3. Recapitulation of Test for Equality of Means Between Series

No.	Name of Bank	Test Results					
		ROA	ROE	NIM	CAR	LDR	NPL
1.	Bank Mandiri	ns	ns	***	**	***	ns
2.	Bank Rakyat Indonesia	ns	ns	ns	ns	**	***
3.	Bank Negara Indonesia	ns	ns	**	ns	***	ns
4.	Bank Tabungan Negara	ns	ns	**	***	***	ns
5.	Bank Central Asia	*	ns	**	***	***	**
6.	Bank CIMB Niaga	ns	ns	**	ns	**	ns
7.	Bank Danamon Indonesia	ns	ns	***	**	***	**
8.	Pan Indonesia Bank	ns	ns	ns	***	ns	ns
9.	Bank Internasional Indonesia	ns	ns	**	ns	**	ns

Notes:

ns = not significant: probability value > 0.1
*** = significant at 1% level: probability value < 0.01
** = significant at 5% level: 0.01 < probability value < 0.05
* = significant at 10% level: 0.05 < probability value < 0.1

In the period of 2000-2004, the average ROA of Bank CIMB Niaga was 1.24 percent. This indicator has improved into 2.02 percent in 2005-2009 although this improvement was not significant statistically. The other performance indicators which were also improved include NIM, CAR, LDR, and NPL. However, only NIM (Appendix 14) and LDR (Appendix 15) were found significant.

Four of six performance indicators were improved in the case of Bank Danamon Indonesia, i.e. ROA, NIM, LDR, and NPL. Unfortunately, not all of them were statistically significant. For instance, the average NPL has decreased from 4.96 percent in 2000-2004 to only 1.46 percent in the period of 2005-2009. As showed in the Appendix 18, this decreased was statistically significant. On the reverse, the increased of average ROA was not significant statistically.

The last two private banks involved in this research were Pan Indonesia Bank and Bank Internasional Indonesia. Three performance indicators of Pan Indonesia Bank were improved in the period of 2005-2009

compared to 2000-2004. They were ROA, ROE, and LDR. Meanwhile, NIM, CAR, and LDR were declined in the similar period. However, all improved indicators were found not significant. This means that the implementation of API has no impact on the performance improvement of Pan Indonesia Bank.

In the case of Bank Internasional Indonesia, all performance indicators were improved after the implementation of API. For example, the average NIM has increased from 2.02 percent in 2000-2004 to 5.23 percent in the period of 2005-2009. However, only the improvement of NIM and LDR which found significant statistically as presented in Appendix 19 and Appendix 20.

5. CONCLUSION

This research found that, in general, the implementation of API was not optimum in improving the performance of nine biggest banks in Indonesia neither state-owned banks nor private banks. The average ROA of all banks was not improved in the period of 2005-2009 compared to 2000-2004, except for Bank Central Asia with only weak significant statistically. The worst case was found in the performance of ROE. None of bank's ROE were improved after the implementation of API.

There were various influenced of API implementation on the improvement of NIM, CAR, LDR, and NPL. The best impact of API was found on the improvement of LDR. Except for Pan Indonesia Bank, the average LDR of eight banks was increased significantly in the period of 2005-2009 compared to 2000-2004. Meanwhile, the improvement of NIM was not significant only for Bank Rakyat Indonesia and Pan Indonesia Bank. As for CAR, there were four banks without significant improvement of CAR. They were Bank Rakyat Indonesia, Bank Negara Indonesia, Bank CIMB Niaga, and Bank Internasional Indonesia. Finally, there were only three banks with the significant improvement of NPL after the implementation of API, i.e. Bank Rakyat Indonesia, Bank Central Asia, and Bank Danamon Indonesia.

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FLUKTUASI HARGA MINYAK DUNIA DAN PENCAPAIAN SUSTAINABILITAS FISKAL INDONESIA

Sri Suharsih
FE UPN "Veteran" Yogyakarta
Asiheko@yahoo.com

Abstract

This research aims to measure the fiscal risks and contingent liabilities caused by increasing world oil prices in terms of fiscal sustainability. Analysis was performed by using the Balance Sheet Approach (BSA) and the mean variance analysis to calculate the fiscal risk. Furthermore, in relation to fiscal sustainability it was examined whether the fiscal risks that occur was through structural changes or not during the years 1977-2008 with the fluctuating oil price conditions. It was analyzed by using stationary test application by inserting a structural break elements, developed by Zivot Andrews (ZA test).

The results show that increases in oil prices caused the fiscal risk in Indonesia, this can be seen from the calculation of networth with BSA and the mean variance analysis showed negative results, especially when Indonesia became a net oil importing country and increase oil price was very high approaching U.S. $ 100 / barrel. ZA test results showed that there had been structural changes in risk variables, such conditions occur when the world oil price has increased to nearly 100 U.S. dollars / barrel. This shows that the increase in oil prices could disrupt the achievement of fiscal sustainability.

Keywords: Fiscal Risk, Zivot Andrews (ZA) test, Balance Sheet Approach (BSA)

1. PENDAHULUAN

1.1. Latar Belakang

Hampir semua negara di dunia menghadapi kerentanan fiskal. Menurut Hemming (2000), kerentanan fiskal adalah ketika pemerintah gagal dalam melakukan koordinasi antar kebijakan fiskal secara keseluruhan. Salah satu indikator kerentanan fiskal akibat kegagalan koordinasi pemerintah adalah adanya risiko dan ketidakpastian dalam pelaksanaan kebijakan fiskal. Ketidakpastian dalam pelaksanaan anggaran mengarah pada terjadinya risiko fiskal dan akan menyebabkan terjadinya kerentanan fiskal. Krisis ekonomi global yang terjadi pada tahun 1997 telah mengakibatkan terjadinya risiko fiskal yang pada akhirnya menyebabkan kerentanan fiskal di negara-negara ASEAN. Krisis ekonomi yang disebabkan oleh besarnya pinjaman yang dilakukan perbankan, overvalue nilai tukar, dan lemahnya birokrasi, menyebabkan memburuknya kondisi fiskal negara-negara tersebut melalui bertambahnya defisit primer, naiknya utang negara, menurunnya rasio pajak, dan munculnya kewajiban implisit (Makin, 2002: 2).

Risiko fiskal yang dihadapi oleh beberapa negara tersebut disebabkan karena perhatian pemerintah terhadap kondisi fiskalnya lebih terfokus pada isu-isu seputar penerimaan dan pengeluaran yang secara eksplisit tercantum dalam pos-pos anggaran pemerintah. Pemerintah sebagai pelaku kebijakan fiskal seharusnya juga memperhatikan dan mempertimbangkan berbagai kegiatan dan kemungkinan yang bisa menimbulkan kewajiban kontingensi (contingent liabilities). Adanya kewajiban kontingensi tersebut dapat menghambat kinerja fiskal yang pada gilirannya akan menghambat pertumbuhan ekonomi suatu negara. Isu mengenai adanya kewajiban kontingensi merupakan bagian integral dari isu-isu risiko fiskal yang dihadapi oleh pemerintah suatu negara secara menyeluruh. Risiko fiskal tersebut akan menyebabkan munculnya berbagai kewajiban yang menjadi beban bagi otoritas fiskal suatu negara di masa yang akan datang. Brixi dan Moody (2002) telah melakukan identifikasi terhadap dua sumber

utama penyebab terjadinya risiko fiskal yang dihadapi oleh sebagian besar negara yaitu, kewajiban langsung (direct liabilities), dan kewajiban kontingensi (contingent liabilities), yang terdiri dari kewajiban eksplisit (explicit liabilities) dan kewajiban implisit (implicit liabilities). Kewajiban langsung adalah kewajiban-kewajiban fiskal yang dapat diprediksikan sebelumnya. Kewajiban-kewajiban tersebut merupakan subyek utama analisis kebijakan fiskal konvensional, misalnya pembayaran utang pemerintah, dan semua pengeluaran rutin seperti gaji PNS, pensiunan, dan jaminan sosial. Kewajiban kontingensi eksplisit merupakan kewajiban pemerintah yang diatur dalam peraturan perundang-undangan yang berlaku, seperti jaminan pinjaman, investasi infrastruktur, lembaga keuangan, pembangunan pemerintah daerah, jaminan pensiun, dan skim-skim asuransi pemerintah daerah (Ulfa dan Zulfadin, 2004: 21-22). Kewajiban kontingensi implisit tergantung pada ada tidaknya suatu kejadian tak terduga yang akan menjadi sumber kewajiban pemerintah di masa yang akan datang, misalnya menutup kerugian atau kewajiban bank sentral, pemerintah daerah, dan BUMN. Lebih lanjut, Brixie dan Moody (2002), menyatakan bahwa secara umum ada tiga sumber utama kewajiban kontingensi yaitu (1) skim-skim asuransi pemerintah untuk sektor perbankan, (2) penyediaan dana talangan untuk pemerintah daerah dalam rangka pelaksanaan desentralisasi fiskal, dan (3) jaminan dari pemerintah bagi sektor swasta yang melaksanakan pembangunan infrastruktur.

Brixie dan Gooptu (2002) telah melakukan identifikasi risiko yang dihadapi oleh Indonesia. Hasil identifikasi menunjukkan bahwa risiko fiskal bersumber dari 10 jenis kewajiban kontingensi. Sumber risiko tersebut meliputi kewajiban eksplisit berupa blanket guarantee, simpanan bank, jaminan atas klaim bank, payung pinjaman atas pinjaman non utang negara, serta jaminan perdagangan dan selisih kurs. Risiko fiskal juga bersumber dari kewajiban implisit yaitu kerugian perusahaan jasa publik, dukungan kepada perusahaan-perusahaan, subsidi yang terkait dengan harga beras dan bahan bakar Minyak (BBM), rekapitalisasi bank, kemungkinan rekapitalisasi lanjutan Bank Indonesia, dan kemungkinan pengalihan kewajiban pemerintah pusat ke daerah.

Salah satu risiko yang dihadapi oleh pemerintah adalah risiko subsidi energi yang disebabkan oleh berfluktuasinya harga minyak dunia. Dewasa ini, tingginya harga minyak dunia menjadi fokus pembicaraan, data harga Organization of Petroleum Exporting Countries (OPEC) dan Energy International Agency (EIA) menunjukkan bahwa harga minyak dunia mengalami fluktuasi. Kenaikan harga minyak dapat dibagi dalam beberapa tahap. Pertama, tahun 1973 karena terjadinya embargo minyak pada perang Yom Kippur. Kedua, periode tahun 1977-1980 karena adanya perang Irak. Ketiga, tahun 1991 karena adanya perang teluk Persia. Keempat, terjadinya kenaikan harga minyak yang sangat drastis mulai tahun 1999 dan tahun 2003 yang berada pada tingkat US$25, dan terus mengalami kenaikan tertinggi sampai tahun 2008.

Menurut pengamat dari EIA, titik balik minyak dunia terjadi pada tahun 1999 karena setelah tahun 1999 produksi minyak akan turun secara bertahap. Hal tersebut sesuai dengan pertumbuhan penduduk dan meningkatnya industri dunia. Konsumsi minyak dunia akan meningkat sebesar 10 persen per tahun, diperkirakan pada tahun 2020 konsumsi minyak dunia akan mencapai 100 juta barrel perhari. Kenaikan minyak yang tajam sejak tahun 2003 disebabkan karena adanya kenaikan permintaan minyak di dunia maupun adanya gangguan supply minyak. Jika dilihat pada awal tahun 2008 harga minyak telah mencapai US $119.90/barrel.

Kenaikan harga minyak mempunyai pengaruh dua sisi terhadap anggaran pemerintah, di satu sisi mempengaruhi penerimaan negara yang berupa penerimaan minyak bukan pajak dan penerimaan pajak minyak. Di sisi lain, kenaikan harga minyak akan mempengaruhi pengeluaran negara yang berupa subsidi minyak dan biaya produksi minyak (cost recovery). Ada dua risiko fiskal yang dihadapi pemerintah Indonesia karena kenaikan harga minyak dunia. Pertama, risiko yang muncul dari subsidi BBM. Kenaikan harga minyak yang diikuti oleh meningkatnya permintaan BBM dalam negeri akan meningkatkan risiko pemerintah dalam pemberian subsidi BBM. Kedua, risiko fiskal yang muncul dari produksi minyak. Kenaikan harga minyak yang tidak diimbangi dengan peningkatan penawaran minyak olahan dalam negeri akan menyebabkan defisit anggaran, yang selanjutnya akan menyebabkan terjadinya risiko fiskal.

1.2. Permasalahan

Berdasarkan latar belakang masalah, ada dua hal yang mendasari perumusan masalah penelitian sebagai berikut :
1. Indonesia mempunyai potensi menghadapi risiko fiskal, menurut Bank Dunia potensi risiko fiskal di Indonesia yang disebabkan oleh 10 jenis kewajiban kontingensi baik kewajiban eksplisit maupun kewajiban implisit.
2. Adanya fluktuasi harga minyak dunia dan status Indonesia sebagai Negara pengimpor minyak netto sejak tahun 2004 akan berpengaruh terhadap kondisi fiskal di Indonesia. Berfluktuasinya harga minyak dan posisi Indonesia sebagai Negara pengimpor minyak netto tersebut dapat menyebabkan terjadinya risiko fiskal. Penelitian ini akan difokuskan pada analisis makro mengenai risiko fiskal dan kewajiban kontingensi yang disebabkan adanya fluktuasi harga minyak dunia dan pengaruhnya terhadap pencapaian sustainabilitas fiskal.

Berdasarkan permasalahan tersebut, maka rumusan permasalahan dalam penelitian ini adalah sebagai berikut :
Berapa besarnya risiko fiskal termasuk kewajiban kontingensi Indonesia yang disebabkan oleh fluktuasi harga minyak dunia dan bagaimana pengaruhnya terhadap pencapaian sustainabilitas fiskal?

2. TINJAUAN PUSTAKA

Perubahan di semua aspek kehidupan selalu terjadi di setiap tahun, bulan, minggu, hari, jam, menit, dan bahkan detik. Perubahan-perubahan tersebut menciptakan keragaman (variance) dan ketidakpastian (uncertainty). Setiap kejadian dalam kehidupan tersebut tidak akan pernah mendapatkan hal yang pasti tetapi hanya kesimpulan yang bersifat probabilistik, sehingga diperlukan ilmu untuk memperkecil error dalam menghadapi ketidakpastian. Dalam sejarahnya, perkembangan ilmu ketidakpastian sudah terjadi sejak disampaikannya konsep mengenai peluang dan probabilitas yang pada awalnya diinspirasi oleh masalah perjudian.

Ilmu ekonomi merupakan ilmu tentang pilihan, secara umum pelaku kegiatan ekonomi menghadapi pilihan-pilihan yang mengandung risiko dan ketidakpastian. Hampir semua kegiatan ekonomi dihadapkan kepada probabilitas terhadap risiko dan ketidakpastian. Misalkan permintaan atau penawaran input, keduanya selalu berfluktuasi sepanjang waktu dan fluktuasi tersebut tentu saja menimbulkan risiko dan ketidakpastian.

Pembahasan mengenai ketidakpastian dalam ekonomi disampaikan oleh Frank Knight (1922) yang menggambarkan suatu hubungan antara risiko dengan ketidakpastian. Knight menyatakan bahwa suatu keadaan dinyatakan tidak berisiko jika kita dapat menentukan probabilitas obyektif secara pasti terhadap hasil atau kejadian. Sementara itu, suatu kejadian dianggap mengandung ketidakpastian jika tidak ada probabilitas obyektif yang dapat ditentukan. Sejak Knight menulis buku mengenai ketidakpastian, telah berkembang teori probabilitas yang di dasarkan pada keyakinan-keyakinan obyektif sehingga keyakinan konsumen dan produsen dapat diinterpretasikan dengan menggunakan probabilitas (Arsyad, 2008: 79). Teori Knight ini selanjutnya diikuti oleh penulis lain dibidang ekonomi ketidakpastian, misalnya Von Neuman dan Oscar Morgenstern dengan teori Expected Utility (1944), Varian (1978) dan penulis lain mengenai Game Theory misalnya Nash (1950), Brander dan Spencer (1983), serta Ordeshoock (1986).

2.1. Risiko dan Kondisi Ketidakpastian

Risiko mempunyai beberapa definisi, sebagai contoh risiko dapat didefinisikan sebagai kejadian yang merugikan. Definisi lain yang sering dipakai dalam analisis investasi, adalah kemungkinan hasil yang diperoleh menyimpang dari yang diharapkan. Alat statistik yang sering digunakan untuk mengukur penyimpangan adalah standar deviasi, sehingga standar deviasi dapat digunakan untuk mengukur risiko. Risiko muncul disebabkan

adanya kondisi ketidakpastian, ketidakpastian tersebut dapat dilihat dari fluktuasi yang tinggi, semakin tinggi fluktuasi, semakin besar tingkat ketidakpastiannya (Hanafi, 2006: 1)

Dalam konteks ilmu keuangan (finance) dan ilmu ekonomi (economics) risiko didefinisikan sebagai volatilitas atau standar deviasi dari net cash inflow suatu perusahaan atau unit usaha (Haffernan, 1996). Menurut Jorion (2000) menyatakan bahwa risiko adalah terjadinya guncangan yang tidak diharapkan dalam mencapai suatu tujuan tertentu. Risiko lebih sering digunakan dalam masalah manajemen keuangan. Dalam manajemen keuangan Jorion (2000) menjelaskan adanya 5 risiko yang dihadapi oleh suatu perusahaan. Kelima risiko yang dihadapi oleh perusahaan tersebut adalah : risiko pasar, risiko kredit, risiko likuiditas, risiko operasional, dan risiko hukum (Hanafi, 2006: 9).

Ketidakpastian tidak hanya dihadapi oleh entitas bisnis seperti perusahaan, tetapi bisa juga dihadapi oleh suatu negara. Seperti layaknya entitas bisnis lainnya, negara dalam menjalankan fungsinya dapat menghadapi berbagai risiko dan ketidakpastian baik risiko pasar, risiko kredit, risiko likuiditas, risiko operasional, maupun risiko hukum. Krisis ekonomi tahun 1997/1998 yang penyebab utamanya adalah ketidakpastian pasar telah menyebabkan terhambatnya kinerja fiskal pada hampir semua negara, khususnya negara berkembang seperti Indonesia. Kenyataan tersebut menunjukkan bahwa risiko dan ketidakpastian sangat mempengaruhi pelaksanaan kebijakan fiskal suatu negara. Menghadapi kegagalan pelaksanaan kebijakan fiskal akibat terjadinya krisis ekonomi yang disebabkan oleh ketidakpastian pasar tersebut, menyebabkan beberapa peneliti dari Bank Dunia yang dipelopori oleh Brixie dan Shick (2002) memasukkan risiko dan ketidakpastian dalam analisis kebijakan fiskal khususnya anggaran. Sehingga dalam perkembangannya teori mengenai risiko dan ketidakpastian digunakan dalam analisis fiskal (anggaran negara).

Brixie dan Shick (2002: 2) mendefinisikan risiko fiskal sebagai suatu sumber tekanan atau beban keuangan yang akan dihadapi pemerintah pada masa yang akan datang, yang kemudian risiko fiskal ini diasosiasikan sebagai suatu kewajiban kontingensi pemerintah (government contingent liabilities). Ada tiga faktor penyebab munculnya risiko fiskal dan ketidakpastian anggaran negara. Pertama, terintegrasinya pasar global yang akan memperbesar volume dan volatilitas arus modal Kedua, adanya privatisasi fungsi pemerintahan yang diikuti adanya tanggung jawab pemerintah kepada masyarakat baik secara eksplisit maupun implisit. Dalam hal ini pemerintah akan bertanggung jawab mengambil alih kejadian yang tidak pasti, misalnya pelaksanaan program Public Service Obligation (PSO). Program tersebut akan menciptakan off-budget dan menyebabkan beban laten fiskal dan membebani anggaran negara pada masa yang akan datang. Ketiga, adanya tujuan pemerintah untuk mencapai keseimbangan neraca atau adanya target defisit tertentu cenderung menimbulkan terjadinya off-budget yang akan mengakibatkan terjadinya beban laten fiskal. Kondisi tersebut akan menyebabkan pemerintah gagal dalam mencapai tujuan sustainabilitas fiskal.

2.2. Manajemen Risiko Fiskal

Pemerintah seperti layaknya entitas bisnis tidak mungkin dapat menghindarkan diri dari risiko dan ketidakpastian yang terjadi di pasar. Namun demikian, pemerintah dapat melakukan pengelolaan terhadap risiko fiskal dengan menggunakan berbagai pendekatan (Brixi dan Mody 2002: 344). Pendekatan pertama adalah pemerintah mengidentifikasi semua risiko yang dihadapi, volume dan biaya yang mungkin dihadapi, dan kemungkinan dari berbagai komitmen yang akan muncul. Pendekatan ini sejalan dengan kebijakan mengenai transparansi fiskal. Pendekatan kedua adalah berkaitan dengan keputusan pemerintah untuk memasukkan unsur risiko dalam proses perencanaan anggaran negara, dimana pemerintah melakukan perbandingan terhadap pengeluaran langsung dan pengeluaran kontingensi secara proporsional dan tidak bias dalam satu atau beberapa jenis transaksi yang dilakukan. Pendekatan ketiga, pemerintah melakukan pengelolaan risiko dengan membatasi kemungkinan terjadinya risiko sebelum ada komitmen atau realisasi transaksi oleh pemerintah. Pendekatan ini akan menghasilkan kriteria untuk menentukan apakah pemerintah akan memberi jaminan atau termasuk pada komitmen kontingensi. Pemerintah akan memperhitungkan tingkat risiko berdasarkan kriteria ini, dan menolak penjaminan apabila tidak sesuai dengan kriteria standar pemerintah. Keempat adalah pemerintah

dapat ikut serta dalam mekanisme pasar dan mengubah sebagian atau keseluruhan risiko pada entitas bisnis. Tujuan dari beberapa pendekatan ini adalah untuk menstimulasi pemikiran inovatif bagaimana pemerintah dapat lebih tanggap terhadap risiko fiskal yang akan terjadi pada masa yang akan datang.

Palackova (1998) memberikan pernyataan mengenai pengelolaan risiko fiskal yang dilakukan pemerintah suatu negara. Pertama, pemerintah perlu untuk menginternalisasi dan mengungkap gambaran fiskal secara menyeluruh termasuk gambaran mengenai risiko fiskal. Kedua, perlunya menganalisis program-program pemerintah dan janji pemerintah, dimana analisis lebih difokuskan pada perbandingan biaya risiko yang dihadapi dari setiap program dan menentukan kemampuan terhadap biaya risiko yang dapat ditanggung pemerintah. Ketiga, menjalankan fungsi anggaran fiskal dan melakukan manajemen utang secara hati-hati (prudent). Keempat, melakukan identifikasi, klasifikasi, dan menganalisis risiko fiskal dalam portofolio tunggal. Kelima, melakukan pengawasan, dan mengungkap dan mempublikasi risiko yang terjadi baik di sektor publik maupun di sektor swasta.

Brixi dan Mody (2002: 23) memaparkan tiga kerangka untuk mengurangi celah risiko (risk exposure) pemerintah, yaitu: melakukan upaya sistematis (sistematic measures); pengendalian terhadap program-program yang dilakukan; dan solusi pada sektor swasta. Dengan adanya kerangka pengurangan celah risiko fiskal tersebut diharapkan pemerintah dapat mengurangi terjadinya risiko fiskal.

Dilihat dari kemungkinan terjadinya risiko yang muncul dalam kebijakan pemberian subsidi di Indonesia, risiko tersebut dapat digolongkan menjadi dua hal. Pertama, dalam pandangan Jorion (2002) dalam konteks manajemen risiko, harga minyak menghadapi risiko harga (market risk). Kedua, menurut Brixi (1998) dalam konteks risiko fiskal, harga minyak akan menyebabkan terjadinya risiko eksplisit langsung saat subsidi BBM, subsidi listrik, dan pemberian Dana Bagi Hasil (DBH) migas sudah dimasukkan dalam anggaran negara dan juga risiko implisit ketika pembiayaan subsidi maupun pemberian DBH migas melebihi anggaran yang telah direncanakan.

2.3. Sustainabilitas Fiskal

Tujuan manajemen risiko fiskal adalah mencapai sustainabilitas fiskal. Konsep sustainabilitas fiskal berkaitan dengan solvabilitas hutang. Konsep lain mengatakan bahwa sustainabilitas fiskal berhubungan dengan kemampuan pemerintah untuk melakukan kebijakan fiskal secara solvabel dan tidak terjadi risiko.

Persamaan dasar dan analisis sustainabilitas fiskal adalah government budged contraint yang diformulasikan sebagai berikut:

$$B_t - B_{t-1} = I_t - X_t - (M_t - M_{t-1}) \qquad (2.1)$$

Keterangan

B_t : utang tahun t
I_t : bunga pengembalian
X_t : keseimbangan primer
M_t : base money

$$b_t = 1 + r(b_t - 1) - x_t - \sigma_t \qquad (2.2)$$

Dimana $b_t = B_t / P_t =$ kapital riil akhir tahun

x_t = surplus primer

$\tau_t = (M_t - M_{t-1}) / P_t$ = nilai penerimaan seignorage riil

Persamaan (2.2) ditulis kembali

$$b_{t-1} = (1+r)^{-1} b_t + (1+r)^{-1} (x_t + \sigma_t) \tag{2.3}$$

Persamaan (2.3) dapat ditulis untuk periode t

$$b_t = (1+r)^{-1} b_t + 1 + (1+r)^{-1} (x_{t+1} + \tau_{t+1}) \tag{2.4}$$

Substitusikan b_t pada persamaan (2.3)

$$b_{t-1} = (1+r)^{-2} b_t + 1 + (1+r)^{-1} (x_t + r)^{-1} (x_t + \tau_t) + (1+r)^{-2} (x_t + 1 + \tau_{t+1}) \tag{2.5}$$

Substitusikan b_{t+1} pada persamaan (2.5)

$$b_{t-1} = (1+r)^{-(i+1)} b_{t+j} + \sum_{i=0}^{j} (1+r)^{-1(i+1)} (x_{t+i} + \tau_{t+i}) \tag{2.6}$$

Persamaan (2.6) menghubungkan jumlah pinjaman pemerintah 2 periode yaitu t-1 dan t+j

$$Lim (1+r)^{-(j+1)} b_t + j = 0$$
$$j \to \infty \tag{2.7}$$

Diperoleh government's life time budget constraint

$$b_{t-1} = \sum_{i=0}^{\infty} (1+r)^{-(i+1)} (x_{t+1} + \tau_{t+1}) \tag{2.8}$$

Y_t merupakan GDP riil, $\overline{b}_t = b_t / Y_t$, $\overline{X}_t = X_t / Y_t$ dan $\overline{\sigma}_t = \sigma_t / Y_t$, persamaan (2.8) dapat ditulis :

$$\overline{b}_{t-1} Y_{t-1} = \sum_{i=0}^{\infty} (1+r)^{-i+1} (\overline{x}_t + 1 + \overline{\sigma}_{t+1}) Y_t + 1$$

Atau

$$\overline{b}_{t-1} = \sum_{i=0}^{\infty} (1+r)^{-i+1} (\overline{x}_t + 1 + \overline{\sigma}_{t+1}) \frac{Y_{t+1}}{Y_{t-1}} \tag{2.9}$$

Kondisi state state (1) GDP riil tumbuh pada tingkat konstan g, sehingga $Y_t / Y_{t-1} = 1 + g$, (2) surplus primer merupakan bagian dari GDP adalah konstan $\overline{x}$, dan (3) seignorage merupakan bagian dari GDP adalah konstan $\overline{\sigma}$, pada kasus (2.9) menjadi:

$$\overline{b}_{t-1} = \sum_{i=0}^{\infty} \left(\frac{1+g}{1+r} \right)^{i+1} (\overline{x} + \overline{\sigma}) \tag{2.10}$$

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Diasumsikan r > g, (10) menjadi

$$\bar{b}_{t-1} = \bar{b} \equiv (\bar{x} + \bar{\sigma}) / \bar{r} \tag{2.11}$$

Dimana r = (r – g) / (1 + g)
Atau dapat ditulis

$$\bar{x} = \bar{r}\ \bar{b}_{t-1} - \bar{\sigma} \tag{2.12}$$

Pada uraian sebelumnya dikatakan bahwa sustainabilitas fiskal merupakan kondisi dimana pemerintah dapat melaksanakan kebijakan fiskal secara solvabel tanpa adanya risiko. Dengan kata lain risiko fiskal sangat erat kaitannya dengan sustainabilitas fiskal, adanya risiko fiskal dan kewajiban kontingensi dapat menghambat kinerja fiskal yang pada akhirnya akan membahayakan tercapainya sustainabilitas fiskal. Menurut Dinh (1990), sustainabilitas fiskal dalam jangka panjang menyangkut solvabilitas fiskal (fiscal solvency). Solvabilitas suatu negara sangat tergantung pada aset dan kewajiban negara, yang secara sederhana dapat di definisikan sebagai net worth = assets - liabilities. Jika net worth menunjukkan nilai negatif maka negara tersebut berada dalam kondisi insolvent. Apabila kondisi solvent atau insolvent suatu negara tersebut diwujudkan dalam intertemporal budged constraint, dapat dirumuskan sebagai berikut :

s* = (r-g) / (1+g) x Bo/Yo

Dimana s* merupakan proporsi keseimbangan primer terhadap PDB, r tingkat suku bunga riil, Bo adalah nilai pinjaman pada awal tahun, dan Yo adalah PDRB nominal. Dari definisi tersebut, suatu negara dapat dikatakan sebagai net debtor (yang dicerminkan melalui Bo/Yo) akan menghadapi dua kemungkinan sebagai berikut :

Jika (r-g) > 0, maka untuk mencapai fiscal solvency dibutuhkan surplus dalam keseimbangan primer sejumlah nilai s*

Jika nilai (r-g) < 0, meskipun suatu negara sudah memiliki stok pinjaman sejumlah Bo/Yo masih dimungkinkan memiliki defisit anggaran tanpa membahayakan fiscal solvency asal defisit tersebut tidak melebihi nilai s*

Dengan demikian, besarnya pinjaman suatu negara, tidak secara langsung menggambarkan sustainabilitas fiskal. Suatu negara dapat mempunyai pinjaman (rasio pinjaman/PDB) rendah namun tetap menghadapi masalah solvabilitas fiskal, apabila prospek perekonomian negara tersebut buruk yang dicerminkan (r-g) > 0. Dan sebaliknya suatu negara memiliki tingkat pinjaman yang relatif tinggi tanpa membahayakan solvabilitas fiskal karena memiliki prospek perekonomian yang cerah yang secara teknis dicerminkan (r-g) < 0.

3. METODE RISET

3.1. Alat Analisis

3.1.1. Metode Balance Sheet Approach (BSA)

Metode BSA difokuskan kepada variabel stok neraca anggaran Negara dan neraca keseimbangan secara agregat (asset dan liabilities). Secara umum pengukuran risiko dengan menggunakan BSA dapat dilakukan dengan melihat tipe kemungkinan risiko (Allen. et.al, 2002 : 15), yaitu risiko yang disebabkan oleh adanya fluktuasi harga minyak. Metode ini menggunakan dasar analisis Assets-Liabilities management yang biasanya di gunakan dalam manajemen keuangan atau manajemen investasi pada ekonomi makro (khususnya analisis fiskal). Secara umum pendekatan ini digunakan untuk mengestimasi neraca pemerintah yang memberikan pengukuran secara lebih luas dari risiko fiskal. Penyusunan neraca ini merupakan framework untuk mengidentifikasi sumber risiko fiskal dan strategi untuk mengatasi risiko tersebut.

Tahap awal analisis dilakukan dengan menghimpun berbagai informasi dan data sekunder untuk menyusun neraca pemerintah secara makro. Tahap selanjutnya adalah melakukan analisis terhadap neraca tersebut. Analisis dapat dilakukan dengan pendekatan sisi ukuran nilai assets dan liabilities (size)

1. Analisis dapat dilakukan dengan konsep stock dimana yang dilihat adalah net worth total asset-liabilities. Apabila networth yang diperoleh negatif, artinya sustainabilitas dapat terpenuhi bila present value dari penerimaan pajak dikurangi pengeluaran dapat menutupi negative net worth tersebut.
2. Selain itu, analisis juga dapat dilakukan dengan konsep flow, dimana sustainabilitas fiskal dapat terpenuhi dengan mempertahankan rasio konstan tertentu antara net worth assets-liabilities terhadap Product Domestic Bruto (PDB).

3.1.2. Aplikasi uji Zivot Andrews **(ZA test)**

Pada metode BSA dengan konsep flow diatas secara teoritis dijelaskan bahwa sustainabilitas fiskal dapat dicapai dengan mempertahankan rasio konstan networth/PDB. Untuk melihat apakah rasio networth/ PDB konstan atau tidak selama tahun pengamatan, dalam penelitian ini akan diaplikasikan pengujian stasioneritas dengan memasukkan jeda struktural (structural break) untuk melihat apakah risiko fiskal konstan atau tidak selama tahun pengamatan. Jika selama kurun waktu 1977-2008 risiko fiskal per PDB tidak terjadi perubahan struktural dapat disimpulkan bahwa rasio networth/ PDB konstan, yang berarti sustainabilitas fiskal bisa dicapai. Model penelitian Zivot-Andrews tentang perubahan struktural terdiri dari tiga bagian yakni:

Shift in Mean (Perubahan Struktural pada Intersep)

$$\Delta Y_t = \hat{\alpha} + \hat{\theta} Y_{t-1} + \hat{\delta} t + \hat{\phi} DU_t(\hat{\lambda}_t) + \hat{\varepsilon}_{1t}$$

Shift in Trend (Perubahan Struktural pada Trend)

$$\Delta Y_t = \hat{\alpha} + \hat{\theta} Y_{t-1} + \hat{\delta} t + \hat{\psi} DT_t(\hat{\lambda}_t) + \hat{\varepsilon}_{2t}$$

Shift in Regime (Perubahan Struktural pada Intersep dan Trend)

$$\Delta Y_t = \hat{\alpha} + \hat{\theta} Y_{t-1} + \hat{\delta} t + \hat{\phi} DU_t + \psi DT_t(\hat{\lambda}_t) + \hat{\varepsilon}_{3t}$$

3.2. Jenis dan Sumber Data

Data yang akan digunakan dalam penelitian ini adalah data sekunder dengan jenis data runtut waktu tahunan periode 1977 - 2008. Penggunaan tahun 1977 sebagai periode awal penelitian dikarenakan pada tahun tersebut merupakan periode awal kebijakan pemberian subsidi BBM tepatnya tahun anggaran 1977/1978, dan penggunaan tahun 2008 disebabkan karen aharga minyak dunia mencapai harga tertinggi pada tahu 2008 (mencapai 146 US $/ barrel). Mengingat adanya perbedaan dalam penghitungan akuntansi negara, dimana dari tahun 1977 sampai tahun 1999 penghitungan tahun anggaran dilakukan mulai dari 1 April dan berakhir sampai 31 Maret. Sementara itu, sejak tahun 2001 diberlakukan mekanisme baru yaitu dimulai 1 Januari dan berakhir tanggal 31 Desember. Penyamaan penghitungan anggaran dilakukan dengan menggunakan interpolasi untuk periode 1977/1978 sampai tahun 1999/2000.

Sumber data diperoleh dari beberapa sumber yang relevan yaitu Nota Keuangan dan APBN yang dikeluarkan Departemen Keuangan, Statistik Ekonomi dan Keuangan Indonesia yang dikeluarkan oleh Bank Indonesia, Ditjen Migas Depkeu, Departemen Sumber Daya Minyak (DESDM) dan International Financial Statistic terbitan International Monetary Fund (IMF). Untuk harga minyak dunia, data diperoleh dari BP Migas, Energy Information Association (EIA) dan Organization of Petroleum Exporter Countries (OPEC).

4. HASIL DAN PEMBAHASAN

Pada bagian ini diuraikan analisis data yang secara umum akan dibagi dalam 2 bagian. Pertama, analisis kualitatif menghitung besarnya risiko fiskal yang disebabkan oleh kenaikan harga minyak dengan menggunakan analisis rerata varian dan BSA. Kedua, dalam kaitan dengan pencapaian sustainabilitas fiskal, hasil perhitungan analisis BSA dan analisis rerata varian dilihat konstan atau tidak selama periode pengamatan dengan menggunakan aplikasi uji stasioneritas Zivot Andrews (ZA test.

4.1. Analisis Risiko Fiskal

Untuk mengetahui besarnya risiko fiskal digunakan analisis rerata varian dan BSA, hasil perhitungan disajikan pada tabel 4.1

Tabel 4.1. Tabel Perhitungan Risiko

Tahun	Rerata varian	Networth		Networth/**GDP riil**	
		BBM	**BBM,listrik,DBH**	**BBM**	**BBM,listrik,DBH**
1977	-51.525	1883.9	1883.9	0.43	0.43
1978	86.25	2112	2112	0.44	0.44
1979	270.95	3562.1	3562.1	0.70	0.70
1980	223.875	5382.3	5382.3	0.97	0.97
1981	-97.6	6626.6	6626.6	1.10	1.10
1982	-20.525	6488.5	6488.5	1.06	1.06
1983	1511.3	7593.9	7593.9	1.19	1.19
1984	34.25	8430.3	8430.3	1.23	1.23
1985	-221.575	9072.8	9072.8	1.29	1.29
1986	-127.075	5264	5264	0.71	0.71
1987	265.85	8318.2	8318.2	1.07	1.07
1988	-38.075	8192.9	8192.9	0.99	0.99
1989	484.3	8712.1	8712.1	0.98	0.98
1990	2186.225	11277	11277	1.19	1.19
1991	1367.225	12523.3	12523.3	1.23	1.23
1992	751.4	11400.2	11400.2	1.05	1.05
1993	1132.9	8167.1	8167.1	0.71	0.71
1994	835.075	9318	9318	0.75	0.75
1995	171.7	11964	11964	0.89	0.89
1996	1062.075	13366.9	13366.9	0.93	0.93

Tahun	Rerata varian	Networth		Networth/**GDP riil**	
		BBM	**BBM,listrik,DBH**	**BBM**	**BBM,listrik,DBH**
1997	7714.75	12449.7	12449.7	0.82	0.82
1998	3258.025	-2778.6	-4708.5	-0.21	-0.36
1999	23471.35	-2876	-6167	-0.22	-0.47
2000	-4162	-2857	-6785	-0.21	-0.49
2001	-12470.3	-9450	-20080	-0.66	-1.39
2002	784.7	16486	6600	1.10	0.44
2003	-390	12969	3669	0.82	0.23
2004	1827.1	-5136.1	-12236.1	-0.31	-0.74
2005	1765.3	-63714	-77314.3	-3.64	-4.42
2006	9936	45937.7	-1197.3	2.49	-0.06
2007	6738.2	20103.7	-28796.3	1.02	-1.47
2008	7148.4	2500	-86350	0.12	-4.15

Sumber : Hasil perhitungan

Dari tabel 4.1. dapat dilihat hasil perhitungan risiko baik dengan menggunakan analisis rerata varian maupun BSA. Hasil keduanya menunjukkan kesimpulan yang sama yaitu pada beberapa periode tahun pengamatan mempunyai nilai rerata varian dan nilai networth yang negatif, hal ini menunjukkan bahwa adanya kenaikan harga minyak menyebabkan terjadinya risiko fiskal pada pos-pos APBN yang berkaitan langsung dengan penerimaan dan pengeluaran minyak yaitu pos penerimaan migas, subsidi BBM, subsidi listrik, dan Dana Bagi Hasil. Hasil perhitungan rerata varian dan networth yang negatif terutama terjadi paska krisis moneter tahun 1997 dan paska krisis energi tahun 1999. Keadaan tersebut sejalan dengan kondisi empiris sejarah perminyakan dunia, dimana tahun 1999 merupakan salah satu periode (periode ke 4) tahap terjadinya kenaikan harga minyak yang signifikan. Tahap kenaikan minyak yang signifikan sebelumnya terjadi pada tahun 1973, pada tahun 1973 harga minyak mengalami kenaikan karena adanya perang Yom Kippur. Kenaikan harga minyak tahap kedua terjadi pada tahun 1977-1980, harga minyak mengalami kenaikan karena terjadinya perang Irak. Kenaikan harga minyak tahap ketiga terjadi pada tahun 1991 karena terjadinya Perang Teluk Persia. Kenaikan harga minyak tahap keempat pada tahun 1999, menurut Energy International Agency (EIA) disebabkan karena naiknya jumlah penduduk dan meningkatnya industri dunia. Kenaikan permintaan tersebut justru dibarengi dengan produksi minyak yang turun secara bertahap.

Besarnya risiko fiskal di Indonesia diperbesar oleh posisi Indonesia, dimana sejak tahun 2004 Indonesia mengalami perubahan status menjadi negara pengimpor minyak netto (net importer). Perubahan status menjadi Negara pengimpor netto menyebabkan terjadinya risiko fiskal kemungkinan dipengaruhi oleh kurs, sebagai negara pengimpor, harga minyak akan sangat ditentukan oleh perubahan kurs, hal tersebut secara otomatis akan berpengaruh terhadap besarnya risiko fiskal. Kondisi kurs yang berfluktuatif tersebut, terutama terjadi paska krisis moneter tahun 1997.

4.2. Analisis Risiko Fiskal dan Sustainabilitas Fiskal

Dalam kaitannya dengan pencapaian sustainabilitas fiskal yang secara teoritis kondisi tersebut akan tercapai jika nilai rasio antara networth dan GDP konstan selama periode tahun pengamatan. Dengan menggunakan aplikasi uji stasioneritas Zivot Andrews (ZA test) akan dilihat apakah rasio networth/GDP riil tersebut konstan atau tidak selama periode tahun pengamatan. Jika selama periode tahun pengamatan mempunyai rasio yang konstan maka terjadinya risiko fiskal tidak membahayakan pencapaian sustainabilitas fiskal. Sebaliknya jika rasio networth/ GDP tidak konstan selama periode tahun pengamatan, maka kondisi risiko fiskal tersebut dapat membahayakan pencapaian sustainabilitas fiskal. Uji ZA yang dilakukan dengan menggunakan trimming region mulai pada regresi ke 5, dan diakhiri pada regresi ke 23. Hasil pengujian stasioneritas dengan Uji ZA untuk risiko hasil perhitungan analisis rerata varian disampaikan pada tabel 4.2.

Tabel 4.2 Hasil Uji ZA Risiko-1 (perhitungan dengan analisis reratavarian) dengan Model Shift in Regime

Model	$\left|t_{statistik}\right|$	Critical Value Zivot - Andrews			Keterangan
		$\left|t_{ZA,1\%}\right|$	$\left|t_{ZA,5\%}\right|$	$\left|t_{ZA,10\%}\right|$	
regresi 1	-4.674205	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 2	-4.722182	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 3	-4.771484	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 4	-4.834616	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 5	-4.897611	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 6	-4.954737	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 7	-5.013064	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 8	-5.076282	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 9	-5.140245	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 10	-5.207550	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 11	-5.294237	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 12	-5.389806	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 13	-5.477563	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 14	-5.564651	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 15	-5.648349	-5.57	-5.08	-4.82	Tidak stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 16	-5.715262	-5.57	-5.08	-4.82	Stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 17	-5.770775	-5.57	-5.08	-4.82	Stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 18	-5.872555	-5.57	-5.08	-4.82	Stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 19	-5.996128	-5.57	-5.08	-4.82	Stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 20	-6.374725	-5.57	-5.08	-4.82	Stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 21	-7.061203	-5.57	-5.08	-4.82	Stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 22	-6.912638	-5.57	-5.08	-4.82	Stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$
regresi 23	-6.837329	-5.57	-5.08	-4.82	Stasioner, karena $\left|t_{stat}\right|<\left|t_{ZA}\right|$

Sumber: Hasil Analisis

Pada tabel 4.2. dapat dilihat bahwa selama periode tahun pengamatan telah terjadi perubahan struktural pada risiko hasil perhitungan rerata varian. Perubahan struktural terjadi mulai pada regresi ke 16 (tahun1997). Hal tersebut menunjukkan bahwa risiko yang terjadi akibat adanya kenaikan harga minyak selama periode pengamatan dapat membahayakan kebijakan fiskal. Perubahan struktural terjadi pada tahun 1997, hal tersebut bisa di pahami karena pada tahun 1997 merupakan awal terjadinya krisis moneter. Kondisi tersebut diperkuat lagi pada tahun 1999 dimana pada tahun 1999 tersebut merupakan tahap awal phase kenaikan harga minyak periode ke empat, setelah periode sebelumnya tahun 1992/1993 terjadinya kenaikan harga minyak karena terjadinya perang Teluk.

Tabel 4.3 Hasil Risiko-4 (perhitungan BSA) Uji ZA dengan Model Shift in Regime

Model	$\left| t_{statistik} \right|$	Critical Value Zivot - Andrews			Keterangan	
		$\left| t_{ZA,1\%} \right|$	$\left| t_{ZA,5\%} \right|$	$\left| t_{ZA,10\%} \right|$		
regresi 1	-3.392042	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 2	-3.502316	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 3	-3.627651	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 4	-3.753664	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 5	-3.879887	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 6	-4.006809	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 7	-4.205141	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 8	-4.406858	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 9	-4.622433	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 10	-4.858420	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 11	-5.056713	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 12	-5.207559	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 13	-5.354648	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 14	-5.548643	-5.57	-5.08	-4.82	Tidak stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 15	-5.738071	-5.57	-5.08	-4.82	stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 16	-5.836165	-5.57	-5.08	-4.82	stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 17	-5.851000	-5.57	-5.08	-4.82	stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 18	-5.848546	-5.57	-5.08	-4.82	stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 19	-5.643529	-5.57	-5.08	-4.82	stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 20	-5.513716	-5.57	-5.08	-4.82	stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 21	-5.463132	-5.57	-5.08	-4.82	stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 22	-5.500191	-5.57	-5.08	-4.82	stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$
regresi 23	-5.709444	-5.57	-5.08	-4.82	stasioner, karena	$\left| t_{stat} \right| < \left| t_{ZA} \right|$

Sumber : hasil perhitungan

Hasil Uji ZA perhitungan risiko dengan menggunakan BSA juga menunjukkan kesimpulan yang sama dengan hasil perhitungan rerata varian. Pada tabel 4.3. dapat dilihat bahwa selama periode pengamatan telah terjadi perubahan struktural risiko hasil perhitungan ZA. Hal ini juga menunjukkan bahwa risiko fiskal yang disebabkan oleh kenaikan harga minyak dapat membahayakan percapaian sustainabilitas fiskal. Perubahan struktural hasil

perhitungan networth juga menunjukkan kondisi yang sama dengan hasl perhitungan analisis rerata varian yaitu pada tahun 1997.

Menurut Ong (2007) yang melakukan analisis kualitatif menyatakan bahwa risiko fiskal di Indonesia disebabkan oleh adanya fluktuasi harga minyak dan perubahan kurs. Pada tabel 4.4. disampaikan hasil uji ZA terhadap kurs, hal ini dilakukan karena status Indonesia yang mulai tahun 2004 menjadi negara pengimpor minyak netto, perhitungan risiko fiskal di Indonesia sangat terkait dengan perubahan kurs.

Tabel 4.4 Hasil Uji ZA KURS dengan Model Shift in Regime

Model	$\left\|t_{statistik}\right\|$	Critical Value Zivot - Andrews			Keterangan
		$\left\|t_{ZA,1\%}\right\|$	$\left\|t_{ZA,5\%}\right\|$	$\left\|t_{ZA,10\%}\right\|$	
regresi 1	-5.249303	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 2	-5.304297	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 3	-5.343352	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 4	-5.357300	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 5	-5.379248	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 6	-5.425028	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 7	-5.450647	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 8	-5.474869	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 9	-5.474869	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 10	-5.508590	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 11	-5.591309	-5.57	-5.08	-4.82	stasioner, karena $\|t_{stat}\|>\|t_{ZA}\|$
regresi 12	-5.715936	-5.57	-5.08	-4.82	stasioner, karena $\|t_{stat}\|>\|t_{ZA}\|$
regresi 13	-5.779039	-5.57	-5.08	-4.82	stasioner, karena $\|t_{stat}\|>\|t_{ZA}\|$
regresi 14	-5.805354	-5.57	-5.08	-4.82	stasioner, karena $\|t_{stat}\|>\|t_{ZA}\|$
regresi 15	-5.791223	-5.57	-5.08	-4.82	stasioner, karena $\|t_{stat}\|>\|t_{ZA}\|$
regresi 16	-5.779069	-5.57	-5.08	-4.82	stasioner, karena $\|t_{stat}\|>\|t_{ZA}\|$
regresi 17	-5.788412	-5.57	-5.08	-4.82	stasioner, karena $\|t_{stat}\|>\|t_{ZA}\|$
regresi 18	-5.841088	-5.57	-5.08	-4.82	stasioner, karena $\|t_{stat}\|>\|t_{ZA}\|$
regresi 19	-5.816393	-5.57	-5.08	-4.82	stasioner, karena $\|t_{stat}\|>\|t_{ZA}\|$
regresi 20	-6.304227	-5.57	-5.08	-4.82	stasioner, karena $\|t_{stat}\|>\|t_{ZA}\|$
regresi 21	1.378664	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 22	-0.231218	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$
regresi 23	-0.270253	-5.57	-5.08	-4.82	Tidak stasioner, karena $\|t_{stat}\|<\|t_{ZA}\|$

Sumber: hasil perhitungan

Upaya pencapaian sustainabilitas fiskal di Indonesia sangat dipengaruhi oleh perubahan kurs. Selain harga minyak, kurs diduga sebagai salah satu penyebab terjadinya risiko fiskal di Indonesia, terutama setelah Indonesia menjadi negara pengimpor minyak netto pada tahun 2004. Dari tabel 4.4. dapat dilihat bahwa selama periode pengamatan telah terjadi perubahan struktural pada kurs, hal ini menunjukkan bahwa kurs tidak stabil, dan sewaktu-waktu dapat membahayakan kondisi fiskal. Berbeda dengan perubahan struktural risiko, perubahan struktural kurs terjadi sejak tahun 1993.

Hasil perhitungan risiko baik dengan menggunakan analisis rerata varian maupun BSA. Hasil keduanya menunjukkan kesimpulan yang sama yaitu pada beberapa periode tahun pengamatan mempunyai nilai rerata varian dan nilai networth yang negatif, hal ini menunjukkan bahwa adanya fluktuasi harga minyak dunia menyebabkan terjadinya risiko fiskal pada pos-pos APBN yang berkaitan langsung dengan penerimaan dan pengeluaran minyak yaitu pos penerimaan migas, subsidi BBM, subsidi listrik, dan Dana Bagi Hasil. Hasil perhitungan rerata varian dan networth yang negatif terutama terjadi pada tahun-tahun setelah terjadinya krisis moneter tahun 1997 dan paska krisis energi tahun 1999.

Keadaan tersebut sejalan dengan kondisi empiris sejarah perminyakan dunia, dimana tahun 1999 merupakan salah satu periode (periode ke 4) tahap terjadinya kenaikan harga minyak yang signifikan. Tahap kenaikan minyak yang signifikan sebelumnya terjadi pada tahun 1973, pada tahun 1973 harga minyak mengalami kenaikan karena adanya perang Yom Kippur. Kenaikan harga minyak tahap kedua terjadi pada tahun 1977-1980, harga minyak mengalami kenaikan karena terjadinya perang Irak. Kenaikan harga minyak tahap ketiga terjadi pada tahun 1991 karena terjadinya Perang Teluk Persia. Kenaikan harga minyak tahap keempat pada tahun 1999, menurut Energy International Agency (EIA) disebabkan karena naiknya jumlah penduduk dan meningkatnya industri dunia. Kenaikan permintaan tersebut justru dibarengi dengan produksi minyak yang turun secara bertahap.

Besarnya risiko fiskal di Indonesia diperbesar oleh posisi Indonesia, dimana sejak tahun 2004 Indonesia mengalami perubahan status menjadi negara pengimpor minyak netto (net importer). Perubahan status menjadi Negara pengimpor netto menyebabkan terjadinya risiko fiskal yang kemungkinan juga dipengaruhi oleh kurs. Sebagai negara pengimpor, harga minyak akan sangat ditentukan oleh perubahan kurs, hal tersebut secara otomatis akan berpengaruh terhadap besarnya risiko fiskal. Kondisi kurs yang berfluktuatif tersebut, terutama terjadi paska krisis moneter tahun 1997.

4.2. Analisis Risiko Fiskal dan Sustainabilitas Fiskal

Selama periode tahun pengamatan telah terjadi perubahan struktural pada risiko hasil perhitungan rerata varian. Perubahan struktural terjadi mulai pada regresi ke 16 (tahun1997). Hal tersebut menunjukkan bahwa risiko yang terjadi akibat kenaikan harga minyak selama periode pengamatan dapat membahayakan sustainabilitas fiskal. Perubahan struktural terjadi pada tahun 1997, hal tersebut bisa di pahami karena pada tahun 1997 merupakan awal terjadinya krisis moneter. Kondisi tersebut diperkuat lagi pada tahun 1999 dimana pada tahun 1999 tersebut merupakan tahap awal phase kenaikan harga minyak periode ke empat, setelah periode sebelumnya tahun 1992/1993 terjadinya kenaikan harga minyak karena terjadinya perang Teluk

Hasil Uji ZA perhitungan risiko dengan menggunakan BSA juga menunjukkan kesimpulan yang sama dengan hasil perhitungan rerata varian. Analisis menunjukkan bahwa selama periode pengamatan telah terjadi perubahan struktural risiko hasil perhitungan ZA. Hal ini juga menunjukkan bahwa risiko fiskal yang disebabkan oleh kenaikan harga minyak dapat membahayakan percapaian sustainabilitas fiskal. Perubahan struktural hasil perhitungan networth juga menunjukkan kondisi yang sama dengan hasil perhitungan analisis rerata varian yaitu pada tahun 1997.

5. PENUTUP

5.1. Kesimpulan

Dari hasil estimasi dan analisis, penelitian ini menyimpulkan hal-hal yang terkait dengan tujuan penelitian sebagai berikut :
1. Kenaikan harga minyak dunia telah menyebabkan terjadinya risiko fiskal di Indonesia yang disebabkan oleh pemberian subsidi BBM, subsidi listrik, dan DBH migas. Hal ini di tunjukkan nilai networth yang negatif dari hasil perhitungan analisis BSA maupun nilai negatif hasil analisis rerata varian, pada beberapa periode pengamatan terutama paska Indonesia menjadi negara pengimpor minyak netto. Risiko terbesar terjadi pada

tahun 2007, hal tersebut bisa dipahami karena pada tahun tersebut harga minyak dunia mencapai angka US 119 dollar per barrel.

2. Dikaitkan dengan sustainabilitas fiskal, risiko fiskal yang disebabkan adanya kenaikan harga minyak bisa mengganggu pencapaian sustainabilitas fiskal. Hal tersebut ditunjukkan dari hasil uji Zivot Andrew (ZA). Hasil uji ZA menunjukkan bahwa selama tahun pengamatan telah terjadi perubahan struktural pada rasio networth per GDP, perubahan struktural tersebut terjadi pada periode tahun 1997 sampai tahun 2008. Perubahan struktural terjadi pada saat Indonesia mengalami krisis moneter yang dibarengi dengan kenaikan harga minyak dunia phase ke empat sebagai akibat ketidakseimbangan antara permintaan dan penawaran minyak. Hal ini mengindikasikan bahwa mulai tahun 1997 terjadinya risiko fiskal dapat membahayakan pencapaian sustainabilitas fiskal.

5.2. Saran

Berdasarkan hasil penelitian menunjukkan bahwa fluktuasi harga minyak menyebabkan kan terjadinya risiko fiskal di Indonesia dan membahayakan pencapaian sustainabilitas fiskal. Pemerintah diharapkan bisa membuat kebijakan yang tepat mengenai pemberian subsidi terutama subsidi BBM dan mempercepat pelaksanaan penggunaan energi alternatif untuk mengalihkan penggunaan BBM ke bahan BBNM sebagai bahan bakar bagi Pembangkit listrik PLN.

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ANALISIS FAKTOR PENENTU NIAT BERWIRAUSAHA MAHASISWA UNIVERSITAS SEBELAS MARET

Asri Laksmi Riani
Fakultas Ekonomi Universitas Sebelas Maret
Email : asrilaksmiriani@yahoo.com

Heru Irianto
Fakultas Pertanian Universitas Sebelas Maret
Email : irian_her@yahoo.com

Agus Widodo
Fakultas Ekonomi Universitas Sebelas Maret
Email : awd_hatta@yahoo.com

Abstract

The objective of research is to find out the determinant factor of Student Entrepreneurship Intention in Sebelas Maret University (UNS) and how such the factors interrelated, so that it is expected that from this research there will be found further development of entrepreneurship education program toward the creation of entrepreneur from the campus that in turn will encourage the nation's progress and competitiveness. The number of sample was determined by individual faculties consisting of 35 respondents, with the total sample of 315 respondents, so that it met the data feasibility minimum criteria with structural equation model (SEM).

The result of research shows that the subjective norm (family or friend), positive attitude to entrepreneurship and UNS's institutional support are the determinant factors supporting the UNS's student intention to have entrepreneurship. The implication of research in the future is that there should be classification among the business and non-business students; and geographical coverage expansion between the university within industrial area and that far from industrial area.

Keywords: Subjective norm, attitude, intention, having entrepreneurship, students

1. PENDAHULUAN

Fenomena pengangguran dunia menjadi semakin besar sejak terjadinya krisis ekonomi dunia tahun 2008. Di Indonesia, tingkat pengganggguran juga masih relatif tinggi meski pada periode 3 tahun setelah krisis 2008 (2008-2010) secara relatif cenderung menurun. Data BPS menunjukkan bahwa tingkat pengangguran pada tahun 2008 sebesar 8,5%, sedang pada tahun 2009 7,87% dan tahun 2010 7,4%. Tingginya tingkat pengangguran tersebut berdampak pada masih tingginya tingkat kemiskinan, yang pada gilirannya akan memperlemah daya saing bangsa. Daya saing bangsa yang masih lemah dapat dilihat dari masih rendahnya Human Develompment Indeks (HDI) bangsa Indonesia pada periode tersebut (2008-2010). Pada tahun 2008 HDI Indenesia menempati urutan 109, sedang pada tahun 2009 pada peringkat 111, dan pada tahun 2010 berada pada rangking 108.

Upanya memecahkan permasalahan tingginya pengangguran, kemiskinan dan rendahnya daya saing bangsa dapat dilakukan dengan meningkatkan pendidikan maupun budaya berwirausaha. Peningkatan pendidikan diharapkan dapat memberikan pengetahuan dan kemampuan anak bangsa untuk dapat mengusai pengetahuan dan teknologi sehingga mereka mampu bersaing dalam dunia kerja secara profesional. Sedang

upaya meningkatkan budaya berwirausaha diharapkan dapat mendorong terciptanya wirausaha baru yang tidak saja mampu menciptakan usaha namun sekaligus dapat menyerap tenaga kerja terdidik sehingga produk yang dihasilkan juga mampu bersaing di pasar (lihat Cooper et al, 1994; Kennedy dan Drennan, 2001)

Pentingnya pendidikan dan budaya wirausaha telah disadari perguruan tinggi di Indonesia sebagai lembaga pendidikan yang dituntut untuk menciptakan manusia yang berkualitas. Lembaga pendidikan tinggi mempunyai kewajiban untuk menghasilkan lulusan yang berdaya saing tinggi pada berbagai jenis pengetahuan, tingkatan pekerjaan, namun sekaligus diharapkan mampu menghasilkan wirausaha baru guna penciptaan lapangan kerja dan mengurangi pengangguran. Oleh kesadarannya tersebut perguruan tinggi selain melaksanakan tugasnya melakukan transfer pengetahuan dan teknologi sesuai perkembangannya, juga telah mengembangkan budaya wirausaha melalui matakuliah kewirausahaan maupun melalui pelatihan motivasi diri bagi para mahasiswanya.

Meski demikian, bukan berarti mahasiswa yang telah mendapatkan matakuliah dan pelatihan kewirausahaan serta merta mempunyai niat untuk beriwirausaha, oleh karena banyak faktor yang mempengaruhi niat seseorang dalam berwirausaha. Hasil penelitian Nabi, Holden, dan Walmsley (2010) menunjukkan bahwa mahasiswa yang telah berniat berwirausaha proporsinya hanya sedikit yang benar-benar menjadi wirausaha setelah lulus, selain itu usaha untuk meningkatkan motivasi hanya sedikit berdampak pada usaha memulai bisnis. Sedang hasil penelitian Brockhaus dan Horwitz (1986) yang menunjukkan bahwa keputusan untuk memulai wirausaha dipengaruhi oleh kepribadian dari individu yang membutuhkan prestasi, berani mengambil resiko, pengendalian internal maupun inovatif. Artinya bahwa niat berwirausaha akan ditindaklanjuti sebagai profesi kalau sesorang tersebut secara pribadi telah siap dan berani mengambil resiko. Kemudian pendekatan kepribadian tersebut berkembang ke arah pendekatan sikap sebagai peramal akan niat individu berwirausaha (lihat Robinson et al., 1991; Douglas, 1999).

Faktor niat perlu dikaji dalam kewirausahaan, karena niat terbukti merupakan prediktor penting dari perilaku kewirausahaan (lihat Katz, 1988; Reynolds, 1995; Kruger at al., 2000). Salah satu model hubungan sikap dan niat telah dikembangkan oleh Ajzen (1991) yang dikenal sebagai Teori Perilaku yang direncanakan (Theory Planned Behavior – TPB).

Studi-studi sikap dan niat berwirausaha yang telah dilakukan menunjukkan indikasi perbedaan hasil yang dikarenakan perbedaan dalam memodifikasi model, maupun setting penelitian. (lihat Kolvereid, 1996; Tkachev and Kolvereid, 1999; Linan and Chen, 2006; Souitaris et al, 2007; Wu, S. et al., 2008; Schwarz et al., 2009). Perbedaan-perbedaan tersebut mendorong studi ini untuk mengkaji faktor penentu niat berwirausaha mahasiswa sesuai dengan pemilihan setting di wilayah Indonesia, lebih terkhusus di Universitas Sebelas Maret Surakarta. Pemilihan setting di UNS karena UNS telah menetapkan pendidikan wirausaha sebagai salah satu brand image, sehingga diharapkan dari penelitian ini dapat ditemukan strategi pengembangan lebih lanjut dari program pendidikan wirausaha ke arah terciptanya wirausaha dari kampus.

Dari latar belakang tersebut di atas maka dapat dikemukakan permasalahannya adalah sebagai berikut:
a. Apakah norma subyektif berpengaruh pada niat berwirausaha mahasiswa UNS?
b. Apakah sikap berhubungan positif pada niat berwirausaha mahasiswa UNS?
c. Apakah PBC berhubungan positif pada niat berwirausaha mahasiswa UNS?

2. KAJIAN TEORITIS DAN RISET TERKAIT

2.1. Tinjauan Hasil Penelitian Terdahulu

Faktor niat banyak dikaji dalam kewirausahaan, karena niat terbukti merupakan prediktor penting dari perilaku kewirausahaan (lihat Katz, 1988; Reynolds, 1995; Kruger at al., 2000). Teori Perilaku yang direncanakan (Theory Planned Behavior – TPB) merupakan salah satu model teori yang digunakan untuk menganalisis hubungan sikap dan niat kewirausahaan. Dalam TPB, niat selain dipengaruhi oleh sikap, juga dipengaruhi norma subyektif dan kontrol perilaku, yang secara bersama-sama mengendalikan perilaku seseorang. Artinya bahwa seseorang memerlukan peluang dan sumber daya, jika bermaksud untuk melaksanakan perilaku, agar ia berhasil dalam

pelaksanaannya (Ajzen, 1991). Ketersediaan peluang dan sumber daya tersebut merupakan bagian dari kontrol perilaku (PBC- planned behavior control), yang merupakan persepsi orang tentang kemampuan mereka untuk melaksanakan suatu perilaku. Lebih lanjut menurut Schwarz et al., (2009) bahwa dalam konteks niat berwirausaha adalah berupa dukungan maupun rintangan lingkungan, dan dukungan kelembagaan.

Penelitian Kolvereid (1996) yang membahas niat sebagai prediksi status ketenagakerjaan dengan variabel amatan unsur TPB (norma subyektif, sikap, PBC) dan variabel demografi (gender, latar belakang keluarga, pengalaman kerja mandiri) menunjukkan hasil bahwa variabel demografi tersebut mempunyai hubungan tidak langsung terhadap niat melalui variabel TPB. Sementara penelitian Tkachev and Kolvereid, (1999) yang membahas niat sebagai prediksi kewirausahaan dengan variabel amatan seperti dalam Kolvereid (1996) pada mahasiswa di Rusia menunjukkan hasil bahwa hanya variabel TPB saja yang berpengaruh terhadap niat.

Lebih lanjut Hasil Penelitian Wu, S. et al., (2008) yang meneliti dampak pendidikan yang lebih tinggi terhadap niat wirausaha dari mahasiswa universitas di China menunjukkan hasil bahwa sikap dan tingkat pendidikan merupakan peramal utama terhadap niat berwirausaha. Sedang hasil penelitian Schwarz et al., (2009) yang meneliti efek sikap dan kondisi lingkungan terhadap niat berwirausaha mahasiswa di Austria menunjukkan hasil bahwa sikap dan lingkungan universitas mempunyai pengaruh niat terhadap berwirausaha.

2.2. Kajian Teoritis Dan Pengembangan Hipotesis

Pendekatan yang sering digunakan dalam mengkaji hubungan norma subyektif, sikap dan niat induvidu adalah model TPB (Theory of Planned Behaviour) yang dikembangkan oleh Ajzen (1991), yaitu bahwa suatu niat tingkah laku (contoh niat berwirausaha) pada dasarnya ditentukan oleh tiga faktor : sikap orang terhadap perilaku (yaitu sikap terhadap kewirausahaan), derajat tingkat dari tekanan sosial yang dirasakan oleh orang mengenai perilaku (norma subyektif) (Ajzen dan Fishbein, 1980), dan derajat tingkat dari kendali yang dirasa atas pelaksanaan perilaku (yaitu merasa kendali tingkah laku / Kontrol keperilakuan yang dirasakan / PBC). Dalam kajian tentang hubungan sikap dan niat berwirausaha di UNS ini diusulkan model sebagai berikut :

Hubungan Norma Subyektif dan Niat berwirausaha. Menurut Ajzen (2005), Norma subyektif adalah merupakan suatu faktor sosial yang mengacu pada tekanan sosial yang dirasa untuk melaksanakan atau tidak melaksanakan suatu perilaku. Lebih lanjut Ajzen (2005), menegaskan bahwa norma subyektif seseorang juga dipengaruhi oleh faktor lingkungan sosial khususnya orang-orang yang berpengaruh bagi kehidupan individu tersebut (significant others) dapat berupa teman maupun keluarga. Variabel norma subyektif dalam beberapa penelitian terkait dengan niat berwirausaha menunjukkan hasil yang tidak konsisten. Hasil penelitian Tkachev dan Kolvereid (1999) menunjukkan bahwa variabel norma subyektif berpengaruh terhadap niat berwirausaha. Berdasarkan hasil-hasil penelitian tersebut di atas maka variabel norma subyektif dimasukkan dalam model, dan disusun hipotesis pertama (H1) sebagai berikut :

H1 : Variabel norma subyektif akan secara positif mempengaruhi niat individu berwirausaha.

Hubungan sikap individu dan Niat. Sikap individu terhadap niat adalah suatu cerminan kepercayaan dan pendapat yang dipegang dalam berperilaku (Wu, S. et al., (2008). Semakin baik sikap mendukung perilaku, semakin kuat niat untuk melaksanakan perilaku (Ajzen, 1991). Banyak hasil penelitian tentang hubungan sikap dan niat berwirausaha, secara konsisten menunjukkan hubungan yang positif, seperti hasil penelitian Kolvereid (1996); Tkachev dan Kolvereid (1999); Wu, S. et al., (2008); Schwarz et al., (2009). Berdasarkan hasil-hasil penelitian tersebut di atas maka variabel sikap individu dimasukkan dalam model penelitian ini, dan disusun hipotesis ke dua (H2) sebagai berikut :

H2 : Sikap positif terhadap berwirausaha akan secara positif mempengaruhi niat berwirausaha.

Kontrol perilaku yang dirasa (PBC- planned behavior control). Kontrol perilaku pada dasarnya adalah perasaan seseorang mengenai mudah atau sulitnya mewujudkan suatu perilaku tertentu Ajzen (2005). Lebih lanjut menurut Schwarz et al., (2009) kontrol perilaku dalam niat berwirausaha adalah dapat berupa dukungan lingkungan; rintangan lingkungan maupun dukungan kelembagaan. Dukungan lingkungan dapat berupa ketersediaan bank maupun kemudahan untuk memperoleh modal; rintangan lingkungan dapat berupa subsidi yang tidak mencukupi, konsultan berkualitas terbatas ketersediaannya, dan syarat-syarat pendirian usaha yang biokratis, sedang dukungan kelembagaan berupa dukungan perguruan tinggi melalui berbagai kegiatan yang mendukung kewirausahaan mahasiswa (Schwarz et al., 2009). Berdasarkan hasil-hasil penelitian dan uraian tersebut diatas maka variabel PBC dimasukan dalam model, dan disusun hipotesis ke 3, 4 dan 5 sebagai berikut :

H3 : Dukungan lingkungan berpengaruh secara positif terhadap niat berwirausaha mahasiswa UNS.
H4 : Rintangan lingkungan berpengaruh terhadap niat berwirausaha mahasiswa UNS.
H5 : Dukungan UNS berpengaruh secara positif terhadap niat berwirausaha mahasiswa UNS.

Berdasarkan uraian alasan-alasan diatas maka model TPB yang dimodifikasi dengan hasil studi Schwarz et al., (2009), Wu, S. et al., (2008); dan Engle RL, et al., (2008) yang akan diuji dalam penelitian tentang niat berwirausaha mahasiswa UNS ini dapat disusun kerangka dasar seperti tertera pada gambar 1 sebagai berikut :
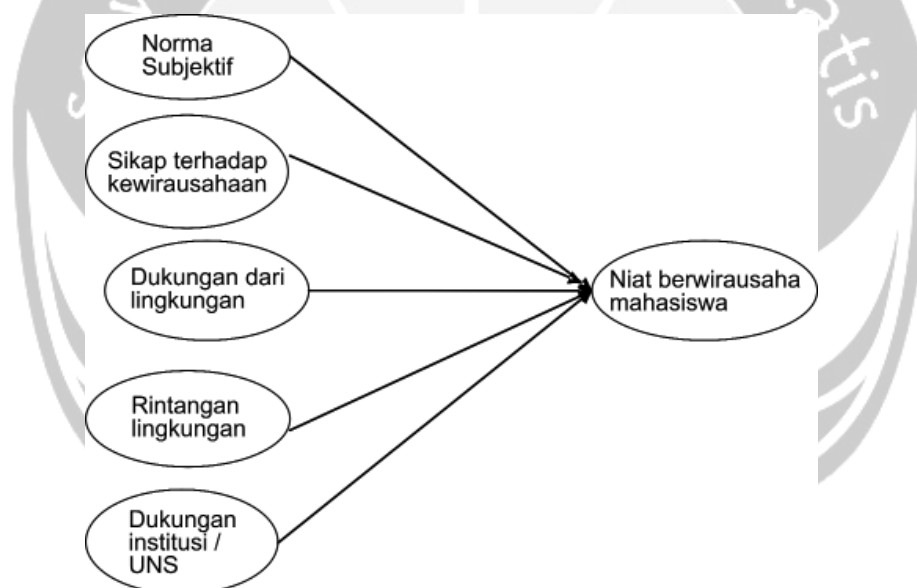
Gambar 1. Model yang Diusulkan untuk Niat Berwirausaha Mahasiswa UNS

3. METODE PENELITIAN

3.1. Desain penelitian

Desaian penelitian berupa penelitian explanatory, yaitu suatu penelitian yang dirancang untuk menjelaskan suatu fenomena yang ada (Maholtra, 2004). Data primer yang dikumpulkan berupa data cros-sectional, dengan teknik pengumpulannya digunakan teknik survei.

3.2. Populasi dan sampling

Populasi dalam studi ini adalah individu mahasiswa UNS yang berniat untuk berwirausaha. Sampel diambil secara non probabilistik dengan menggunakan kriteria sebagai berikut : (1) Sampel harus mahasiswa UNS yang telah mengambil matakuliah kewirausahaan dan atau pelatihan kewirausahaan; (2) Sampel belum menjadi wirausaha. Sedang jumlah sampel ditentukan masing-masing fakultas sebanyak 35 responden, sehingga total sampel sebanyak 315 responden, sehingga memenuhi pertimbangan aspek kriteria minimal kelayakan data dengan analisis structural equation model (SEM).

3.3. Definisi Operasional dan pengukuran variabel

Pertama, variabel norma subyektif dalam penelitian ini adalah suatu faktor sosial yang mengacu pada tekanan sosial yang dirasa untuk melaksanakan atau tidak melaksanakan berwirausaha. Variabel norma subyektif diukur dengan menggunakan 4 indikan (modifikasi dari Tarkianen, A dan Sundqvist, 2005), yaitu : (1) Dukungan keluarga; (2) Dukungan teman pergaulan; (3) Dukungan masyarakat sekitar; (4) Dukungan masyarakat keagamaan. Ke dua, sikap terhadap kewirausahaan adalah derajad evaluasi baik atau tidak baik dari seseorang terhadap suatu obyek yang terkait dengan kewirausahaan. Sikap terhadap kewirausahaan diukur dengan menggunakan 4 indikan (modifikasi Schwarz et al., 2009): (1) Saya lebih senang dengan pimpinan yang menjamin pekerjaan; (2) Saya lebih senang menemukan perusahaan baru yang memungkinkan saya menjadi salah satu manajernya; (3) Saya lebih senang bisa bekerja mandiri; (4) saya lebih senang dapat membuka usaha sendiri. Ke tiga, dukungan lingkungan adalah persepsi individu terhadap lingkungan luar yang mendukung terwujudnya niat berwirausaha (Schwarz et al., 2009). Variabel ini diukur dengan menggunakan 3 indikan (modifikasi dari Schwarz et al., 2009) : (1) Perbankan tidak siap memberikan kredit modal bagi wirausaha baru; (2) Tidak mudah memperoleh penyedia modal; (3) Tidak ada kemudahan bagi wirausaha baru (Tidak ada insentif). Ke empat, penghalang lingkungan didefinisi sebagai persepsi individu terhadap lingkungan luar yang merintangi terwujudnya niat berwirausaha (Schwarz et al., 2009). Variabel ini diukur dengan menggunakan 3 indikan (modifikasi dari Schwarz et al., 2009) : (1) Ketidak cukupan subsidi bagi usaha baru; (2) Tidak cukup tersedia konsultan berkualitas bagi usaha baru; (3) Prosedur yang biokratis bagi pendirian usaha baru. Ke lima, dukungan lembaga / UNS didefinisi sebagai persepsi individu terhadap lingkungan kelembagaan yang mendukung terwujudnya niat berwirausaha (Schwarz et al., 2009). Variabel ini diukur dengan menggunakan 4 indikan (modifikasi dari Schwarz et al., 2009) : (1) Di UNS, mahasiswa yang aktif didorong untuk mengejar gagasan kreatif mereka; (2) UNS memberi mahasiswa pengetahuan yang diperlukan untuk memulai usaha; (3) UNS memberi fasilitasi infrastruktur guna mendukung mahasiswa mengawali usaha; (4) Asmospire UNS mengilhami mahasiswa untuk mengembangkan gagasan memulai usaha baru. Ke enam, Niat berwirausaha didefinisikan sebagai kecenderungan individu untuk memilih melakukan atau tidak melakukan (Lihat Ajzen, 1991), dalam hal ini niat untuk berwirausaha. Variabel ini diukur dengan menggunakan 3 indikan (Schwarz et al., 2009) : (1) Bagaimana saudara sebagai mahasiswa tertarik untuk menyiapkan bisnisnya sendiri; (2) Apakah saudara mungkin akan menyiapkan bisnis yang lain dalam dua tahun ke depan; (3) Apakah saudara mungkin akan menyiapkan bisnis yang lain dalam lima tahun berikutnya? Tiap-tiap item dari keenam variabel yang dikaji tersebut diukur dengan menggunakan skala Likert 5 poin dari sangat tidak setuju untuk poin 1 dan sangat setuju untuk poin 5.

3.4. Metode Analisis Data

Guna mengetahui validitas dan reabilitas instrumen dilakukan uji validitas kontruks menggunakan analisis faktor dengan menggunakan metode rotasi varimax, dengan batas loading yang diterima > 0,5 (Hair, et al., 2006), sedang uji reliabilitas dilakukan diukur dengan koefisien Cronbah's alpha, dengan batas keterhandalan jika nilai Cronbah's alpha yang diperoleh melebihi 0,7 (Maholtra, 2004). Hasil uji validitas dan reliabilitas disajikan pada tabel 1.

Tabel 1. Hasil Uji Validitas dan Reliabilitas

Keterangan	Jumlah item yang dipertahankan	Cronbah's alpha (α)
Norma subyektif	4	0,770
Sikap	4	0,750
Dukungan lingkungan	3	0,749
Penghalang Lingkungan	3	0,824
Dukungan lembaga	4	0,796
Niat	3	0,802

Sumber data : data primer, diolah

Dari hasil uji validitas dan reliabilitas tersebut bahwa semua variabel yang diteliti valid dan relialibel. Lebih lanjut pada analisis SEM, pada analisis pertama hasil uji asumsi normalitas menunjukkan bahwa dari 315 sampel terdapat 33 observasi pencilan, sehingga harus dikeluarkan dari model sebelum dilakukan pengujian lebih lanjut. Dengan demikian, jumlah data yang diolah lebih lanjut sebanyak 282 sampel.

4.   HASIL ANALISIS DAN PEMBAHASAN

4.1. Karakteristik Responden

Karakteristik responden dapat dikemukakan sebagai berikut: dari 315 responden, 31,4 persen atau 99 responden berjenis kelamin laki-laki dan 68,6 persen atau 216 orang perempuan. Dilihat menurut urutan anak, paling banyak dari responden adalah anak ke 1, ke-2, ke-3, ke-4 dan ke-5, kemudian dilanjutkan anak ke-6, ke-10 dan ke-7 masing-masing sebesar: 43,5 persen; 31,7 persen; 16,5 persen; 4,1 persen; 2,2 persen; 1,0 persen; 0,6 persen dan 0,3 persen. Sedangkan pendidikan responden, 253 orang atau 80,3 persen berpendidikan S1 sedangkan sebanyak 62 orang atau 19,7 persen berpendidikan D3. Dilihat berdasarkan tingkat/ semester dari responden secara berturut-turut sebagian besar adalah: menduduki semester: 4; 6; 8; 2; 10; 12; 5; 9 & 14 masing-masing sebesar: 33,3 persen; 31,4 persen; 15,9 persen; 13,7 persen; 3,5 persen; 1,0 persen; 0,6 persen dan 0,3 persen.

Pekerjaan ayah responden, sebagian besar adalah: PNS sebanyak 41,6 persen; karyawan swasta sebanyak 24,4 persen; lainnya sebanyak 18,4 persen dan wirausaha sebesar 15,6 persen. Sedangkan pekerjaan Ibu dari responden sebagian besar adalah: PNS sebanyak 36,5 persen; lainnya sebanyak 38,7 persen; karyawan swasta sebanyak 12,7 persen serta wirausaha sebanyak 12,1 persen. Sebagian besar pendidikan ayah adalah berpendidikan: S1 keatas sebanyak 48,0 persen; SMTA sebanyak 36,5 persen; di bawah SMTA sebanyak 12,7 persen, serta diploma sebanyak 4,8 persen. sebagian besar ibu responden berpendidikan: S1 ke atas sebanyak 37,1 persen; SMTA sebanyak 34,9 persen; di bawah SMTA sebanyak 18,7 persen; dan Diploma sebanyak 9,2 persen.

4.2. Deskripsi Tanggapan Responden tentang Kewirausahaan

Pertama, norma subyektif. Secara keseluruhan hasil tanggapan responden terkait dengan norma subyektif mengindikasikan bahwa norma subyektif mahasiswa UNS mendukung mahasiswa untuk berwirausaha. Hasil penelitian terkait dengan norma subyektif ini merupakan peluang bagi UNS untuk mendorong mahasiswa berwirausaha karena keseluruhan lingkungan mahasiswa (keluarga, teman pergaulan, dan keagamaan) mendukung untuk beriwirausaha.

Ke dua, sikap terhadap berwirausaha. Secara keseluruhan mengindikasikan bahwa mahasiswa bersikap positif terhadap profesi kewirausahaan, sehingga sikap yang demikian dapat diharapkan mahasiswa untuk berprofesi sebagai wirausaha.

Ke tiga, dukungan lingkungan. Tanggapan atas pernyataan dukungan lingkungan secara keseluruhan menyatakan bahwa responden ragu atas kesiapan perbankan dalam memberikan modal bagi wirausaha baru (46,3%); responden merasa tidak mudah untuk mendapatkan akses permodalan (44,44%); responden merasa tidak ada kemudahan bagi wirausaha baru (tidak ada insentif) mencapai 40,6%.

Ke empat, Rintangan / Penghalang Lingkungan. Tanggapan atas pernyataan bahwa ketidak cukupan subsidi bagi usaha baru, 28,9% responden merasa setuju dan sangat setuju, 38,4% merasa ragu-ragu; responden merasa tidak cukup tersedia konsultan berkualitas bagi usaha baru mencapai 28,9%, 34,9% merasa ragu-ragu; responden merasa ada prosedur birokratis bagi pendirian usaha baru mencapai 29,2%, dan merasa ragu-ragu 44,1%.

Ke lima, dukungan institusi UNS. Tanggapan atas pernyataan bahwa UNS mendorong mahasiswa aktif untuk mengejar gagasan kreatif mereka, 68% responden merasa setuju, 26,3%, dan hanya 5,7% yang tidak setuju; responden yang merasa UNS memberi mahasiswa pengetahuan yang diperlukan untuk memulai usaha mencapai 64,8% dan 8,6% tidak merasa UNS memberi mahasiswa pengetahuan yang diperlukan untuk memulai usaha; responden yang merasa UNS memberi fasilitasi infrastruktur guna mendukung mahasiswa mengawali usaha mencapai 48,2%, sedang yang tidak merasa sebesar 12,7%; responden yang merasa atmosphire / suasana UNS mengilhami mahasiswa untuk mengembangkan gagasan memulai usaha baru mencapai 41,3% dan yang tidak merasa adanya atmosphire yang mengilhami mahasiswa mencapai 12,1%.

Ke enam, niat berwirausaha. Tanggapan atas pernyataan bahwa mereka Sebagai tertarik untuk menyiapkan bisnisnya saya sendiri mencapai 80,5%, sedang yang tidak setuju hanya 4,3%; responden yang merasa akan menyiapkan bisnis lain dalam dua tahun ke depan mencapai 62,2% dan yang tidak akan menyiapkan bisnis lain dalam dua tahun ke depan hanya 5,4%; responden yang merasa akan menyiapkan bisnis yang lain dalam lima tahun berikutnya mencapai 62,9%, dan yang tidak akan menyiapkan bisnis yang lain hanya mencapai 6,1%.

4.3. Persamaan Struktural

Sesuai tujuan penelitian, maka pengujian hipotesis dilakukan dengan analisis SEM, dengan hasil analisis ditunjukan pada gambar 2. Dari hasil analisis menunjukkan bahwa goodness of fit yang relatif baik dan dapat dianggap memenuhi kesesuian model, yaitu dengan nilai chi-square 328,464 (df=177; p=0,000); CMIN/Df= 1,856; TLI = 0,904; CFI =0,919 dan RMSEA 0,055 , sedang parameter lain kurang mendukung.

Dari gambar 2 dapat diringkas hasilnya seperti disajikan pada tabel 2. Dari tabel 2 tersebut terlihat bahwa niat berwirausaha mahasiswa dipengaruhi oleh norma subyektif, sikap terhadap kewirausahaan, dan dukungan lembaga (UNS), sedang dukungan lingkungan dan penghalang lingkungan tidak berpengaruh.

Tabel 2. Hasil analisis SEM Model Persamaan Struktural

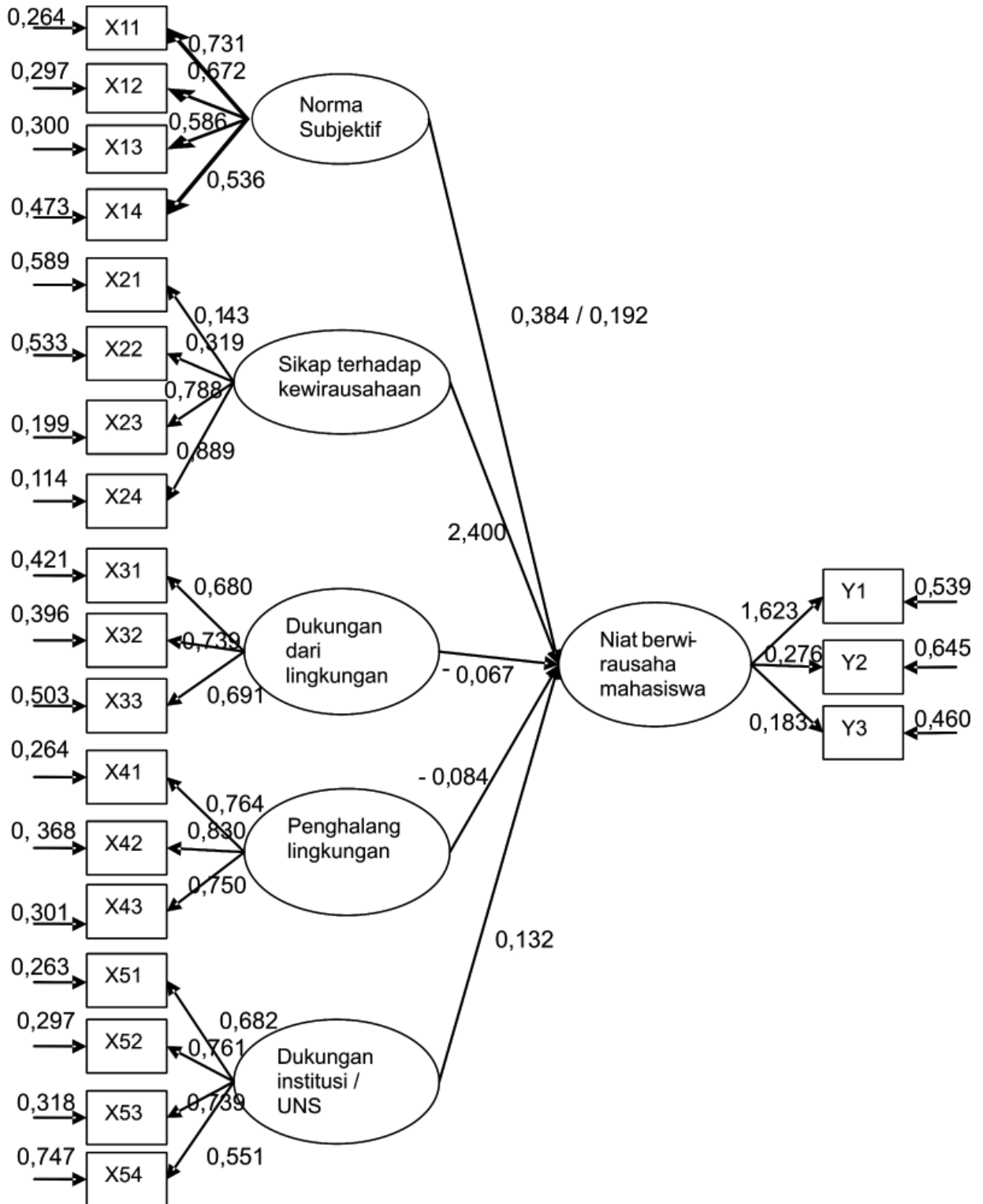|			Estimate	S.E.	C.R.	P
NW	<---	NS	0,384	0,082	4,676	0,001[***]
NW	<---	SK	2,400	1,121	2,141	0,032[*]
NW	<---	DL	- 0,067	0,058	-1,163	0,245
NW	<---	PL	0,084	0,051	-1,635	0,102
NW	<---	DU	0,132	0,072	1,821	0,069[*]

Sumber data : Analisis data primer

Keterangan   : [***] = signifikan pada   0,001

[*] = signifikan pada   0,1

4.4. Pembahasan

Hasil estimasi pada model struktural yang ditunjukkan pada tabel 2 mengungkapkan bahwa 3 variabel yang dipelajari berpengaruh positif terhadap niat mahasiswa untuk berwirausaha, sehingga terdapat 3 hipotesis yang diterima (H1, H2 dan H5), dan 2 hipotesis ditolak (H3 dan H4) . Hipotesis 1 (H1) memperkirakan bahwa norma subyektif secara positif mempengaruhi niat individu mahasiswa untuk berwirausaha. Hasil estimasi untuk H1 terbukti dengan nilai b = 0,384, p = 0,001. Hasil ini selaras dengan hasil penelitian Kolvereid (1996) dan Tkachev dan Kolvereid (1999), yaitu bahwa pengaruh lingkungan (keluarga dan atau teman) di sekitar mahasiswa UNS memberikan dukungan cukup kuat terhadap niat perilaku berwirausaha. Dukungan tersebut ditunjukan dengan memberikan apresiasi terhadap profesi sebagai wirausaha. Lebih lanjut Hipotesis 2 (H2) memperkirakan bahwa sikap positif terhadap kewirausahaan secara positif mempengaruhi niat berwirausaha mahasiswa. Hasil estimasi untuk H2 terbukti dengan nilai b = 2,400, p = 0,032. Hasil ini konsisten dengan studi sebelumnya yang menunjukkan bahwa hubungan sikap dan niat berwirausaha adalah positif (Kolvereid, 1996; Tkachev dan Kolvereid, 1999; Wu, S. et al., 2008; Schwarz et al., 2009). Indikasi bahwa sikap secara positif berpengaruh terhadap niat kewirausahaan juga ditunjukan dengan semakin banyak proporsi responden yang bersikap positif terhadap kemandirian dan lebih senang membuka usaha sendiri. Sedang hipotesis 5 (H5) memperkirakan bahwa dukungan institusi UNS berpengaruh positif terhadap niat berwirausaha mahasiswa, juga terbukti dengan nilai b = 0,132, p = 0,069. Hasil ini konsisten dengan studi Schwarz et al., (2009) yang menunjukkan pentingnya dukungan institusi perguruan tinggi yang bersangkutan terhadap niat perilaku berwirausaha mahasiswa. Penelusuran terkait dengan dukungan institusi ini diberikan baik melalui dorongan terhadap mahasiswa untuk mengejar gagasan wirausahanya melalui pelatihan wirausaha, motivasi diri maupun pemberian pengetahuan wirausaha melalui kuliah wirausaha sebagai matakuliah wajib, selain diberikan kesempatan bagi mahasiswa untuk mengelola usaha koperasi mahasiswa maupun kesempatan usaha bagi unit kegiatan mahasiswa (UKM) dan fasilitasi berbagai tempat di fakultasnya masing-masing untuk berwirausaha.

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Gambar 2 . Hasil Estimasi Terstandar

Hipotesis 3 (H3) memperkirakan bahwa dukungan lingkungan berpengaruh secara positif terhadap niat berwirausaha mahasiswa UNS. Hasil estimasi menunjukkan bahwa variabel dukungan lingkungan tidak berpengaruh (b = -0,067 , p = 0,245), dan hipotesa H3 ditolak. Hasil tersebut tidak sesuai dengan studi Schwarz et al., (2009).   Hal ini terjadi dikarenakan dukungan berwirausaha bagi mahasiswa dari pihak perbankan maupun pemilik modal relatif terbatas, dan tidak mudah diakses, maupun belum tersedianya kemudahan bagi wirausaha baru dalam banyak hal, seperti pengurusan berbagai ijin terkait dengan usaha dan sebagainya. Hal ini tergambarkan ke hasil penelitian dengan tanda koefeisien yang negatif, meskipun tidak sampai signifikan. Hipotesis 4 (H4) memperkirakan bahwa penghalang / rintangan lingkungan berpengaruh terhadap niat berwirausaha mahasiswa UNS. Hasil estimasi menunjukkan bahwa variabel penghalang / rintangan lingkungan tidak berpengaruh (b = -0,084 , p = 0,102), dan hipotesa H4 ditolak. Hasil tersebut sesuai dengan studi studi Schwarz et al., (2009). Hal ini terjadi dikarenakan bahwa penghalang / rintangan berwirausaha yang ada secara umum sudah dianggap hal biasa sehingga mahasiswa sejak awal menyadari adanya keterbatasan tesebut sehingga dianggap tidak penting.

Dengan melihat hasil estimasi dengan model struktural tersebut maka ke depan dapat diupayakan mendorong niat wirausaha mahasiswa melalui faktor norma subyektif dengan melalui lingkungan pergaulan (keluarga dan atau teman), memupuk sikap positif terhadap wirausaha, meningkatkan dukungan institusi (UNS), meningkatkan akses berbagai lembaga keuangan maupun konsultan usaha dan sebagainya.

Meskipun hasil penelitian ini menunjukkan faktor niat telah terbukti merupakan prediktor penting terhadap perilaku kewirausahaan mahasiswa, namun ke depan perlu ditelusuri berapa proporsi mahasiswa yang berniat berwirausaha benar-benar menjadi wirausaha. Hal ini dirasa perlu dilakukan karena mahasiswa yang telah berniat berwirausaha proporsinya hanya sedikit yang benar-benar menjadi wirausaha setelah lulus, selain itu usaha untuk meningkatkan motivasi hanya sedikit berdampak pada usaha memulai bisnis (Nabi, Holden, Walmsley, 2010). Oleh karena itu penelusuran ini dirasa penting agar tujuan program mendorong lahirnya kewirausahaan dapat dicapai dengan baik.

5.   PENUTUP

5.1. Simpulan

Berdasarkan hasil analisis dan pengujian yang dilakukan dalam penelitian ini, terdapat beberapa kesimpulan sebagai berikut:
a.   Secara deskriptif variabel norma subyektif (keluarga, teman dan lingkungan) dari mahasiswa mendukung niat mahasiswa untuk berwirausaha, demikian juga dengan sikap mahasiswa cenderung untuk berniat berwirausaha, dan dukungan lembaga (UNS) dalam memfasilitasi niat berwirausaha dinilai cukup signifikan
b.   Hasil analisis Structural Equation Model (SEM) menunjukkan bahwa niat berwirausaha mahasiswa UNS dipengaruhi oleh norma subyektif, sikap terhadap kewirausahaan, dan dukungan lembaga (UNS), sedang dukungan lingkungan dan penghalang lingkungan tidak berpengaruh.

5.2. Saran

a.   Guna meningkatkan niat berwirausaha mahasiswa Perguruan Tinggi (UNS), dapat melakukan pelatihan wirausaha, motivasi diri (khususnya business motivation training). Mahasiswa diberikan kesempatan magang atau menjadi mengelola usaha koperasi mahasiswa maupun kesempatan usaha bagi unit kegiatan mahasiswa (UKM) dan menfasilitasi berbagai tempat di fakultasnya masing-masing untuk berwirausaha.
b.   Memperluas dukungan Perguruan Tinggi dan Perbankan dalam akses permodalan. Selama ini dukungan berwirausaha bagi mahasiswa dari pihak perbankan maupun pemilik modal relatif masih terbatas, dan tidak mudah diakses. Perguruan Tinggi harus menfasilitasi pengurusan ijin usaha dan memberikan payung hukum yang jelas untuk unit bisnis di lingkungan kampus.

c. Pengembangan kurikulum kuliah kewirausahaan diarahkan agar mahasiswa memiliki awareness dan sikap mental positip untuk menjadi wirausaha. Perguruan tinggi harus mampu mendorong mahasiswa agar bercita-cita menjadi wirausaha atau minimal memiliki satu usaha, memberi penghargaan dan fasilitas bagi mahasiswa wirausaha muda, melibatkan pihak ketiga dalam pengembangan business center unit di lingkungan kampus.

d. Sebagai suatu lembaga perguruan tinggi UNS ke depan perlu menindaklanjuti program kewirausahaan tersebut dengan melakukan monitoring proporsi perkembangan mahasiswa yang berniat berwirausaha tersebut yang benar-benar memilih profesi wirausaha setelah lulus, untuk melihat tingkat keberhasilan program wirausaha yang sudah dicanangkan.

5.3. Keterbatasan

a. Jumlah sampel yang terbatas dan tidak mewakili semua angkatan pada masing-masing fakultas, serta karakteristik/ orientasi yang berbeda menurut fakultas.

b. Penelitian ini hanya mengambil obyek satu lingkungan perguruan tinggi (UNS). Diperlukan studi yang lebih luas lingkupnya dengan membandingkan lingkungan bisnis di wilayah lingkungan industry yang berbeda dari perguruan tinggi yang berbeda.

5.4. Rekomendasi

a. Penelitian selanjutnya dapat menggunakan klasifikasi fakultas bisnis dan non bisnis, misalnya: mahasiswa fakultas ekonomi dan mahasiswa fakultas kedokteran karena berbeda mindset ilmu maka berbeda pula kepentingan (orientasi) yang diharapkan setelah lulus.

b. Penelitian selanjutnya dapat menambahkan jumlah sampel, baik data primer maupun data sekunder sehingga hasil penelitian dapat digeneralisasikan lebih baik lagi.

c. Untuk penelitian selanjutnya dapat menggunakan proksi wilayah (geografis) dengan ukuran yang lain atau dapat juga membandingkan lingkungan bisnis antara lokasi kampus di wilayah industri dengan kampus yang jauh dari wilayah industri (studi comparative).

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THE ROLE OF INTERNAL AND EXTERNAL CONTEXTUAL FACTORS ON FIRM'S RESOURCES-PERFORMANCE RELATIONSHIPS

Lena Ellitan
Widya Mandala Catholic University Surabaya
Email: ellistya@yahoo.com

Abstract

The critical resources affect the power of company's competitiveness. Management and business literature have limited knowledge and empirical research concerning the problems faced by the Indonesian manufacturing sector in relation to resources management, strategy, and environment issues. The broad objective of this study is to investigate the effects of resources on performance in Indonesian manufacturing firms and to analyze sensitivity of the resource-growth relationship on the degree of competition, degree of uncertainty as well as firm's characteristics. This study is conducted by distributing a set of structured questionnaires to the CEOs of large-scale manufacturing firms. Simple random sampling is used in this study in order to provide the least bias and offer most generalizability. This study indicates that for the Indonesian manufacturing firms to survive and to grow, they need not only to improve its production capacities but also technological capabilities. The effects of firm's resources on performance depend on contextual factors such as environment and business strategies.

Keywords: Firm's Resources, degree of competition, uncertainty, firm's characteristic, firm's performace.

1. INTRODUCTION

Entering 21 century, Indonesian companies face many business difficulties to maintain their sustainability. In 1997, Indonesia suffers due to financial crisis which lead many companies have gone to bankruptcy. It need more than five years to recovery the financial resource crisis. While the financial resource problems have not fully resolved, in recent years, Indonesian companies also address crisis of resource in energy (including gas, oil, and electric power). Indonesia has comparative advantage in natural resources, these phenomena however, have been often occurred. Some industries such as fertilizers and metal industries bear a problem in continuing their operation due to the lack of energy.

Other problems may occur in some industries which address difficulties to acquire material resources. It is not only in quantity but also in quality of the material resources. Some suppliers may have inconsistent (low or high) quality of material, which lead to the uncertainty of the product and service qualities. Furthermore, the classic problems in developing countries, such as Indonesia, are lack of skill and expertise workers (reflected from many expatriate skilled workers) and lack of advance and sophisticated technologies.

These critical resources will affect the power of company's competitiveness. While the practical issues are not fully resolved, Management and business literature have limited knowledge and empirical research concerning the problems faced by the Indonesian manufacturing sector in relation to resources management, strategy, and environment issues. Thus, this research was motivated by these considerations:

1. The dearth of a systematic and empirical research that simultaneously investigates the effect of overall resources on firm's growth and its performance.
2. The dearth of study that comprehensively investigates the moderating effect of internal and external factors on the relationship between resources and the performances.
3. The results of past studies on resources-performance relationship are still contradictive.

The broad objective of this study is to investigate the effects of resources on performance in Indonesian manufacturing firms. The specific objectives are as follows:
1. To investigates relationship between resources and firm performance.
2. To investigates relationship between resources and firm growth.
3. To analyze sensitivity of the resource-growth relationship on the degree of competition.
4. To analyze sensitivity of the resource-growth relationship on the degree of uncertainty.
5. To analyze sensitivity of the resource-performance relationship on firm's characteristics (including business relationships, business strategy, and type of ownership).

2. TEORITICAL FRAMEWORK AND HYPOTHESES

2.1. Critical Resources, Firms Growth and Its Performance

A theory that may explain why technology adoption, resources and management practices may increase organizational performance and creates competitive advantage is put forth by Barney (1991) and others who argue for resource based theory of competitive advantage. Under this theory, the firm's resources are key determinants of performance and competitive advantage. Firms can develop this competitive advantage only by creating value in a way that is difficult for a competitor to imitate. Specifically, Barney (1991) asserts there are four characteristics of a firm's resources that assure competitive advantage. Firstly, it must be valuable in the sense that it exploits opportunities and/or neutralizes threats in a firm's environment. Secondly, it must be rare (not easily obtained) among a firm's current and potential competition. Thirdly, it must be imperfectly imitable and lastly, there cannot be strategically equivalent substitutes for these resources that are valuable but neither rare nor imperfectly imitable. In other words, to gain competitive advantage, the resources add value and must be rare. These attributes of a firm's resources can be thought of as empirical indicators of how heterogeneous and immobile a firm's resources are and thus how useful these resources are for generating sustained competitive advantages.

Grant (1991) proposed three types of resources associated with a firm: (1) Physical capital resources include the physical technologies, plants and equipments used in a firm. (2) Human capital resources consist of the employees' knowledge and experiences. (3) Organizational capital resources include structure, system for planning, monitoring and controlling activities as well as informal relations among groups within a firm and between a firm and those in its environment.

Lado and Wilson (1994) stated that 'the firm is viewed as a nexus of resources and capabilities that are not freely bought and sold in the spot market. Along the general lines of this theory, two key concepts are resources and capabilities. Wernerfelt (1984) defined resources as anything, which could be thought of as strengths or weaknesses of a firm. Resources are the input into the production process (Grant, 1991). In contrast, capability must be defined apart from resources. Capability refers to a firms' capacity to deploy resources, usually in combination, using organizational processes, to affect a desired end (Amit & Schoemaker, 1993). Thus, capability is joint resources to produce any work or activity.

Based on the resource-based theory, AMT, material, capital, labor, and management practices are considered as a resource. Technological adoption greatly influences a firm's human resources and other firm's resources. The extents to which technology can be used to gain competitive advantage are partly determined by the environment in which a firm operates (Wernerfelt, 1984; Grant, 1991).

Technology. The fact that technology is a potential source of competitive advantage is widely accepted in management and economic literature. Technological adoption and technological innovation are powerful forces for industrialization, increasing productivity, supporting growth and improving the standard of living (Abernathy & Clark, 1985). Technological strength has affected manufacturing cost and other competitive drivers (Harisson & Samson, 1997). Schroeder (1990) found that technology adoption (innovation) creates competitive opportunities and threats for those who adopt them and for those who did not. Technology adoption and new operation techniques have proven to have a positive effect on SME's performance such as payroll size, asset size, financial rating, sales rating

and operating problem (Ignance, et al., 1998). Numerous studies (such as Youseff, 1993; Mechling et al., 1995; and Mc Gregor & Gomes, 1999) have emphasized the potential strategic benefit of flexibility responsiveness and improved productivity through purposeful adoption of advanced manufacturing technology. The literatures provide evidences that the benefits of AMT are not only to large firms but also to small firms (Mechling et al., 1995; Rishel & Burn, 1997; McGregor & Gomes, 1999). Most of the studies found that AMTs positively influence firms' performance (Youseff, 1993; Zammuto & O' Connor, 1992; Rishel & Burn, 1997; McGregor & Gomes, 1999). However, some of the studies revealed that hard technology has no significant impact on performance (Burgess et al. 1998; Dean & Snell, 1996). Even Beaumount and Scroeder (1997) found that hard technology has a negative impact on performance. Thus studies relating the impact of AMTs-performance relationship have produced contradictory results.

Capital. Capital defined as the elements of the sources of funds which stems from stems from bonds (long-term debt), stocks, hybrid financing and other sources of financing. Sources of funds are very important in countries attempting to develop. In emerging countries, such as Indonesia, information asymmetry often appear in capital market. This condition will reduce the ability of the prospective firms to acquire lower cost of capital. Hence, they will use more internal funds than   external funds (Myers, 1984). Firms will add the funds from debt firstly when external fund needed. The capital is needed to exploit new product, processes, technologies are handsomely rewarded by markets. However, the current leverage level also determines the choice of sources of funds. Firm with high operating leverage may use less debt to reduce the firm's risk. The ability to generate new sources of competitive advantages may represent a key to long term prosperity and sustainable competitive advantage (Gofrey & Gregerson, 1999).

Human Resource/Labor. Bearing in mind the concept of intangible resources and the enumeration is issued by Hall (1993). It can be clearly deduced that human resources (skill, know how, talent and so on) are intangible resources. However until few years ago, little attempt has been made to identify and give structure to the nature and role of intangible resources (human resources) in strategic management. The capabilities and skill of human resources are crucial for a firm's success. A problem now arises from the condition regarding acquisition. Human resources may be attracted to an enterprise which offers higher compensation, career development program, and alike. Consider that human resources are able to be strategic resources. According to Hall (1993), human resources may generate functional and cultural capabilities due to experience, abilities, values, integration in the company and so forth. Thus, the resource-based theory suggests that human resources may create or sustain a competitive advantage through competency development and knowledge transfer.

Material. Material covers raw material, utilities and other supporting material in production process (Heizer & Render, 2000). Material resources are considered as those assets that create competitive advantage if they 'outperform' equivalent assets within competitor. The availability and the sourcing of material also determine the business survival. Harrison et al. (1993) found that the firms that engage in raw material extraction and primary manufacturing are more capital-intensive than company that produce and market finished product. Import of raw material and capital goods are usually very high in countries attempting to develop.

Management Practices. There are abundant articles and empirical studies that investigated the impact of management practices (e.g. TQM, JIT, TPM, MRP and benchmarking) on a firm's performance. Sohal and Terziovky (2000) argued that the effective implementation of quality improvement practices (TQM, benchmarking, process reengineering) lead to improvements in organizational performance in terms of both productivity and profitability, along with improved customer satisfaction.

Beaumount and Scroeder (1997) suggested that achieving competitive cost and quality may not be possible without some sophisticated technologies and modern management practices. They found that although sophisticated technologies, JIT and TQM are not strongly associated with cost reduction and dependability, these technologies give benefits in terms of increasing flexibility (reduction in new product development time) and increasing employees' morale. Sim (2001) investigated the impact of TQM, JIT and AMT on performance. Successive incremental technique could streamline the production process through the elimination of non-value added activities. On the other hand, capital investment in advanced manufacturing technology is often associated

with a 'quantum leap' in performance. Most of the studies have showed that management practices have a positive impact on firm's performance. However, some researchers found contradictory results. For example Dean and Snell (1996) found that JIT has no impact on firms' performance. The finding of Burgess et al. (1998) revealed that there is no significant relationship between soft technology (TQM, JIT, MRP) on sales and market shares. It is also surprising that Beaumont and Schroeder (1997) found that TQM increase the cost of quality. This may mean that the cost of correcting poor is made more explicit and tangible.

H_1: The higher the power to acquire the major resources the higher the firm's growth.

H_2: The higher the power to acquire the major resources the higher the firm's performance.

2.2. The Role of External Factors

Degree of Uncertainty. Spital (1992) argued that environmental uncertainty (caused by the rapid changes in product and process technology) resulted in differing competitive and technology strategies. In the environment in which there was high product technology dynamism, the firms tend to have a high level of investment in R&D, deep technical competence and followed a strategy of product innovation. In firms that had low product technology dynamism, the organizations had a lower level of investment in R&D, smaller breath of knowledge of product technology (as opposed to deep product technology know-how) and followed a strategy of product differentiation.

Moreover, in a more uncertain environment, firms were subjected to greater uncertainty, that either posed greater threats or provided opportunities. Firms with technology competencies and resources would be able to capitalize on these opportunities or were able to reduce these threats and outperformed its rival (Ellitan, 2003c, 2005b). When the environment was uncertain, and the environment changed rapidly and the customer needs fluctuated, the more innovative firms would get more benefit. Therefore, one can expect that the impact of resources on performance would be greater in a dynamic environment as opposed to a stable one. Thus, we proposed the following proposition.

H_3: The impact of firm's resources on firm's growth is greater in an uncertain economic environment, compared to a stable one.

Degree of Competition. Intensity of competitions refers to the degree of competition, degree of pressure and number of dimensions or sources of competition (Miller, 1988). Higher intensity of competition also reflects the keenness of competition market place (Badri et al., 2000). Technological innovation was needed more when the competition was more intense to achieve competitive advantage (Zahra & Covin, 1993). Thus, the more competitive the environment the greater the need to adopt new technology, managerial practices, and increase the competencies/capabilities and the firms were more likely to be more innovative. A competitive environment would open the windows of opportunities to exploit technology for greater returns to the more innovative and risk taker firms. In highly competitive environment, firms with competencies and capabilities would be able to overcome the pressures and threats. These firms would successfully differentiate themselves and perform better than its competitors, thus gaining competitive advantage. In sum, this study formulated the following proposition.

H_4: The impact of firm's resources on firm' growth is greater in a more competitive environment compared to the lower competitive one.

2.3. The Role of External Factors

Business Relationship. Chisea, Manzini and Tecilla (2000) argued that foreign owned and joint venture companies have a greater access to sources of technology and other resources. The greater the access to such sources of technology and other resources create greater opportunities for foreign and joint venture companies

to adopt more advanced technologies. It is also supported by the availability of skilled workers to operate the advanced technology in foreign and joint venture companies. In case of Indonesia, foreign and joint venture companies tend to adopt a higher level of AMTs compared to locally owned company (Ellitan, 2005). On the other hand, implementation of management practices is not significantly different between locally and foreign owned companies. It can be attributed to the nature of the modern management practices, which are easier to adopt and implement by locally owned companies.

Further, the level of AMT adoption also varies in terms of the extent of partnership. Companies having partnership with foreign counterparts tend to adopt more AMTs and implement new management practices. This phenomenon reflects that companies that have cooperative arrangement with foreign entities seem to be more proactive and have greater access to AMTs, new management practices, and other resources (skill workers, material, and capital) Schroeder and Sohal (1999).

H$_5$: The impact of firm's resources on firm' performance is higher due to business relationship.

Business Strategy. Critical resources have an important strategic potential in achieving competitive advantage (Wernerfelt, 1984; Grant, 1991; Russo & Fouts, 1997; Olala, 1999; Goldfrey & Gressen, 1999). In order to understand the relationship between resources and performance, we must consider an important aspect of the context in what situation technology and management practices are implemented, and the availability and the of other resources such as human resources, material resources and capital. Specifically, the impact of critical resources on performance depends on firms' choice of business strategy.

The role of critical resources in supporting the competitive advantage of firms is well recognized in classic management literatures such as Ansoff and Steward (1967), Kantrow (1980), Porter (1983) and Frohman (1985). For example, technology makes firms more profitable if it is managed well and if the technology strategy is formulated systematically (Ansoft & Steward, 1967). While, Kanthrow (1980) and Frohman (1985) argued that technology can create competitive advantage, if it is integrated into the firm's strategic planning. Further, Porter (1985) highlighted that technology has become the most important factor in expanding the market share.

In addition, the result of integrating critical resources into strategy can improve a company's list of priorities among technology options, identify the technical resources needed to achieve business goal, and to make the movement of ideas into products and processes faster (Buttler, 1988). This way, the company can also focus on the internal and external technological efforts. Frohman (1985) proposed a framework for incorporating resources issues into business strategy, which consists of the following: (1) to identify the distinctive competence of the companies, (2) to identify the technology that contributes or can contribute to business success, (3) to coordinate business goals and technological implications, and (4) to align organizational systems (people, technology, organization, external linkages, business policies, performance measurements, reward and budgets) for the implementations of the business strategy.

Schroeder et al. (1995) focused on the strategy-technology link. Importantly, they investigated the links between competitive business strategy and manufacturing technology of twenty SMEs. The study revealed that: (1) The strategic concept of strategy helps identify, assess and compare the type of technologies that are appropriate for competing within specific market environment (2) The appropriate technology adoption for firms within a given competitive situation are often dictated by customer demand and market forces. (3) The competitive advantage of technology can be exploited when technology is aligned with the firm's strategy. (4) The failure to adopt appropriate new technology or failure to align strategy to the new technology will weaken the competitive position of the firms.

The issue here is that critical resources must be viewed strategically, meaning they must be related to the whole strategic plan of the organization. There are two major points related to the resources-strategy connection:
1. Critical resources are enablers, and therefore they must fit in with the overall corporate strategy.
2. The performance will only materialize if there is a fit between the resources (technology adopted, management practices implemented, sourcing of capital, and of the labor/material) and the strategy.

Further, literature on resources based theory documented that the critical resources will produce sustainable competitive advantage when a company focus and put emphasize on diversification strategy (Barney, 1991; Harrison et al, 1991, Wernerfelt, 1984, Harrison, et al. 1993). The resources perspective provides a basis for addressing some key issues in the formulation of strategy for diversified firms, such as: 1. on which of the firm's current should diversification based be? 2. Which resources should be developed through diversification? 3. In what sequence and into what markets should diversification take place?

H_6: The impact of firm's resources on firm' performance is sensitive to business strategy.

Type of Ownership. The separation of ownership and control leads to an agency problem whereby management operates the firm aligning with their own interests, not those of shareholders (Jensen and Meckling 1976). This creates opportunities for managers to spend firm resources maximising their utilities rather than owners' utilities. Agency problem not only occurs in the conflict of interests between managers and owners, but also in broader conflict areas, such as shareholders through managers versus bondholders, and major (dominant) shareholders versus minor ones.

Principal-agent theory (Jensen and Meckling 1976) is widely used to explain why closely-held firms have better economic performance than do publicly owned firms. The theoretical framework tends to suggest that public enterprises are inefficient due to the fact that there is a lack of capital market discipline. Because of the lack of market monitoring, managers attempt to pursue their own interests at the expense of enterprises' interests. Thus, agency theory views that there is a relationship between controlling ownership and economic performance: the cost of monitoring makes private or closely-held firms economically more efficient than publicly -owned firms.

Recent research by Tandelilin et al. (2006) indicates type of ownership have a moderating variable function which induce different effect on performance. They classified the type ownerships into three types of ownerships: domestic private-owned enterprise, state-owned enterprise, and foreign-owned enterprise. Domestic private-owned represents concentrated ownership; state-owned enterprise represents perfectly dispersed ownership; and foreign-owned enterprise in emerging market represent reputable entity which have higher experience and technology in management practices and multinational business relationships than local entities. Foreign-owned enterprise also represents investment in emerging countries. They find that different types of ownership lead to different managerial behavior and firm's performance relationships. Parallel findings are also provided by Supriyatna (2006). He finds that foreign-owned enterprises have higher ability to control their resource which related with the firm's performance than local-owned enterprises.

The managers of state-owned enterprise may have many different incentives that are not aligned with those of taxpayers. These managers may maximize their wealth through several ways, including consumption of perquisites, leisure time and staff numbers. Shleifer and Vishny (1994; 1997) argue that the managers may also seek to advance their careers in political area by serving particular interest groups. The managers are less risk averse than shareholders who have managed their portfolio well. Therefore, managers will undertake less risk than is optimal from the taxpayers' point of view. In order to mitigate such opportunism, the managers may be given little autonomy.

Thus, owners who have higher power to control their resources will get more benefit to use the resources inline with their interest. In this conceptual framework, the firms with controlling ownership will increase the power effect of firm's resources s on firm's performance.

Based on the literature review related to the linkages amongst critical resources, business strategy, business partnership and controlling ownership, we formulate the following hypotheses:

H_7: More power in acquiring and controlling critical resources leads higher performance of the firm, especially due to controlling ownerships

2.4. The Relationship between Firm Performance and Firm Growth

Numerous variables influence firm's performance. However, this study focuses on the impact of critical resource on firm's performance. Swamidas and Newell (1987) described the difficulty in selecting performance measures. The appropriateness of the performance measurement used may depend on the circumstances and the uniqueness of the study (Badri et al. 2000). Measuring performance by comparing firm performance with average performance in industry, major competitor, and growth are frequently used as a perspective to measure firm's performance (Dess & Byard, 1984; Vickery et al. 1993). The use of growth has special appeal for previous research and this study due to the firms are faced with recession and increasing competition from abroad. Under these circumstances, growth provide a more rigorous test of performance rather than only measure the performance by comparing to average performance in industry or major competitor. Vickery et al. (1993) stated that there is interrelationship between firm's performance and firm's growth.   Thus, we propose the following hypothesis.

H_8:   There is causal inter-relationship between firm's performance and firm's growth.

3.   RESEARCH METHOD

This research involves an empirical study to examine the relationship between independent variables and the dependent variable. The independents variables are level of technology adoption, capital, human resources, material, and management practices, while the independent variables are firm performance and its growth. Degree of uncertainty, degree of competition, business relationships, business strategy and type of ownerships are treated as moderating variable. This study is conducted by distributing a set of structured questionnaires to the CEOs of large-scale manufacturing firms. Simple random sampling is used in this study in order to provide the least bias and offer most generalizability. The relationship amongst the variable are tested using simultaneous regression analysis.

3.1. Population and Sample

The unit of analysis is the organization. For this study, medium and large companies will be obtained from the Directory of Manufacturing Industry, published by Statistic Center Bureau (Indonesia). Classification of the sized of the firms was based on the number of employees: (1) firms with 10-99 employees are classified as small, (2) firms of 100-499 employees are classified as medium, and (3) firms over 500 employees are classified as large. This short of classification techniques was undertaken by past researchers such as Ko et al. (2000) as well as Cagliano and Spina (2000). Based on these criteria, the sample selected is the manufacturing firms with more than 100 full time employees (medium and large companies). Random sampling techniques will be used to provide the least bias and offer generalizability. Data will be collected through mail questionnaires to the organization's CEO.

3.2. Variables and Measures

Based on the theoretical framework (Figure1), variables developed in this research require a number of measures, which are adopted and/or modified from different sources.

Technology. Technology in this research refers to a family of advanced manufacturing technologies and computer-based technologies, which include 17 types of hard technology. Five point Likert type scales (1 = not adopted to 5 = very high) are used in order to measure level of adoption of hard technology, an instrument developed by Youseff (1993), Schroeder & Sohal (1999), Ko, Kinkade, Brown, (2000) are used.

Capital. Capital refers to the sourcing of funds. Sourcing of fund stems from bonds (long-term debt), stocks, hybrid financing and other sources of financing. This variable is measured by using semantic differential scale ranging from local market to international market sourcing.

Human Resource. Human resource refers to the staffs and workers of the company, which includes managerial staff, administrative staff, technician, clerical worker, specialist, and production workers. We measure the human resource variable from two perspectives. First perspective is seen from the level of skill and capabilities (low and high). Second perspective measurement is seen from the abundant-scarcity of the human resources. Five point semantic differential type scales (1 to 5) are used in order to measure the skills/capabilities and availability of human resource. An instrument developed by Badri el al. (2000) is used for the purpose of this study.

Material. We define material resources as the resources of the company which is needed in the production process. It involves raw material, utilities and supporting materials. Material resources is gauged the material resources from the perspective of the availability (abundant-scarcity) of materials. Five point semantic differential type scales (1 to 5) are used in order to measure the availability of material resource. An instrument developed by Ellitan et al. (2003; 2005) is used for the purpose of this study.

Management Practices. Management practices refers to the system, which control the technical processes within the organization such as Total Quality Management, Just In Time, Total Productive Maintenance, Manufacturing Resources Planning, Concurrent engineering, Quality Function Deployment, Team Work, and Benchmarking. TQM measure are obtained and modified from. A five-point Likert scale anchored by 1 (not practiced) to 5 (very high) is used to measure the level of soft technology adoption. The instrument are modified from, Warnock (1996), Yasin et al. (1997), Sohal and Terziovsky (2000), Schroeder and Sohal (1999), Ko, Kinkade, and Brown, (2000), Tsang and Chan (2000), and Hinton, Franciss, and Holloway (2000).

Degree of Uncertainty. Environmental uncertainty refers to the unpredictability of change in the environment (Dess and Beard, 1984). To measure the extent of environmental uncertainty, a modified version of the instrument used by Badri et al. (2000) is adopted and five point Likert scale ranging from 1 (unpredictable) to 5 (very predictable) is used. These items involve business cost, exchange rate, law and regulation, rate of innovation of new product, rate of change in the taste and preferences of customers. This study uses dummy variable to measure the degree of uncertainty, 1 for high uncertainty and 0 for others. The dummy variable is based on mean values of the items.

Degree of Competition. Khandawala (1972) considered price, product, and marketing or distribution channel as factor comprising the market competition. Cooper (1995) extended Khandawala (1972) model by incorporating other competition factors such as new entrants in the market, competitor strategies and actions, number of competitors and the strength of company market position. Based on these studies, the current study conceptualized the intensity of market competition consisting of price, new product development, marketing distribution channels, market share, competitors' actions, and number of competitor in the market. Five point Likert type scales (1 = very low to 5 = very high) are used in order to measure the market intensity or degree of competition. This study uses dummy variable to measure the degree of competition, 1 for high competition and 0 for others. The dummy variable is based on mean values of the items.

Business Relationship. The type of business relationship is categorized in two types, namely local partnership and international partnership. International partnership is a partnership with foreign entities, whereas local partnership is the partnership or cooperation with the local entities (Ellitan, 2005). Two dummy variables are used to measure the business relationship. D_{BR1} is 1 for international partnership in supplies affiliations and 0 for others. D_{BR2} is 1 for international partnership in demand affiliations and 0 for others.

Business Strategy. Business strategy is defined as the long term plan of action a company may pursue to achieve its goal (Zahra and Covin, 1993). Three business strategy dimensions are examined in this study: differentiation, cost leadership and focus. These dimensions are chosen for examination because they represent fundamental strategic choices that are meaningful in a wide variety of environmental setting (Oster, 1990). Cost strategy refers to the business strategy which put high emphasis to achieve overall cost leadership within its industry. Important component of this strategy include the aggressive construction of efficient-scale facilities, vigorous pursuit of cost reduction from experience, emphasis on operating efficiency, tight cost and overhead control, avoidance of marginal customer accounts, a and cost minimization in areas like R&D, sales force, advertising etc (Vickery et al., 1993). Five items are used to measure the emphasis on cost strategy e.g. level of capacity utilization Level of

operating efficiency, offering competitive price, emphasis on finding ways to reduce cost of production, emphasis on finding ways to reduce cost of production, and efficiency of the distribution channel. Differentiation strategy concerns to the high emphasis of the company to differentiate its product offering by creating a product that is recognized industry wide as being unique and which is able to command a premium price due to the uniqueness of its attribute(s). Company managers devote a great deal of attention to product differentiation although cost reduction is not ignored. The approach or approaches of the company uses for differentiating the products from others concerns with the need to manufacture products and services that confirm to the specification and customers' need (Vickery et al (1993). The literature suggests that differentiation strategy can be measured with through the offering abroad line of production, emphasis on new product development process, rate of new product introduction to market, number of new product offered, and superior product performance. Focus strategy is an emphasis on offering specialty products, Uniqueness of the product attributes Targeting a clearly identified segment offering product suitable for high price segments (Zahra and Covin, 1993). Measuring this variable, four items were designed accordingly. The instrument used to measure manufacturing strategy is adopted from Zahra and Covin (1993) and Vickery et al. (1993). Here, the respondents are asked to indicate the importance to statements on five point Likert's scale (1 = very low to 5 = very high).

Furthermore, these variables will be classified into three types of strategies; namely differentiation, cost leadership, and focus strategies. The classifications are based on comparison of mean value of each strategy (the highest value is considered as the dominant strategy implemented by the firm). Two dummy variables are used to measure the business relationship. D_{BS1} is 1 for differentiation strategy and 0 for others. D_{BS2} is 1 for cost leadership strategy and 0 for others.

Type of Ownership. In this study, the type of ownership is categorized in three types, namely state-owned enterprise, domestic private-owned enterprise, Foreign-owned enterprise. Domestic private-owned represents concentrated ownership; state-owned enterprise represents perfectly dispersed ownership; and foreign-owned enterprise in emerging market represent reputable entity which have higher experience and technology in management practices and multinational business relationships than local entities. Foreign-owned enterprise also represents investment in emerging countries.This category is adopted from Tandelilin el al. (2006).

Current Performance: This study looks at performance from two perspectives. First, the firm performance compared to the major competitor in industry and second, changes in performance, which is measured by comparing current performance with performance of the previous year. Firms' performance as measured by return on investment (ROI), return on assets (ROA), return on equity (ROE), and return on sales (ROS). Five-point Likert-like scale ranking from 1 (much lower) to 5 (much higher) is used to measure firm performance compared to average performance in industry. Five-point Likert-like scale ranking from 1 (much lower) to 5 (much higher) is used to measure firm performance compared to previous firm performance.

Growth. Growth represents the firm's ability to maintain their operation and survival in the long run periods. This study uses the medium trend of growth (the last three years) based on financial reports and non financial reports. Proxies of growth are measured by growth of sales and assets (Beaumont and Schroeder, 1997), and overall productivity delivery (Bond, 1999). Seven-point Likert-like scale, rating from 1 (decrease more than 10%) to 7 (increase more than 10%), is used to measure growth of firms. The growth measures used include sales, assets, and overall productivity.

3.3.Statistical Techniques

For the purpose of data analysis and hypothesis testing, several statistical tools and method were utilized from SPPS software, version 12 and EVIEWS software. These include:
1.   Validity and Reliability Analysis
2.   Descriptive statistic to describe the characteristic of respondents.
3.   Simultaneous Regression
4.   Multiple regressions to test the effects of firm's resources on firm's performance

5. A hierarchical regression to test the moderating effect of business strategy, environmental uncertainty, and degree of competition on the relationship between firm's resources and firm's performance.

4. ANALYSES AND FINDINGS

4.1. Response Rate

Table 1 summarizes the response rate for this survey. Twenty six companies were dropped from the target sample because twenty two of them have moved to unknown addresses and the other four companies refused to participate. In addition, 13 incomplete responses cannot be used for this study. Finally, a total of 57 responses were collected and used for the purpose of this study. The response rate of 11.40% can be considered to be reasonable given that the respondents were the CEOs or the top managers.

Table 1. The Questionnaires Distribution

Questionnaires were distributed.	500
Not delivered.	22
Refuse to participate	4
Returned and usable.	57
Returned but unusable.	13
Not returned.	404
Response rate.	12.00%
Rate of usable response.	11.40%

4.2. Respondents' Profiles

The profile of the sample revealed an interesting spread of Indonesian medium and large companies' characteristics. Majority (more than 69%) of the responding firms have less than 1500 full time employees, and only 8 companies (14) % are very large firms having in excess of 2500 full time employees. It is not surprising that about 91% of them have assets in excess of 25 million Rupiahs (1 USD equal to 12,000 Rupiahs). Most of them (84.2%) have been in existence for more than 10 years with only 15 companies (26.3 %) are relatively new (less than 10 years).

Eighteen point eight percent (28.1%) of the companies are in fabricated metal, machinery automotive and electronic industry, while also 28.1% in food, beverage and tobacco industry. Seventeen point five percent of the companies operated in rattan, bamboo, and furniture and handicraft industry. The smallest (5.3%) group came from non metallic and mineral industry.

In terms of ownership, approximately 72 % are Indonesian owned, while the remainders are either joint venture companies or totally foreign owned. However, locally owned companies do have some degree of alliances, with only 42% indicated that they do not have any cooperative arrangement with foreign entities. Given that the data was collected at the end of 2009 (during the global recession), it is not surprising that more than 60% of them have shown a decrease or stagnant in financial performance over the last three years.

4.3. Reliability and Validity Test

Table 2 summarizes the reliability and validity test of the measures. As shown, the Cronbach alphas of the measures were all comfortably above the lower limit of acceptability (Cronbach's` alpha > .60), and the range of all homogeneity items. Hence, all the measures were highly valid and reliable (See Appendices 1 and 2).

Table 2. Reliability and Validity Test

Variables	Number of Items in Questionnaire	Reliability	Item homogeneity
Advanced Manufacturing Technology	13	.9347	.619-.829**
Skill and Availability Human Resources	12	.8507 & 8294	.563-.758**
Material Resources	3	.8419	.839-.901**
Management Practices	11	.9104	.565-.835**
Cost leadership strategy	5	.8509	.727-.859**
Differentiation strategy	5	.8440	.724-.892**
Environmental uncertainty	10	.7627	.379-.683**
Degree of competition	6	.6754	.433-.698**
Type of ownership	4	.4833	.391-.724**
Firm's performance relative to major competitor	4	.8808	.822-.917**
Firm's performance relative to previous year	4	.8194	.779-.848**
Performance growth	4	.9407	.850-.967**

4.4. Firm's Resources and Performance

Hypothesis 1 examines the impact of firm's resources on firm's performance. To test this hypothesis, multiple regression analysis was done with the extent of hard and soft technology adopted as the independent variables and performance as the dependent variable. The results are summarized in Table 3.

Table 3. The Impact of the Firm's Resources on Performance.

Independent Variables	FPMC	FPPY	FPGR
R^2	.369	.245	.188
Adjusted R^2	.364	.239	.182
Sig. F	.000	.000	.000
Standardized Coefficients (β)			
AMT	.095**	.059	.134***
HRM	.011	.097	.290***
MR	.008	.157**	-.265***
MPRAC	.555***	.262***	.281***

*** : significant at 0.01   ** : significant at 0.05   * : Sig. at 0.1
Note:
AMT: Advanced Manufacturing Technology   MPRAC: Management Practices
MR: Material Resources   HRM: Human Resources Management
FPMC: Firm Performance compared to Major competitor
FPPY: Firm Performance compared to previous year.
FPGR: Firm Performance Growth

On the whole, the model shows that the independent variables, the firm's resources jointly explained 36.4% of the variance of firm's performance compared to major competitor, 23.9% of firm's performance compared to previous year, and 18.2% of firm's performance growth. All the models were significant at 1% level (Sig. F = .000).

Hypothesis 1 stated that, the higher the power to acquire the major resources the higher the firm's performance and Hypothesis 2 stated that the higher the power to acquire the major resources the higher he firm's growth. In other words, there is a positive relationship between firm's resources and firm's performance. It is shown with the positive value of standardized beta advanced manufacturing technologies, material resources, and management practices on firm's performance. It is also shown the positive value of standardized beta advanced manufacturing technologies, human resources, and management practices on firm's performance growth.

Findings from test of the two hypotheses can be summarized as follows:
1. Both Advanced Manufacturing Technologies and Management Practices have positive impact on firm's performance compared to major competitor. Advanced Manufacturing Technologies and Management Practices jointly are able to explain 36.4%, of variation in firm's performance compared to major competitor.
2. Both Material Resources and Management Practices have positive impact on firm's performance compared to previous year. Material Resources and Management Practices jointly are able to explain 23.9%, of variation in firm's performance compared to previous year.
3. Firm's resources in tandem explain firm's performance (compared to previous year) better rather than firm's compared to previous year and growth of performance.
4. There is negative impact of material resources on firm's growth. This result is inconsistent with previous studies.
   Based on the above findings, we conclude that the hypothesis 1 and 2 are partially accepted.

4.5. The Moderating Effect of the External Factors

The Moderating Effect of Environmental Uncertainty on Firm's Resources and Firm's Growth

Hypothesis 3 postulates that the impact of firm's resources and firm's growth is greater in uncertain environment compared to a stable one. In other words, the more dynamic the environment the higher the impact of firm's resources on firm's growth. A moderated regression analysis is utilized for testing this hypothesis. The results are given in Tables 4.

Table 4. summarizes the results of regression analysis to test the moderating effect of the environmental dynamism/uncertainty (ED) on the relationship between firm's resources and firm's growth. The addition of environmental dynamism and the interactions terms increase R^2 from 18.8% to 21.7%, and the F-change is significant at 5%. Furthermore, the standardized beta of interactions between environmental dynamism and human resources and management practices are found to be significant, indicating that environmental dynamism moderates the relationship between management practices and performance growth also between human resource and growth. Further our finding indicates that the impact of human resource on growth is greater in more uncertain environment but the impact of management practices on growth is greater in stable business environment. Our findings indicate that hypothesis 3 is partially accepted.

Table 4. The Moderating Effect of Environmental Dynamism on the Relationship between Firm's Resources and Firm's Growth

Variables	Step 1	Step 2	Step 3
	Standardized Beta		
AMT	.134***	.090*	-.116
AVHR	.290***	.277***	-.795**
AVMR	-.265***	-.249***	-.479
MPRAC	.281***	.270***	1.582***
ED		-.124***	-.256
AMTxED			.213
AVHRxED			1.164***
AVMRxED			.257
MPRACxED			-1.474***
R^2	.188	.201	.217
R^2 change	.188	.013	.059
F change	28.669	7.839	2.601
Sig. F change	.000	.005	.035

*** : significant at 0.01   **   : significant at 0.05   *   : significant at 0.1

The Moderating Effect of Degree of Competition on Firm's Resources and Firm's Growth

The fourth hypothesis in this study states that the impact of firm's on performance growth is greater in more hostile environment or highly competitive environment. Tables 5displays the result of the hierarchical regression analysis used to test this hypothesis.

Table 5. summarizes the regression results to test the moderating impact of environmental hostility or degree of competition (DOC) on the relationship between firm's resources and performance growth. This table clearly

shows that the introduction of degree of competition into the second step is not significant. However, the change in F-ratio and R^2 are significant with the introduction of the interaction terms. All the beta coefficients of the interaction terms are significant at 1% and 5% level. Thus, degree of competition moderates the impact AMT and performance growth and also the impact of management practices on performance growth. The impact of AMT on firm's growth is lower in more hostile environment. It is largely due in more hostile environment firms tend to be more risk averse thus they do not maximize the AMT implementation, thus the impact on performance growth is lower than in benign environment. On the other hand, the impact of management practices on firm's growth is greater in high competition. Regarding these findings, we conclude that hypothesis 4 is partially accepted.

Table 5. The Moderating Effect of Degree of Competition on the Relationship between Firm's Resources and Performance Growth

Variables	Step 1	Step 2	Step 3
	Standardized Beta		
AMT	.134***	.133***	1.200***
AVHR	.290***	.290***	-.416
AVMR	-.265***	-.265***	.487
MPRAC	.281***	.280***	-.984
DOC		-.003	-.553***
AMTxDOC			-1.054***
AVHRxDOC			.834*
AVMRxDOC			-.869
MPRACxDOC			1.444**
R^2	.188	.188	.225
R^2 change	.188	.000	.037
F change	28.669	.004	5.789
Sig. F change	.000	.952	.000
*** : significant at 0.01	** : significant at 0.05	* : significant at 0.1	

The Moderating Effect of Type Ownership on Firm's Resources and Firm's Performance

The hypothesis 5 in this study states that the impact firm's resources on firm's performance are higher due to the type of ownership or business relationship. Firms with more disperse ownership will get better performance. Tables 6 displays the result of the hierarchical regression analysis used to test this hypothesis.

Table 6 and 7 summarize the regression results to test the moderating impact of type of ownership on the relationship between firm's resources and firm's performance. Those tables clearly show that: Firstly for the model with Firm' performance compared to major competitor as dependent variable: (a). the introduction of type of into the second step is significant. Further, the change in F-ratio and R^2 are significant with the introduction of the interaction terms. (b). the interaction term between human resources and type of ownership is significant at 1% and the interaction term between material and type of ownership also significant at 1% level. However, the finding indicate that the impact of human resources on firm's performance compared to major competitor is greater when the ownership is more disperse, on the other hand the impact of material resources on performance is greater when the ownership is more concentrated. Thus, type of ownership moderates the impact human and material resources with firm's performance compared to major competitor in different way.

Table 6. The Moderating Effect of Type of Ownership on The Relationship Between Firm's Resources and Firm's Performance Compared to Major Competitor

Variables	Step 1	Step 2	Step 3
	Standardized Beta		
AMT	.095**	.137***	-.095
AVHR	.011	.029	-1.272***
AVMR	.008	-.004	1.307***
MPRAC	.555***	.550***	.934**
TOW		.155***	.132
AMTxTOW			.279
AVHRxTOW			1.490***
AVMRxTOW			-1.579***
MPRACxTOW			-.420
R^2	.369	.391	.427
R^2 change	.369	.022	.036
F change	72.353	17.626	7.651
Sig. F change	.000	.000	.000
*** : significant at 0.01 ** : significant at 0.05 * : significant at 0.1			

Secondly, for the model with Firm' performance compared to previous year as dependent variable: (a). the introduction of type of into the second step is not significant. Further, the change in F-ratio and R^2 are significant with the introduction of the interaction terms. (b). All beta coefficient of the interaction term between firm's resources and type of ownership are significant at 1%. However, the finding indicate that the impact of human resources and management practices on firm's performance compared to previous year is greater when the ownership is more disperse, on the other hand the impact of material resources and advanced manufacturing technology on performance is greater when the ownership is more concentrated. Thus, type of ownership moderates the impact firm's resources with firm's performance compared to major competitor in different way. Thus, the findings revealed that hypothesis 5 of this research is partially accepted.

Table 7. The Moderating Effect of Type of Ownership on The Relationship Between Firm's Resources and Firm's Performance Compared to Previous Year

Variables	Step 1	Step 2	Step 3
	Standardized Beta		
AMT	.059	.075	.889***
AVHR	.097	.104	-1.043***
AVMR	.157**	.152**	3.361***
MPRAC	.262***	.260***	-2.259***
TOW		.059	-.436***
AMTxTOW			-.781***
AVHRxTOW			1.436***
AVMRxTOW			-3.876***
MPRACxDOC			3.188***

R^2	.245	.240	.325
R^2 change	.245	.003	2.067
F change	40.094	2.067	16.575
Sig. F change	.000	.151	.000
*** : significant at 0.01	** : significant at 0.05	* : significant at 0.1	

4.6. The Moderating Effect of Business Strategy on the Relationship between Firm's Resources on Firm's Performance

Hypothesis 6 postulated that the relationship between the Firm's resources and performance is moderated by the business strategy. Hierarchical regression analysis was used to test the moderating effect of operation strategy on the relationship between firm's resources and firm's performance.

Moderating Effect of Cost Leadership Strategy

Tables 8 to 9 present the results of moderated regression analyzing the moderating effect of cost leadership strategy on the relationship between firm's resources and performance (compared to major competitor and compared to previous year. Table 4.15 displays the moderating role of cost leadership strategy (CS) on the relationship between firm's resources and firm's performance compared to major competitor. The R^2 change and the F-change from step 1 to 2 and from step 2 to 3 are significant, indicating that cost strategy does significantly influence the impact of firm's resources on firm's performance compared to major competitor. This is further supported by the fact that only interaction term between human resource and cost strategy which is not significant and the other three of the beta coefficient for interaction terms between firm's resources (AMT, Material, and Management Practices) are significant. This indicates that cost leadership strategy tend to moderate the impact of firm's resources on firm's performance compared to major competitor. In fact, cost strategy has a negative independent effect on firm performance. That is, the more the emphasis is placed on cost strategy the lower the firm's performance will be.

Table 8. The Moderating Effect of Cost Leadership Strategy (CLS) on The Relationship Between Firm's Resources and Firm's Performance Compared to Major Competitors.

Variables	Step 1	Step 2	Step 3
	Standardized Beta		
AMT	.095**	.079*	-.642***
AVHR	.011	-.024	.157
AVMR	.008	.102	1.094***
MPRAC	.555***	.539***	-.244
CLS		-.156***	-.341*
AMTxCLS			.906***
AVHRxCLS			-.361
AVMRxCLS			-1.475***
MPRACxCLS			1.165***
R^2	.369	.389	.456
R^2 change	.369	.020	.067
F change	72.353	16.219	15.170
Sig. F change	.000	.000	.000
*** : significant at 0.01	** : significant at 0.05	* : significant at 0.1	

Table 9 shows the moderating role of cost leadership strategy on the relationship between firm's resources and firm's performance compared to previous year. The R^2 change and the F-change are significant at 1% level with the introduction the interaction terms, indicating that cost leadership strategy significantly influences the impact of firm's resources on firm's performance compared to previous year. The significant beta coefficient for interaction between human resource and cost leadership strategy ($\beta = -3.902$) indicates that the impact of human resources on firm's performance differ by the degree of emphasis on cost leadership strategy. The higher the emphasis on cost leadership strategy the lower of the impact of human resources on firm's performance compared to previous year. On the other hand the impact of AMT, material resources, and management practice on firm's performance is greater when the firms put more emphasis on cost leadership strategy.

Table 9. The Moderating Effect of Cost Leadership Strategy on The Relationship Between Firm's Resources and Firm's Performance Compared to Previous Year

Variables	Step 1	Step 2	Step 3
	Standardized Beta		
AMT	.059	.056	-.720**
AVHR	.097	.091	2.429***
AVMR	.157**	.174	-1.473***
MPRAC	.262***	.259	-.216**
DS		-.029	.218**
AMTxDS			.925**
AVHRxDS			-3.902***
AVMRxDS			2.633***
MPRACxDS			.838***
R^2	.245	.245	.304
R^2 change	.245	.001	.059
F change	40.090	.457	10.345
Sig. F change	.000	.499	.000
*** : significant at 0.01	** : significant at 0.05	* : significant at 0.1	

The Moderating Effect of Differentiation Strategy on the Relationship between Firm's Resources and Firm's Performance

Tables 10 to 11 summarize the results of regression analyses on the moderating effect of differentiation strategy (DS) on the relationship between firm's resources and performance compared to major competitor and compared to previous year. Table 4.26 tabulates the results of hierarchical regression to test the moderating influence of differentiation strategy on the relationship between firm's resources and firm's performance compared to major competitor. The R^2 change and the F-change from step 1 to step 2 is not significant, indicating that delivery strategy doesn't have direct influence on firm's performance compared to their major competitors. On the other hand, the R^2 and F change from step 2 to 3 is not significant, indicating that the differentiation strategy significantly influence the relationship between firm's resources and firm's performance compared to major competitor. This is supported by the fact that all of the beta coefficients for the interaction terms are significant at 1% level. The significant beta coefficient for interaction between human resource and cost leadership strategy ($\beta = -4.810$) indicates that the impact of human resources on firm's performance differ by the degree of emphasis on differentiation strategy. The higher the emphasis on differentiation strategy the lower of the impact of human resources on firm's performance compared to major competitor. On the other hand the impact of AMT, material resources, and management practice on firm's performance is greater when the firms put more emphasis on differentiation strategy.

Table 10. The Moderating Effect of Differentiation Strategy on The Relationship Between Firm's Resources and Firm's Performance Major Competitor

Variables	Step 1	Step 2	Step 3
	Standardized Beta		
AMT	.095**	.098**	-.442***
AVHR	.011	.012	2.773***
AVMR	.008	.004	-1.206***
MPRAC	.555***	.566***	.412
DS		-.021	1.240***
AMTxDS			.799***
AVHRxDS			-4.810***
AVMRxDS			1.762***
MPRACxDS			-.442***
R^2	.369	.369	.487
R^2 change	.369	.000	.117
F change	72.353	.259	28.002
Sig. F change	.000	.611	.000
*** : significant at 0.01	** : significant at 0.05	* : significant at 0.1	

Table 11 displays the moderating role of differentiation strategy on the relationship between technology and firm's performance. The result of moderated regression shows that R^2 change and the F change from step 2 to 3 are significant at 1% level. The significance of standardized beta of the interaction between firm's resources and differentiation strategy at 1% level indicates that quality strategy moderates the relationship between firm's resources and firm's performance compared to previous year. The relationship between firm's resources, delivery strategy and firm's performance is illustrated as follows: (1) The impact of human resources and management practices on firm's performance is greater when the firm put less emphasis on differentiation strategy, and (2). The impact of AMT and material resources on firm's performance compared to pervious year is greater when the firms put more emphasis on differentiation strategy.

Table 11. The Moderating Effect of Differentiation Strategy on The Relationship Between Firm's Resources and Firm's Performance Compared to Previous Year

Variables	Step 1	Step 2	Step 3
	Standardized Beta		
AMT	.059	.067	-1.648**
AVHR	.097	.099	2.655**
AVMR	.157**	.148**	-1.752**
MPRAC	.262***	.289***	.684
DS		-.051	.328
AMTxDS			2.255***
AVHRxDS			-4.358***
AVMRxDS			2.850***
MPRACxDS			-.602***
R^2	.245	.247	.353

R^2 change	.245	.002	.107
F change	40.094	1.232	20.189
Sig. F change	.000	.268	.167
*** : significant at 0.01	** : significant at 0.05	* : significant at 0.1	

4.7. The Interrelationship between Firm's Performance and Growth.

Hypothesis 3 postulates that there is causal relationship between firm's performance and firm's growth. Correlation analysis is conducted to provide a description of inter-relationship amongst the dependent variables. Table 12 tabulates the result of correlation analysis between firm's performance and performance growth. It indicates that both firm's performance compared to major competitor and firm's performance compared to previous year are positively correlated performance growth. Thus, hypothesis seventh of this study is accepted.

Table 12. The Correlation between Firm's Performance and Performance Growth.

	Relative Performance to major competitor	Relative Performance to previous year	Growth
Relative Performance to major competitor	1	.535**	.485**
Relative Performance to previous year	.535**	1	.464**
Growth	.485**	.464**	1

5. DISCUSSION AND CONCLUSION

5.1. Implications of the Study

Several implications are advanced from the outcomes of this research. In Indonesia, there is a lack of empirical research in management of firm's resources. This study contributes to the development of a resources management theory by adding to the existing body of literature on the subject. It takes an important step in the direction of the empirical development. This study provides a brief description of the extent of resources acquisitions by large manufacturing companies in fast developing countries such as Indonesia.

This study suggests that for the Indonesian manufacturing firms to survive and to grow, they need not only to improve its production capacities but also technological capabilities. The process of acquiring the technological capabilities and technological learning is not simple and effortless. Developing and maintaining these capabilities require both conscious efforts by the organizations and also support from other institutions and government, in terms of partnership programmed and government policy that encourage technological development.

This study finds that firm's resources positively influence performance. Thus, Indonesian manufacturing firms should consider adopting more advanced manufacturing technology which is currently at low level. However, the lack of technological dynamism (the ability to adapt or upgrade technologies to cope with changing circumstances) inhibits the adoption process (Zulkiefflumansyah, 2001). Most of the firms in Indonesia are also technically inefficient in using the advanced technology. One of the main reasons for the technical inefficiency in using advanced technology in Indonesia is the misconception of technology adoption. Albu (1997) stated that In Indonesian, technology is still viewed as machines and devices which are independently able to stand alone in improving the business and operational performance without considering the complementary factors such as human resources (e.g. expertise and skilled workers) and social contexts (e.g. environment conditions, internal and external culture).

In the real world, the evidence shows that the effective adoption and mastery of technology require not just the establishment of new production facilities (e.g. ancillary manuals, charts, schedules, diagrams, and people), but also the knowledge and expertise for implementing technical change (Clarck, 1993). Therefore, in order to survive in the era of hyper competition, Indonesian manufacturing firms must cope with the complex process of technological learning. They should continuously choose, use, and master technology.

The success of new technology adoption and resources management also depend on top management (CEOs) support. CEOs must be ready to make sacrifices and accept failures as well as provide supports by committing visible fund and resources. CEOs also should understand factors that drive resource management. In the case of Indonesia, the following factors are found to be critical for the success of resources management: (1) top management (support and involvement); (2) culture (openness of innovation, participation, cross functional working system, open communication system); (3) strategy (technology sourcing, monitoring systems); (4) skill development (employee training and education); and (5) resources (availability of finance, material and technocrat). The studies by Harrison and Samson (1997) as well as Lefvebre et al. (1997) are consistent with our exploratory study which found that top management support and involvement are the most critical for the success of technology adoption.

The effects of firm's resources on performance depend on contextual factors such as environment and business strategies. Of greater significance is the contribution of this study in understanding the alignment of resources required to support business strategies in achieving performance. Furthermore, this study contributes significantly to the understanding of the resources–performance relationship in an environment of developing nations, which are just learning to adopt technology in its development process and one that is thrown into turmoil resulting from Asian financial collapse. What has been shown in the study is that past finding about resources and performance does not hold true in such a unique environment (one in which technology is in its infancy and environment is dynamic and hostile). The correct environmental consideration should be identified and should be a part of any resources management framework. Ignoring the environment effects in a strategic model of resource management is likely to result in failure of management and performance achievement.

Finally, research partnership between academician-business enterprises-and government should exist and be effective in order to support the success of resource management in Indonesian firms. The pooling of information, knowledge, and expertise within this network would be a platform to better understand the real problem of the industry. It is important to provide practical solution to the problems and eventually to formulate appropriate policies and strategy based on the real experiences.

5.2. Limitations of the Study

As in most studies, this study has a number of limitations i.e.:
1. Data were collected based on perceived, self-rating, multi-choice questionnaire. This approach is adequate to gather a large amount of data within limited time. It should be desirable to develop a longitudinal study, but it was entirely beyond the scope and the possibilities of the study.
2. The questionnaires were directed to CEOs, thus only CEOs responded as their perception of the extent of resources management, the emphasis on business strategy, the environment to be faced and the performance achieved. In this case, the potential mono-response bias might emerge. The limitation is whether manufacturing executives would response the same way, even on priorities that clearly within the manufacturing domain?
3. The nature of requested data in some cases was considered confidential. It could limit their participation in this study.
4. The choice of firm's resources as a research topic places limitation on this study, particularly in the area of sample selection, data availability, and data collection. The major sample selection at the manufacturing firms level is difficult to obtain because firms perception in terms of firm's resources, business strategy, environment, and performance, may not be the same, thus it is difficult to ascertain relevant sample characteristics.

5. This study was conducted in Indonesia only, so the finding of this study might not be generalized to other cultures or other countries.

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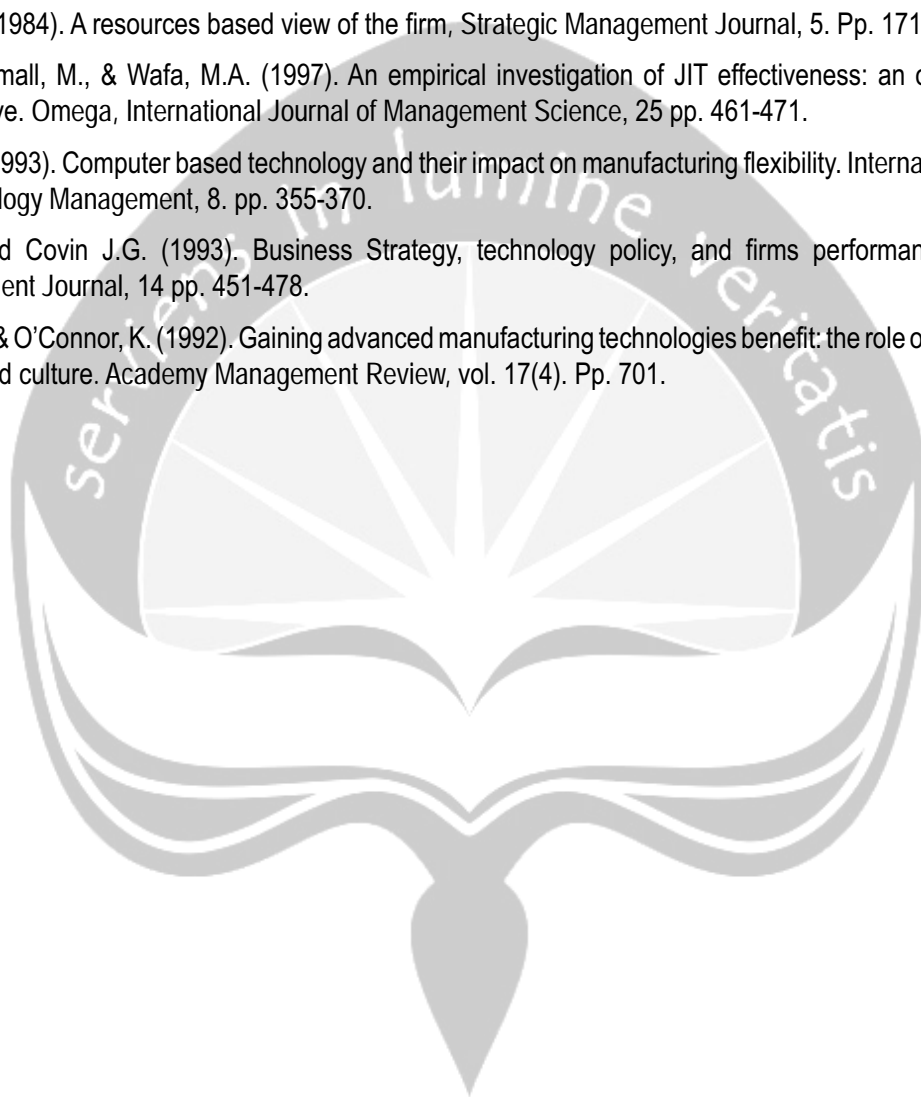
THE EFFECT OF CONSUMER CONFUSION PRONENESS ON WORD OF MOUTH, TRUST, AND CUSTOMER SATISFACTION

Malisa Rosadi
Universitas Atma Jaya Yogyakarta

Fandy Tjiptono
Universitas Atma Jaya Yogyakarta
Email: fandy.tjiptono@gmail.com

Abstract

High-tech products (such as smartphones, notebooks, and tablets) have been characterized as being increasingly similar between brands, having too many slightly different choices, and providing complex information. In buying these products, many consumers find it difficult to differentiate between brands, evaluate over alternatives, and make a good purchase decision. Such situation is known as consumer confusion phenomenon. Previous studies have revealed that consumer confusion is becoming a problem for both consumers and marketers. However, the topic still needs further examination, especially in the context of a developing country.

The present study aims to examine consumers' general tendency to become confused and its effect on word of mouth, trust and consumer satisfaction. The product context is smartphones, while the sample consists of 150 university students who had experiences in using or buying smartphones. Nine research hypotheses were tested using multiple regression analyses. The results indicate that only two of the three consumer confusion dimensions (i.e. similarity confusion and overload confusion) have significant negative impacts on word of mouth, trust and consumer satisfaction. The other dimension (i.e. ambiguity confusion) was found to have insignificant impacts on the three dependent variables.

Keywords: Consumer confusion, word of mouth, trust, consumer satisfaction, smartphone.

1. INTRODUCTION

Consumer confusion is a relatively new concept in marketing research (Matzler and Waiguny, 2005). It is not yet considered in well-established consumer behavior textbooks (Schweizer, Kotouc and Wagner, 2006) and the topic itself remains under researched (Walsh, Hennig-Thurau and Mitchell, 2007).

The increasing product proliferation, the growing adoption of product imitation strategies, and the increasing amounts of marketplace information make purchasing products, particularly high-tech products, very confusing (Leek and Kun, 2006). Many consumers are trapped in the so-called "tyranny of choice", where more choices make consumers suffering from making decisions efficiently (Schweizer, Kotouc and Wagner, 2006, p. 184). Reports of consumer confusion cases can be found in many countries (e.g. the US, the UK, Germany, France, Netherlands, China, South Korea, and India) and across several product categories (such as telecommunications, watches, washing powder, fashion, and private labels) (Walsh, Hennig-Thurau and Mitchell, 2007; Walsh and Mitchell, 2010).

Nevertheless, as noted by Leek and Kun (2006), the majority of consumer confusion research has focused on Western cultures, while only a few studies have examined the phenomenon in Eastern cultures. They argue that it is important to conduct a study in an Eastern culture to provide further understanding and validate the existing

findings. This research call provides a strong justification to the present study that aims to investigate the issue in the Indonesian context, particularly the Indonesian smartphone market.

The Indonesian smartphone market is a logical choice for examining consumer confusion. The Indonesian huge number of population (about 237 million people in 2010) and high economic growth (6.0% in 2010) has attracted many multinational companies to enter the country (Safra and Aguilar-Cauz, 2011). According to a report, in 2011 there were more than 240 million cellular phone subscribers in Indonesia (Firman and Sukirno, 2012), where smartphone usage and ownership have grown rapidly (Suling, 20 July 2010). For example, BlackBerry users increased from 1 million people in 2010 to 5 million people in 2011 and were predicted to reach 9.7 million people in 2015 (www.suarapembaruan.com, 3 January 2012).

The current study aims to replicate with some modifications Walsh and Mitchell's study (2010) which investigated the effect of consumer confusion proneness on word of mouth, trust, and customer satisfaction. Three dimensions of consumer confusion (i.e. similarity confusion, overload confusion and ambiguity confusion) were adopted since they have been validated in previous research (e.g. Leek and Kun, 2006; Walsh, Hennig-Thurau and Mitchell, 2007; Walsh and Mitchell, 2010). Specifically, the research question is: "how does consumer confusion proneness affect word of mouth, trust and customer satisfaction?"

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Defining consumer confusion

There have been several definitions of consumer confusion in the consumer behavior literature. Foxman, Berger and Cote (1992, p. 125), for instance, define consumer confusion as "one or more errors in inferential processing that lead a consumer to unknowingly form inaccurate beliefs about the attributes or performance of a less-known brand based on a more familiar brand's attributes or performance." This definition highlights that errors can happen in all stages of information processing. Similar emphasis was also found in another definition provided by Turnbull, Leek and Ying (2000, p. 145) who define it as "consumer failure to develop a correct interpretation of various facets of a product/service, during the information processing procedure. As a result this creates misunderstanding or misinterpretation of the market."

Schweizer, Kotouc and Wagner (2006, p. 185) define consumer confusion as "a result of a temporary exceedance of an individual capacity threshold for absorbing and processing environment stimuli". In other words, consumer confusion is believed to be an emotional state where consumers find it difficult to select and interpret stimuli, which in turn may lead to lower decision quality.

Furthermore, based on an extensive review of 52 definitions, Lakotta and Jacob (2008, p. 3) offer their own definition, where consumer confusion is defined as "difficulties for a decision-maker to compare, evaluate and rank options for a decision to be made." They state that the confusion is caused by product similarity, product complexity, marketplace information similarity, marketplace information complexity, and/or consumers' cognitive limitations.

In summary, all these definitions can be integrated into the concept of consumer confusion proneness formulated by Walsh, Hennig-Thurau and Mitchell (2007, p. 699). They view it as "a consumers' general tolerance for processing similarity, overload or ambiguity information, which negatively affects consumers' information processing and decision-making abilities". This conceptualization is adopted in the current study.

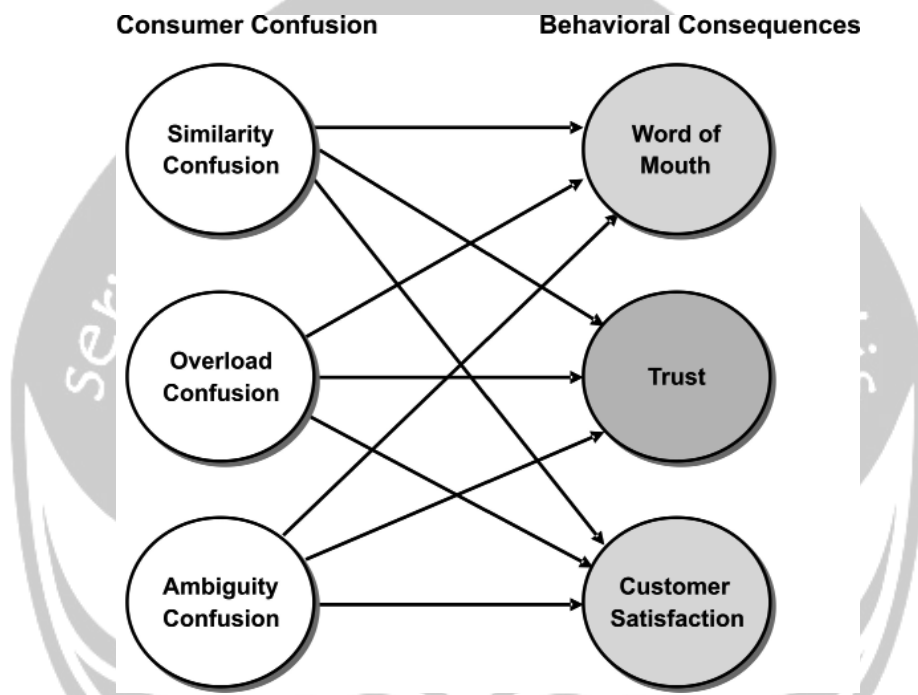### 2.2. Consumer confusion dimensions

Efforts have been made to operationalize the consumer confusion concept. Schweizer, Kotouc and Wagner (2006), for example, developed a 25-item and six-factor model to measure consumer confusion. They named the six factors as follows: stimuli variety, stimuli novelty, stimuli complexity, stimuli conflict, stimuli comfort, and stimuli reliability. However, to the best of our knowledge, their scale has not yet been further validated.

Another measure was provided by Walsh, Hennig-Thurau and Mitchell (2007). In their study of 264 German shoppers, these three marketing professors identified and validated three dimensions of consumer confusion

proneness, i.e. similarity confusion, overload confusion, and ambiguity confusion. In their subsequent study, Walsh and Mitchell (2010) further validated the scale and found that consumer confusion proneness has a significant impact on word of mouth, trust, and customer satisfaction. The following sub-section discusses the three dimensions and their impacts as the basis for the current study's hypothesis development.

2.3. Hypotheses development

Since the present research is a modified replication of Walsh and Mitchell's study (2010), the following hypotheses were adapted from the original study. Figure 1 summarizes the three dimensions of consumer confusion proneness and their behavioral consequences.

Source: Adapted from Walsh and Mitchell (2010)
Figure 1. Consumer Confusion Proneness and Its Behavioral Consequences

Similarity confusion

Similarity confusion is "consumers′ propensity to think that different products in a product category are visually and functionally similar" (Walsh, Hennig-Thurau and Mitchell, 2007, p. 702). This kind of confusion may occur due to decreasing inter-brand differences, increasing number of parity products and increasing number of 'me-too' products. Many manufacturers desperately seek for competitive advantages by developing minor differentiations and/or imitating market leaders' products or brands. As a result, consumers face an overchoice of similar products. The similarity can be in terms of the style and color of the name or packaging (Foxman, Berger and Cote, 1992).

In their study, Walsh and Mitchell (2010) postulated an insignificant impact of similarity confusion on word of mouth; however, their results indicated that the impact was significant negative. They offered two explanations for this finding. First, when consumers perceived products as being similar, they are more reluctant to offer word of mouth because the situation gives them less to talk about to their friends and family members. Second, similarity-prone consumers may find it embarrassing to admit their mistakes and inability to differentiate between brands. Therefore, hypothesis 1 can be formulated as follows:

H$_1$. Similarity confusion proneness has a significant negative impact on consumer word of mouth.

The attribution theory explains how people determine whether the cause for an action or an event resulted from something internal or external to him/herself or object in question (Schiffman and Kanuk, 2010). In general, people tend to credit him/herself for success (internal attribution) and blame others for product failure (external attribution) (Peter and Olson, 2010). Therefore, when they get confused with too many similar products within a product category, they will blame the company. The trust they have in the products and their manufacturers will lessen. In their research, Walsh and Mitchell (2010) indicated that similarity confusion has a negative impact on trust. Hence, hypothesis 2 can be stated as follows:

H$_2$. Similarity confusion proneness has a significant negative impact on consumer trust.

When consumers find it difficult to choose between brands or products, their overall (or macro) satisfaction will be decreasing. They have to spend more time, energy, and money to collect information, evaluate alternatives, and make decisions. Walsh and Mitchell (2010) found support for the negative impact of similarity confusion proneness on macro customer satisfaction. In line with this, hypothesis 3 can be postulated as follows:

H$_3$. Similarity confusion proneness has a significant negative impact on macro satisfaction.

Overload confusion

Overload confusion is "consumers' difficulty when confronted with more product information and alternatives than they can process in order to get to know, to compare and to comprehend alternatives" (Walsh, Hennig-Thurau and Mitchell, 2007, p. 704). When consumers are in such situation, they may engage in more communication with reference group members (e.g. family members, friends, and colleagues) to clarify some of the information they have and/or to work through some of their confusion. Support was found in Walsh and Mitchell's study (2010) that overload-prone consumers involve others in the purchase decision making to help them solve some of their overload confusion. Thus, hypothesis 4 can be stated as follows:

H$_4$. Overload confusion proneness has a significant positive impact on consumer word of mouth.

Information overload is a situation in which a consumer is presented with too much product- or brand-related information (Schiffman and Kanuk, 2010). Consumers may get confused in evaluating alternative brands and/or products. Consistent with external attribution theory, consumers tend to blame the companies for the complexity and difficulty to understand marketplace information provided to them and they will question the companies' motives. It will lead to the decreasing trust in the companies and their products. Despite Walsh and Mitchell's (2010) found no support for the relationship between overload confusion proneness and consumer trust, at least theoretically hypothesis 5 can be formulated as follows:

H$_5$. Overload confusion proneness has a significant negative impact on consumer trust.

Overload confusion makes consumers feel overwhelmed and dissatisfied, or choose not to make a choice at all (Huffman and Kahn, 1998). They may also blame the companies for their inability to process all the information. Walsh and Mitchell (2010) reveal that overload confusion has a negative impact on customer satisfaction because too much information can cause consumer anxiety, frustration, and stress that will lead to dissatisfaction. Consequently, hypothesis 6 can be proposed as follows:

H$_6$. Overload confusion proneness has a significant negative impact on macro satisfaction.

Ambiguity confusion

Ambiguity confusion is "consumers' tolerance for processing unclear, misleading, or ambiguous products, product-related information or advertisements" (Walsh, Hennig-Thurau and Mitchell, 2007, p. 705). In an earlier work, Mitchell, Walsh and Yamin (2005) used the term "unclarity confusion" to refer to this type of confusion. In general, ambiguity confusion may arise from four factors: technological complexity, ambiguous information/dubious product claims, conflicting information, and incorrect interpretation (Leek and Kun, 2006).

When consumers face multiple interpretations of product quality from different sources, they can get confused. Such confusion can be even more problematic if the information is conflicting and inconsistent with the consumer's prior beliefs and knowledge. To overcome the confusion, a consumer may seek support or help from important others (such as family members, friends, co-workers, experts, and so forth) to establish which information is more credible. Once they understand the ambiguity or conflicting information, they may share their new knowledge to others which in turn will increase their word of mouth (Walsh, Hennig-Thurau and Mitchell, 2007). In their study, Walsh and Mitchell (2010) found support for a significant positive impact of ambiguity confusion proneness on word of mouth. As a result, hypothesis 7 is formulated as follows:

H₇. Ambiguity confusion proneness has a significant positive impact on consumer word of mouth.

Inability to choose among many very similar products with ambiguous information about their differences may cause confusion and frustration which lead to purchase decision delay. Consumers are likely to take time to overcome some of their confusion. In addition to uncertain feeling, in some situations ambiguity is likely to cause consumers to suspect that the companies providing conflicting product information attempt to take advantage of them. As a result, ambiguity-prone consumers may have less trust in the companies and their products. Following the original formulation in Walsh and Mitchell (2010), hypothesis 8 is stated as follows:

H₈. Ambiguity confusion proneness has a significant negative impact on consumer trust.

Complex and ambiguous information is likely to cause consumers to be uncertain and anxious as to which information to believe. To reduce the ambiguity, consumers need extra time, efforts and sometimes money to obtain the needed additional information. Such extra processing will result in the reduction of consumers' satisfaction with the companies and products. As argued in Walsh and Mitchell (2010), this reasoning leads to the following hypothesis 9:

H₉. Ambiguity confusion proneness has a significant negative impact on macro satisfaction.

3. RESEARCH METHOD

3.1. Research context

A survey using self-administrative questionnaires was conducted to address the research question of interest. The research context of the present study is how consumer confusion proneness affects word of mouth, trust, and customer satisfaction. While most consumer confusion studies have been focused on the Western cultures context (with exceptions of Thailand, South Korea, China, and India), the present study investigates similar issue in the Indonesian context—one of the most populated countries in the world. The specific research procedures were modified and replicated from Walsh and Mitchell (2010) who studied consumer confusion proneness effects in Germany.

Nevertheless, the product context is different from the general unspecified product category investigated in Walsh and Mitchell (2010). The present study focuses on the Indonesian smartphone market. The specific product

was chosen to address to the research call recommended by Walsh, Hennig-Thurau and Mitchell (2007). They suggested a further study to test their consumer confusion proneness in a specific product context.

Another reason is that respondents are more likely to better understand the topic if a specific product (in this case, smartphones) is provided. Mass media has reported that the popularity of smartphones has grown rapidly in Indonesia (see for instance, Suling, 2010; www.suarapembaruan.com 3 January 2012; Firman and Sukirno, 2012). Although there is no generally accepted definition of the term 'smartphone', generally a smartphone is "a phone that has extra functionality and advanced application so that it is almost like a small computer or more of a mini portable computer" (www.smartphonebasics.com, accessed on 12 January 2012; see Figure 2 for examples of smartphones). The ever growing features, applications, and operating systems of smartphones may cause consumers to be confused as to which brand to choose. Therefore, it is a relevant and appropriate context for studying consumer confusion.

Source: Sunny (2011)

Figure 2. Examples of Smartphones

3.2 Sample and sampling methods

While Walsh and Mitchell (2010) used 355 German shoppers in a major northern German city as their samples, the present study focuses on university students in the Daerah Istimewa Yogyakarta (DIY). Student samples were used because smartphone users in Indonesia are mostly those who aged between 18 to 24 years—university students (Firman, 2010). A combination of convenience sampling and purposive sampling was used to select the sample of university students in DIY in order to examine the hypotheses stated in the present study. The criterion used for the purposive sampling was university students who used and/or owned a smartphone. This resulted in 150 university students participated in the survey.

3.3 Data collection

A structured questionnaire was used as the research instrument in this study. It consists of three parts. The first part was used to identify the respondent profiles in terms of their gender, university, and smartphone ownership.

The second part measuring consumer confusion proneness was adapted from Walsh, Hennig-Thurau and Mitchell's (2007) scale. Respondents were asked to indicate the degree of their agreement with the three similarity confusion proneness statements, four overload confusion proneness statements, and five ambiguous confusion proneness statements on a 5-point Likert scale (ranging from 1 = "strongly disagree" to 5 = "strongly agree"). It is important to note that the questionnaire items were adapted from a general unspecified product category context into the smartphone context. For example, the original statement of "Products such as CD players or VCR often have so many features that a comparison of different brands is barely possible" was adjusted to "Smartphones often have so many features that a comparison of different brands is barely possible".

In the final section, respondents were asked to evaluate their levels of trust, satisfaction, and word of mouth. These three behavioral consequences of consumer confusion proneness were adapted from Walsh and Mitchell (2010) and consisted of six word of mouth statements, three trust statements, and one satisfaction statement. A 5-point Likert scale (1 = "strongly disagree", 5 = "strongly agree") was used for all statements.

4. ANALYSIS AND DISCUSSION

4.1. Profiles of the respondents

There were 200 questionnaires distributed at four major universities in the Daerah Istimewa Yogyakarta, i.e. Universitas Atma Jaya Yogyakarta (UAJY), Universitas Pembangunan Nasional (UPN), Universitas Sanata Dharma (USD), and Universitas Kristen Duta Wacana (UKDW). However, only 150 of them were returned and complete (a response rate of 75%). These 150 questionnaires were used for the analysis.

Respondent profiles are summarized in Table 1. It can be observed that female and male respondents were almost equal (50.67% and 49.33%, respectively). UAJY students were dominant (59.33%), followed by UPN students (21.33%), UKDW (12%), and USD (7.33%).

It is apparent from Table 1 that all respondents had smartphones. BlackBerry, Nokia, and Samsung were the top three, followed by iPhone, Sony, LG, and other brands. It is slightly different from the five most widely used smartphone brands in Indonesia based on the Nielsen survey (cited in Karina, 2011): Nokia 41%, Blackberry 21%, Samsung 9%, Nexian 7%, and Sony Ericsson 7% (Karina, 2011).

Table 1. Profiles of Respondents

Description	Number	Percentage (%)
Gender		
Male	74	49.33
Female	76	50.67
University		
Universitas Atma Jaya Yogyakarta (UAJY)	89	59.33
Universitas Pembangunan Nasional (UPN)	32	21.33
Universitas Sanata Dharma (USD)	11	7.33
Universitas Kristen Duta Wacana (UKDW)	18	12
Smartphone Ownership		
Blackberry	86	57.33
Nokia	21	14
Samsung	20	13.33
iPhone	11	7.33
Sony	5	3.33
LG	4	2.67
Beyond	1	0.67
HTC	1	0.67
Motorola	1	0.67

4.2. Reliability and validity of the multiple-item measures

Reliability and validity tests were conducted using Cronbach's alpha and item-to-total correlations (refer to Table 2). All multiple-item measures had good reliability, with Cronbach's alphas larger than 0.60 (Hair, et al., 2009). Similarly, good validity was found for all measurement items, with item-to-total correlations larger than 0.16 (r-$_{table}$ value for α = 0.05 and degree of freedom = 148). Therefore, it can be concluded that all measures used in the present study are reliable and valid.

Table 2. Reliability and Validity of the Multiple-Item Measures

Variable	Item	Cronbach's Alpha	Item-to-Total Correlation	Conclusion
Similarity Confusion Proneness	SC_1	0.772	0.656	Reliable and Valid
	SC_2		0.586	
	SC_3		0.579	
Overload Confusion Proneness	OC_1	0.750	0.521	Reliable and Valid
	OC_2		0.677	
	OC_3		0.499	
	OC_4		0.493	
Ambiguity Confusion Proneness	AC_1	0.627	0.287	Reliable and Valid
	AC_2		0.438	
	AC_3		0.333	
	AC_4		0.433	
	AC_5		0.408	
Word of Mouth	WOM_1	0.830	0.496	Reliable and Valid
	WOM_2		0.678	
	WOM_3		0.592	
	WOM_4		0.586	
	WOM_5		0.628	
	WOM_6		0.636	
Trust	T_1	0.726	0.584	Reliable and Valid
	T_2		0.698	
	T_3		0.388	

Notes: The cut-off rate for Cronbach's alpha is 0.6 (Hair, et al., 2009).

r-$_{table}$ value (α = 0.05 and degree of freedom = 148) is 0.16.

Consumer satisfaction is a single-item measure, so it does not need reliability and validity tests.

4.3 Behavioral effects of consumer confusion proneness

The effects of consumer confusion proneness on word of mouth, trust, and customer satisfaction were examined through three multiple regressions. The three dimensions of consumer confusion proneness (i.e. similarity confusion, overload confusion, and ambiguity confusion) were treated as the independent variables in the three regressions, while each of the behavioural consequences (word of mouth, trust, and customer satisfaction) was used as the dependent variable in each regression, respectively. Table 3 summarizes the multiple regression results.

As predicted by H_1, a significant negative effect was found (β = -0.218, = 0.071). It suggests that high degrees of perceived similarity confusion proneness are associated with low levels of word of mouth, and vice versa. Supporting H_2, the effect of similarity confusion proneness on consumer trust was negative and significant (β = -0.229, = 0.052). Consumer trust in a product and its manufacturer will lessen when consumers perceive a high degree of similarity confusion, and vice versa. Meanwhile, H_3 postulated that similarity confusion proneness has a significant negative impact on macro satisfaction. A significant negative effect was found (β = -0.282, = 0.009). Hence, H_3 is supported.

Table 3. Behavioral Consequences of Consumer Confusion Proneness Dimensions

Dependent Variable	Independent Variable	Standardized Beta	t		Adj. R Square	F	
			Value	Sig.		Value	Sig.
Word of mouth	Similarity Confusion	-0.218	-1.820	0.071*	0.233	16.047	.000***
	Overload Confusion	-0.366	-3.192	0.002***			
	Ambiguity Confusion	0.71	0.655	0.514			
Trust	Similarity Confusion	-0.229	-1.956	0.052*	0.269	19.312	.000***
	Overload Confusion	-0.401	-3.583	0.000***			
	Ambiguity Confusion	0.083	0.783	0.435			
Customer Satisfaction	Similarity Confusion	-0.282	-2.650	0.009***	0.395	33.464	.000***
	Overload Confusion	-0.426	-4.187	0.000***			
	Ambiguity Confusion	0.035	0.362	0.718			

Notes: *** significant at α = 0.01
* significant at α = 0.1

The current research has found that overload confusion proneness has a significant negative effect on word of mouth (β = -0.366, = 0.002). However, this contradicts the hypothesized positive impact. As a result, H_4 was not supported.

Consistent with H_5, overload confusion proneness was found to have a significant negative impact on consumer trust (β = -0.401, = 0.000). Support was also found for H_6, in which higher overload confusion proneness was associated with lower macro satisfaction (β = -0.426, = 0.000), and vice versa.

However, no significant effects of ambiguity confusion proneness on word of mouth ($\beta = 0.71$, $= 0.514$), trust ($\beta = 0.083$, $= 0.435$), and customer satisfaction ($\beta = 0.035$, $= 0.718$) were found. Hence, so H_7, H_8, and H_9 were not supported.

Table 4 presents the summary of hypothesis testing results. Overall, five of the nine hypotheses were supported (i.e. H_1, H_2, H_3, H_5, and H_6).

Table 4. A Summary of Hypothesis Testing Results

	Hypothesis	Result
H_1	Similarity confusion proneness has a significant negative impact on consumer word of mouth.	Supported
H_2	Similarity confusion proneness has a significant negative impact on consumer trust.	Supported
H_3	Similarity confusion proneness has a significant negative impact on macro satisfaction.	Supported
H_4	Overload confusion proneness has a significant positive impact on consumer word of mouth.	Not Supported
H_5	Overload confusion proneness has a significant negative impact on consumer trust.	Supported
H_6	Overload confusion proneness has a significant negative impact on macro satisfaction.	Supported
H_7	Ambiguity confusion proneness has a significant positive impact on consumer word of mouth.	Not Supported
H_8	Ambiguity confusion proneness has a significant negative impact on consumer trust.	Not Supported
H_9	Ambiguity confusion proneness has a significant negative impact on macro satisfaction.	Not Supported

4.4. Discussion

Choosing a smartphone might be confusing for many consumers. The rapid technology changes have contributed to the availability of so many smartphone brands with slightly different features, styles, designs, and operating systems. However, the present study found that the average scores of similarity confusion proneness, overload confusion proneness, and ambiguity confusion proneness were 3.11, 3.21 and 3.22 in a 5-point Likert scales, respectively. It may suggest that the degree of consumer confusion proneness among the student samples was close to neutral. It may be the case that even though they were confused when confronted with similar, overload, and/or ambiguous information, they relied on their friends as to which brands and types of smartphones to purchase. Previous study in the area of peer influence has suggested that peer groups are highly influential in young adults' products purchase decisions (Makgosa and Mohube, 2007; Lingga and Tjiptono, 2011).

The present study provided support for five of the nine hypotheses formulated in Walsh and Mitchell (2010). It is found that similarity confusion proneness is negatively associated with word of mouth, trust, and customer satisfaction (H_1, H_2, and H_3 being supported). This finding is in line with Walsh and Mitchell's study (2010). Overload confusion proneness was found to have a negative impact on consumer trust (H_5) and customer satisfaction (H_6).

Nevertheless, the present study failed to support four hypotheses. Ambiguity confusion proneness had no effect on word of mouth (H_7), trust (H_8), and customer satisfaction (H_9). It raises a question about the appropriateness of this dimension of consumer confusion proneness. In their study, Walsh and Mitchell (2010) found no support for the impact of ambiguity confusion proneness on customer satisfaction (H_9), and an unexpected positive impact on trust (H_8). Further research is needed to clarify this issue.

The present study also found that overload confusion proneness had a negative impact (instead of the predicted positive effect) on word of mouth. It may suggest that overload-prone consumers did not involve others in their smartphone buying decision. Hence H_4 was not supported.

Furthermore, a comparison between the research findings of and the present research is presented in Table 5. Both studies found support for the behavioural consequences of similarity confusion proneness. The negative impact of overload confusion proneness on customer satisfaction was also consistent in both researches. The two studies also found insignificant effect of ambiguity confusion proneness on customer satisfaction.

However, both studies provided different results for the effects of overload confusion proneness and ambiguity confusion proneness on word of mouth and trust. A plausible explanation for these differences may lie in the different samples (non-student samples in Walsh and Mitchell's study (2010) versus student samples in the present research), different product contexts (general and unspecified product category versus smartphones), and different cultures (German low context culture versus Indonesian high context culture).

Table 5. A Comparison between Previous and Present Research Findings

	Hypothesized Effects	Previous Research (Walsh and Mitchell, 2010)		Present Research	
		Results	Effects	Results	Effects
H_1	Negative effect of similarity confusion proneness on word of mouth	Significant	Negative	Significant	Negative
H_2	Negative effect of similarity confusion proneness on trust	Significant	Negative	Significant	Negative
H_3	Negative effect of similarity confusion proneness on customer satisfaction	Significant	Negative	Significant	Negative
H_4	Positive effect of overload confusion proneness on word of mouth	Significant	Positive	Significant	Negative
H_5	Negative effect of overload confusion proneness on trust	Insignificant	-----	Significant	Negative
H_6	Negative effect of overload confusion proneness on customer satisfaction	Significant	Negative	Significant	Negative
H_7	Positive effect of ambiguity confusion proneness on word of mouth	Significant	Positive	Insignificant	-----
H_8	Negative effect of ambiguity confusion proneness on trust	Significant	Positive	Insignificant	-----
H_9	Negative effect of ambiguity confusion proneness on customer satisfaction	Insignificant	-----	Insignificant	-----

5. CONCLUSION, LIMITATIONS, AND FUTURE RESEARCH

5.1. Conclusion

The present study has addressed the issue of how consumer confusion proneness affects word of mouth, trust, and customer satisfaction in the Indonesian smartphone market. Nine hypotheses were tested, but only five of them were supported. Overall findings indicate that similarity confusion proneness has a negative effect on word of mouth, trust, and customer satisfaction. Overload confusion proneness was also found to be negatively associated with word of mouth, trust, and customer satisfaction. However, it is found that ambiguity confusion proneness has no effect on the three behavioral consequences (word of mouth, trust, and customer satisfaction).

This study contributes to the understanding of the behavioral consequences of the three dimensions of consumer confusion proneness in the Indonesian smartphone market. It has answered the research call put forward by Leek and Kun (2006), Walsh, Hennig-Thurau and Mitchell (2007), and Walsh and Mitchell (2010) who recommended similar studies in a different cultural context.

5.2. Limitations and Future Research

Despite its contribution, the present study has some limitations. First, the results may have limited generalizability due to the usage of student samples and non-probability sampling methods. Second, the geographical scope (only in Daerah Istimewa Yogyakarta) and the product context (smartphones) may also limit its generalizability. Third, the current study provides only a partial support for the nine hypotheses formulated in Walsh and Mitchell's study (2010). An issue of interest is that one of the three dimensions of consumer confusion proneness (i.e. ambiguity confusion proneness) was found to be an insignificant predictor of word of mouth, trust, and customer satisfaction.

Furthermore, it is both interesting and important to investigate whether different research contexts (i.e., cultural settings, product choices, and sample composition) might contribute to divergent empirical findings. Therefore, more studies are needed to enrich the understanding of the dimensions of consumer confusion proneness and their behavioral consequences.

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MONEY NEXUS ANTARA PERKEMBANGAN FUNGSI UANG DAN DAMPAKNYA TERHADAP INFLASI DI INDONESIA

Rudy Badrudin
Sekolah Tinggi Ilmu Ekonomi YKPN Yogyakarta
E-mail: rudy.badrudin@stieykpn.ac.id

Abstract

This research was discussed about the relationship between the development of the function of money from the stage of barter between two commodities, which are C and C′ and then become C-M-C′, when the money once introduced. M - C - M′ happened when the businessman utilize the money (M) to produce commodity C, that will be sell to generate more money (M′). Last, the trading process of M - M′ that shown the capital or financial market, just like the money or security market. The development of the function of money was shown by the changes of the money supply that weigh by the inflation. Based on the data on 1990-2011 using the Anova and regression analysis, it is known that there were a difference between the currency money supply, demand deposits, and quasi money in Indonesia; The currency money supply didn't have significantly positive effect on the inflation in Indonesia; The demand deposits didn't have positive effect on the inflation in Indonesia; and the quasi money have positive effect on the inflation in Indonesia.

Keywords**:** money nexus, currency money, demand deposits, quasi money, inflation rate

1.   PENDAHULUAN

Mark (2007:64), menjelaskan peran evolusioner uang mulai dari barter antara dua komoditas, yaitu C dan C' hingga menjadi C – M – C', ketika uang mulai diperkenalkan. Pada kondisi ini, uang merepresentasikan sebagai medium pertukaran antara dua komoditas, artinya dari kegiatan proses produksi ketika berupa bahan baku (C) menjadi produk akhir (C') uang dipertukarkan beberapa kali. Dengan kata lain, pada kondisi ini fokus sistem kapitalisme adalah pada produksi barang dan jasa dan fungsi uang hanya sebagai medium pertukaran. Kemudian, pada tahap berikutnya dikenalkan peran uang terbaru, yaitu M – C – M', artinya pengusaha menggunakan uang (M) untuk menghasilkan komoditas C yang pada gilirannya dijual untuk mendapatkan lebih banyak uang M'. Dengan memfokuskan pada uang sebagai awal dan akhir aktivitas pengusaha, maka sangat mudah bagi pengusaha untuk menyimpang dari tujuan awal menghasilkan dan mempertukarkan barang, karena tujuannya bukan lagi C tetapi M. Terakhir, sistem pasar yang menunjukkan bahwa komoditas (barang dan jasa) tidak ada sama sekali karena proses pertukarannya M – M'. Tahap akhir tersebut mencerminkan pasar kapital atau finansial, seperti pasar uang dan sekuritas. Dalam lingkungan ini, pelaku bisnis sering kali melupakan tujuan sistem ekonomi -memproduksi barang dan jasa- dan berkonsentrasi hanya pada mendapatkan uang melalui teknik perdagangan berjangka.

Perkembangan evolusioner peran uang di Indonesia telah mengakibatkan perubahan jumlah uang beredar (Gulo, 2008). Jumlah uang beredar terdiri atas uang kartal dan uang giral atau disebut dengan jumlah uang beredar dalam arti sempit dan sering ditulis dengan istilah M_1. Jumlah uang beredar yang terdiri atas uang kartal, uang giral, dan uang kuasi disebut dengan jumlah uang beredar dalam arti luas dan sering ditulis dengan istilah M_2. Dengan demikian, jumlah uang beredar M_2 merupakan penjumlahan M_1 dan uang kuasi. Di Indonesia, pengertian jumlah uang beredar dalam arti luas menunjukkan posisi likuiditas perekonomian Indonesia (Bank Indonesia, 2011:242). Menurut Wasiaturrahma, kebijakan moneter dapat dilakukan dengan menggunakan instrumen jumlah uang beredar dan kebijakan suku bunga. Menurut penelitian Zulverdi et al (2000), jumlah uang beredar berpengaruh signifikan

terhadap inflasi, sedang penelitian Andrianus dan Amelia Niko (2006) menunjukkan bahwa jumlah uang beredar berpengaruh tidak signifikan terhadap inflasi. Penelitian Bank Indonesia (2008) selama periode pengamatan (2002-2007) menunjukkan bahwa sumbangan rata-rata komponen inflasi non inti terhadap laju inflasi Indeks Harga Konsumen (IHK) di Jawa Tengah mencapai 59,90%, sedangkan sumbangan komponen inflasi inti sebesar 40,10%. Artinya, laju inflasi di Jawa Tengah lebih besar dipengaruhi oleh komponen inflasi non inti dibandingkan komponen inflasi inti, meskipun angka perbedaan tersebut relatif proporsional. Tulisan ini membahas perkembangan fungsi uang dari tahap (C – M – C'), (M – C – M'), (M – M'), dan dampaknya terhadap inflasi di Indonesia.

2. KAJIAN TEORITIS DAN RISET TERKAIT

Perkembangan perekonomian dari waktu ke waktu dapat dijelaskan dengan menggunakan Circular Flow Diagram yang ditemukan Francois Quesnay yang menjelaskan "siapa", "bagaimana", dan "di mana" tentang aktivitas ekonomi yang dilakukan (Pressman, 2000:18-24). Kata "siapa" menunjukkan bahwa dalam aktivitas ekonomi ada pelaku yang menjalankan aktivitas ekonomi tersebut, misalnya sektor rumahtangga dan sektor perusahaan. Kata "bagaimana" menunjukkan bahwa masing-masing pelaku ekonomi tersebut menjalankan aktivitas ekonomi yang disebut dengan konsumsi untuk sektor rumahtangga dan produksi untuk sektor perusahaan. Kata "di mana" menunjukkan bahwa masing-masing pelaku ekonomi rumahtangga dan perusahaan dalam menjalankan aktivitas ekonomi konsumsi dan produksi berada dalam suatu tempat yang disebut dengan pasar input dan pasar output.

Perkembangan aktivitas ekonomi yang sangat cepat ditimbulkan oleh berkembangnya peradaban manusia. Perkembangan peradaban manusia ini diiringi dengan berkembangnya kebutuhan manusia. Untuk memenuhi kebutuhannya, seseorang hampir tidak mungkin dapat memenuhi kebutuhannya sendiri tetapi harus melakukan hubungan dengan orang lain. Oleh karena itu, diperlukan pertukaran barang/jasa yang bernilai antarorang agar masing-masing kebutuhannya dapat dipenuhi. Pertukaran faktor produksi di pasar input maupun barang/jasa di pasar output dapat dilakukan dengan cara barter maupun menggunakan alat pembayaran yang disebut uang.

Uang merupakan bagian integral dari kehidupan manusia sehari-hari. Bahkan ada yang berpendapat bahwa uang merupakan darahnya perekonomian, karena di dalam masyararakat modern dewasa ini, di mana mekanisme perekonomian berdasarkan lalu lintas barang dan jasa, semua kegiatan ekonomi tersebut akan memerlukan uang sebagai alat pelancar guna mencapai tujuannya. Oleh karena itu, terwujudlah suatu arus uang yang disebut sebagai peredaran/sirkulasi uang, di mana uang akan beredar, terus berpindah tangan, dan bertambah sesuai dengan berkembangnya kegiatan ekonomi. Apabila jumlah uang yang beredar (JUB) melebihi jumlah uang yang dibutuhkan pelaku ekonomi untuk bertransaksi maka nilai uang akan turun dan dengan demikian harga produk akan semakin mahal. Hal ini disebut dengan inflasi. Dengan demikian, penting untuk mengatur peredaran jumlah uang beredar agar inflasi dapat dikendalikan. Berikut disajikan Tabel 1 tentang jumlah uang beredar dan inflasi di Indonesia dari tahun 1990 sampai dengan 2011.

Berdasarkan Tabel 1, nampak jumlah absolut uang kartal, uang giral, uang kuasi dari tahun 1990 sampai dengan 2011 mengalami kenaikan, sedang jumlah relatif uang kartal dan uang giral mengalami fluktuasi pada periode tersebut mengingat jenis dan kegunaan uang kartal dan uang giral yang berbeda. Tingkat inflasi selama kurun waktu 1990 sampai dengan 2011 juga mengalami fluktuasi. Tingkat inflasi tertinggi terjadi pada tahun 1998 sebesar 77,63% ketika terjadi krisis moneter pada tahun 1998. Selanjutnya pada tahun 2005 tingkat inflasi sebesar 17,11% akibat kenaikan harga Bahan Bakar Minyak (BBM).

Tabel 1. Perkembangan Jumlah Uang Beredar dan Inflasi di Indonesia, Tahun 1990-2011

Tahun	JUB dalam Arti Luas (M2) M1 + Uang Kuasi (Rpmilyar)						Inflasi (%)
	JUB Dalam Arti Sempit (M1) UK + UG (Rpmilyar)				M1	Uang Kuasi (Rpmilyar)	
	Uang Kartal (UK)		Uang Giral (UG)				
1990	9,094	38.18%	14,725	61.82%	23,819	60,811	9.53
1991	9,346	35.48%	16,996	64.52%	26,342	72,717	9.52
1992	11,478	39.88%	17,301	60.12%	28,779	90,274	4.94
1993	14,431	38.96%	22,605	61.04%	37,036	108,563	9.77
1994	18,634	41.07%	26,740	58.93%	45,374	129,138	9.24
1995	21,468	40.25%	31,871	59.75%	53,339	169,961	8.64
1996	22,487	35.09%	41,602	64.91%	64,089	224,543	6.47
1997	28,424	36.28%	49,919	63.72%	78,343	277,300	11.05
1998	41,394	40.90%	59,803	59.10%	101,197	476,184	77.63
1999	58,353	46.82%	66,280	53.18%	124,633	521,572	2.01
2000	72,371	44.62%	89,815	55.38%	162,186	584,842	9.35
2001	89,553	45.34%	107,959	54.66%	197,512	666,322	12.55
2002	110,814	46.06%	129,769	53.94%	240,583	691,969	10.03
2003	137,123	46.78%	155,985	53.22%	293,108	731,893	5.06
2004	109,028	44.33%	136,918	55.67%	245,946	785,261	6.4
2005	123,991	45.73%	147,149	54.27%	271,140	929,343	17.11
2006	150,654	43.41%	196,359	56.59%	347,013	1,032,865	6.6
2007	182,967	40.65%	267,089	59.35%	450,056	1,196,119	6.59
2008	209,747	45.92%	247,040	54.08%	456,787	1,435,772	11.06
2009	226,006	43.81%	289,818	56.19%	515,824	1,622,055	2.78
2010	260,227	42.98%	345,184	57.02%	605,411	1,856,720	6.96
2011	307,760	42.57%	415,231	57.43%	722,991	2,139,840	3.79

Sumber: Bank Indonesia (2011:242).

Menurut Bank Indonesia (2011:99), inflasi yang relatif rendah pada tahun-tahun tertentu sepanjang tahun 1990 sampai dengan tahun 2011 karena kebijakan yang ditempuh Bank Indonesia dan pemerintah yang tercermin dari kinerja berbagai komponen inflasi Indeks Harga Konsumen (IHK). Inflasi inti cukup stabil pada tingkat yang relatif rendah, ditopang oleh kapasitas perekonomian yang memadai, penguatan nilai tukar rupiah yang mampu meredam dampak inflasi dari tingginya harga komoditas internasional, dan terkendalinya ekspektasi inflasi. Bank Indonesia berperan dalam menjaga stabilitas nilai tukar rupiah untuk menghindari tekanan inflasi dari sisi eksternal. Pemerintah berperan dalam pengendalian harga secara langsung baik terhadap komoditas yang tergolong dalam administered prices maupun pengendalian pasokan barang, terutama bahan pangan. Selain itu, kebijakan Bank Indonesia dan pemerintah dilakukan secara proaktif dan terkoordinasi baik di level pusat maupun daerah melalui forum Tim Pengendalian Inflasi (TPI) pusat dan daerah.

Penelitian Arifin (1998) menunjukkan bahwa uang beredar berpengaruh cukup kuat terhadap inflasi. Hal ini tampak dengan adanya pergerakan yang searah antara perubahan jumlah uang beredar dengan tingkat inflasi atau dengan kata lain ekspansi uang beredar mengakibatkan peningkatan inflasi. Dengan demikian, dapat disimpulkan bahwa peningkatan Bantuan Llikuiditas Bank Indonesia (BLBI) mengakibatkan ekspansi uang primer dan uang beredar yang selanjutnya mendorong laju inflasi. Oleh karena itu, untuk menekan laju inflasi yang berasal dari faktor moneter, BLBI harus dikurangi. Apabila terjadi penurunan jumlah uang beredar, tetapi inflasi masih terus meningkat maka perkembangan ini memperkuat simpulan bahwa inflasi lebih banyak dipengaruhi sektor riil daripada pengaruh faktor moneter. Implikasi simpulan ini adalah perbaikan di sektor riil akan banyak membantu upaya mengendalikan inflasi tanpa tekanan berlebihan di sisi permintaan.

Zulverdi et al (2000), menjelaskan mekanisme pengendalian moneter dengan inflasi sebagai sasaran tunggal. Hasil penelitiannya menunjukkan bahwa M0, MI, dan M2 berpengaruh searah terhadap inflasi underlying. Pengujian dilakukan dengan Hsiao-Granger causality penode 1990-1999 (data kuartalan). Berdasarkan pengujian variance decomposition menunjukkan bahwa MI mempunyai pengaruh yang lebih besar terhadap inflasi underlying dibandingkan M2. Hal ini disebabkan permintaan MI merupakan peningkatan real spending yang akan menimbulkan inflasi sisi permintaan. Pengukuran lag berdasarkan uji vektor auto-regresion menunjukkan MI membutuhkan lag sekitar 5 kuartal.

Menurut Hutabarat (2005), determinan inflasi di Indonesia adalah ekspektasi inflasi yang terkait dengan pola pembentukan ekspektasi inflasi yang masih didominasi oleh inflasi masa lalu (ekspektasi adaptif), bukan jumlah uang beredar. Perilaku ini menimbulkan persistensi inflasi karena riwayat inflasi Indonesia yang banyak dipicu oleh inflasi cost-push atau supply shocks yang signifikan dan sering terjadi, seperti kejutan harga minyak, kenaikan harga BBM, devaluasi dan fluktuasi berlebihan nilai tukar Rupiah. Karakteristik inflasi tersebut tidak mengalami perbaikan pada pasca krisis, baik secara time series, distribusi lintas komoditi pembentuk inflasi, maupun perbandingan dengan negara lain. Persistensi inflasi tersebut juga dipengaruhi oleh besarnya tekanan kenaikan harga barang administered khususnya harga BBM dan listrik, depresiasi nilai tukar, dan kenaikan upah minimum yang bersifat over-inflation indexation. Dalam kondisi tersebut maka pada dasarnya inflasi hanya dapat turun jika terjadi favorable supply shocks atau karena pengetatan moneter yang mentolerir dampak resesi ekonomi. Dalam kondisi ekspektasi inflasi yang tinggi dan dengan kebijakan moneter yang belum kredibel, disinflasi akan menghasilkan pengorbanan pertumbuhan ekonomi yang besar.

Andrianus dan Amelia Niko (2006) melakukan penelitian dengan menggunakan data sekunder runtun waktu kuartalan yang diperoleh dan berbagai sumber. Hasil penelitian menunjukkan bahwa berdasarkan pengujian faktor-faktor yang mempengaruhi inflasi menggunakan metode Ordinary Least Square (OLS) dan Partial Adjusment Model (PAM) diperoleh hasil bahwa jumlah uang beredar berpengaruh tidak signifikan terhadap inflasi di Indonesia selama periode 1997.3-2005.2.

Tanuwidjaja dan Een Meng Choy (2006) melakukan penelitian tentang peranan kredibilitas bank sentral dalam pencapaian target inflasi dan usulan aturan terhadap kebijakan moneter di Indonesia. Untuk itu, kedua peneliti tersebut membangun dan mengestimasi Model Ekonomi Makro Skala Kecil (A Small Scale Macroeconomic Model atau SSMM) yang berpandangan ke depan tentang perekonomian Indonesia dengan mengadaptasi teori model Batini-Haldane bersama dengan aturan kebijakan Taylor. Hasil penelitian menunjukkan bahwa sangat penting bagi Bank Indonesia untuk meningkatkan kredibilitas dalam rangka mencapai tingkat inflasi yang rendah. Hasil ini menjadi bermakna penting bagi Bank Indonesia dalam membangun kredibilitasnya selaku Bank Sentral karena berpotensi penting dalam pembentukan ekspektasi yang berhubungan dengan inflasi. Dengan kata lain, bagaimana masyarakat melihat dan percaya kepada Bank Indonesia mampu memenuhi target inflasi atau sebaliknya cenderung memiliki dampak yang signifikan terhadap hasil ekonomi. Jadi inflasi disebabkan bukan oleh perubahan jumlah uang beredar. Dalam sebuah kasus di mana bank sentral tidak memiliki kredibilitas sama sekali di mata publik, akan membutuhkan waktu yang sangat panjang bagi tingkat inflasi untuk dapat dibawa ke tingkat yang ditargetkan. Selama krisis keuangan, misalnya Bank Indonesia tidak memperoleh banyak kredibilitas atas usahanya untuk menargetkan tingkat inflasi yang ada sehingga masyarakat umum cenderung untuk membentuk

pandangan mereka tentang tingkat inflasi saat ini dan masa depan berdasarkan masa lalu inflasi yang terjadi. Hal ini membuat tugas Bank Indonesia dalam menurunkan inflasi menjadi jauh lebih sulit.

Algifari (2010) melakukan penelitian untuk menemukan model Vector Autoregressive (VAR) laju inflasi dan tingkat bunga di Indonesia. Model VAR laju inflasi dan tingkat bunga yang diperoleh dari penelitian ini diharapkan dapat digunakan sebagai salah satu alat untuk membuat ramalan tentang tingkat bunga dan laju inflasi di Indonesia. Hasil penelitian dengan menggunakan Uji Kausalitas Granger menunjukkan bahwa laju inflasi dan tingkat bunga memiliki hubungan kausalitas mulai kelambanan atau lag 3 dan berakhir pada lag 9. Berdasarkan pertimbangan nilai Adjusted R-square, Akaike Criterion (AIC), nilai Schwarz Criterion (SC), dan signifikansi uji t-statistik dapat diketahui bahwa model VAR yang terbaik adalah menggunakan kelambanan atau lag 4, karena memiliki Adjusted R-square yang paling tinggi dan nilai AIC dan SC yang paling rendah. Subekti et al (2010), melakukan penelitian dinamika inflasi Indonesia pada tataran provinsi berdasarkan data tahun 2000-2009. Hasil penelitian menunjukkan bahwa pada kondisi inflasi moderat, pertumbuhan jumlah uang beredar M1 berpengaruh tidak signifikan terhadap inflasi.

Nugroho dan Maruto Umar Basuki (2012), melakukan penelitian tentang pengaruh perubahan Produk Domestik Bruto (PDB), Suku Bunga Sertifikat Bank Indonesia (SBI), jumlah uang beredar (M2), dan nilai tukar rupiah terhadap Dollar (kurs) terhadap tingkat inflasi di Indonesia pada periode 2000.1-2011.4. Hasil penelitian menunjukkan bahwa berdasarkan pengujian faktor-faktor yang mempengaruhi inflasi menggunakan metode Ordinary Least Square (OLS) diperoleh hasil bahwa jumlah uang beredar berpengaruh negatif signifikan terhadap inflasi di Indonesia selama periode 2000.1-2011.4. Hasil ini tidak sesuai dengan teori, karena jumlah uang beredar yang digunakan dalam penelitian (M2) adalah jumlah uang beredar dalam arti luas yang terdiri atas uang kartal, uang giral, dan uang kuasi dan adanya persentase uang kuasi yang terdiri atas deposito berjangka, tabungan, dan rekening valas milik swasta domestik yang cukup besar. Uang kuasi merupakan uang yang nilainya tidak likuid, sehingga walaupun nilainya tinggi namun tidak mampu untuk mempengaruhi peningkatan inflasi yang ada dalam perekonomian.

Berdasarkan kajian teoritis dan riset terkait tersebut disusun hipotesis penelitian sebagai berikut:

H1:   Ada perbedaan jumlah uang beredar uang kartal, uang giral, dan uang kuasi di Indonesia tahun 1990-2011.
H2:   Jumlah uang beredar uang kartal berpengaruh positif terhadap tingkat inflasi di Indonesia tahun 1990-2011.
H3:   Jumlah uang beredar uang giral berpengaruh positif terhadap tingkat inflasi di Indonesia tahun 1990-2011.
H4:   Jumlah uang beredar uang kuasi berpengaruh positif terhadap tingkat inflasi di Indonesia tahun 1990-2011.

3.   METODE PENELITIAN

Data yang digunakan dalam penelitian ini merupakan data sekunder, yaitu data yang diperoleh melalui media perantara yang telah dipublikasikan. Semua data dikumpulkan dari Laporan Tahunan Perekonomian Indonesia dari tahun 1990 sampai dengan 2011. Laporan Tahunan Perekonomian Indonesia dipublikasikan oleh Bank Indonesia. Data pendukung diperoleh dari berbagai buku dan jurnal ilmiah.

Alat analisis untuk menguji H1 digunakan analisis varians atau anova (Algifari, 2003: 101-127). Alat analisis untuk menguji H2 sampai dengan H4 digunakan uji regresi berganda (Algifari, 2003:167-218). Dalam penelitian ini α ditetapkan sebesar 5%. Model penelitian dinyatakan dalam persamaan berikut:

$$TI = \ + \alpha 1 UKa + \beta 2 UG + \beta 3 UKu + e$$

Keterangan:
TI = tingkat inflasi
UKa= uang kartal
UG = uang giral
UKu = uang kuasi

4. HASIL PENELITIAN DAN PEMBAHASAN

Berdasarkan Tabel 1, dapat dilakukan pengujian statistik menggunakan analisis varians atau anova dan uji regresi dengan nilai α ditetapkan sebesar 5%. Pengujian tersebut untuk membuktikan hipotesis penelitian dalam penelitian ini. Hasil uji analisis varians dan uji regresi ditunjukkan pada Tabel 2 berikut ini:

Tabel 2. Hasil Pengujian Hipotesis Penelitian

Hipotesis Penelitian	F atau t test	P value	Hasil Pengujian
H1	20.24974761	1.61686E-07	Signifikan
H2	-1.458435604	0.161949507	Tidak Signifikan
H3	-0.281529944	0.781514946	Tidak Signifikan
H4	2.208203057	0.040441619	Signifikan

Sumber: Data primer, diolah.

Berdasarkan Tabel 2, nampak nilai F test H1 adalah 20,24974761 dengan nilai P value sebesar 1,61686E-07, signifikan pada α sebesar 5%. Ini berarti hipotesis penelitian yang menyatakan bahwa ada perbedaan signifikan jumlah uang beredar uang kartal, uang giral, dan uang kuasi di Indonesia tahun 1990-2011 diterima. Nilai t test H2 adalah -1,458435604 dengan nilai P value sebesar 0,161949507, tidak signifikan pada α sebesar 5%. Ini berarti hipotesis penelitian yang menyatakan bahwa jumlah uang beredar uang kartal berpengaruh positif terhadap tingkat inflasi di Indonesia tahun 1990-2011 ditolak. Nilai t test H3 adalah -0,281529944 dengan nilai P value sebesar 0,781514946 tidak signifikan pada α sebesar 5%. Ini berarti hipotesis penelitian yang menyatakan bahwa jumlah uang beredar uang giral berpengaruh positif terhadap tingkat inflasi di Indonesia tahun 1990-2011 ditolak. Nilai t test H4 adalah 2,208203057 dengan nilai P value sebesar 0,040441619 signifikan pada α sebesar 5%. Ini berarti hipotesis penelitian yang menyatakan bahwa jumlah uang beredar uang kuasi berpengaruh positif terhadap tingkat inflasi di Indonesia tahun 1990-2011 diterima.

Hipotesis penelitian 1 diterima. Dengan demikian, temuan penelitian ini mendukung temuan (Gulo, 2008). Ketika perekonomian berada dalam tahapan primitif, belum ada alat pembayaran untuk melakukan transaksi seperti yang digunakan sekarang ini. Hal ini terjadi karena dalam tahapan primitif transaksi dilakukan secara barter, yaitu barang ditukarkan secara langsung dengan barang. Keuntungan cara perdagangan barter adalah ketika pelaku ekonomi jumlahnya masih terbatas dan kebutuhan pelaku ekonomi belum sekompleks seperti sekarang ini. Cara perdagangan barter (C – C') akan mempermudah pelaku ekonomi dalam mempercepat pertukaran antarkomoditas asal antarpelaku ekonomi sudah sepakat dengan komoditas yang akan saling dipertukarkan. Ketidakuntungan cara perdagangan barter adalah antarpelaku ekonomi harus saling mencari untuk saling bertukar produk yang sesuai dengan keinginan masing-masing pelaku ekonomi. Saling mencari antarpelaku ekonomi untuk saling memadukan keinginannya merupakan sesuatu yang amat sangat sulit terutama dalam tahapan perekonomian yang semakin berkembang yang memiliki mobilitas yang tinggi. Oleh karena itu, diperlukan media untuk memecahkan masalah tersebut, yaitu media uang perbedaan jumlah uang beredar uang kartal, uang giral, dan uang kuasi di Indonesia tahun 1990-2011 diterima yang berfungsi sebagai alat tukar menukar.

Dalam perekonomian uang (C – M – C'), fungsi uang sebagai alat tukar menukar mendasari adanya spesialisasi dan distribusi dalam memproduksi suatu barang. Karena dengan adanya uang, orang tidak harus menukar barang yang diinginkan dengan barang yang diproduksikannya tetapi langsung menjual produksinya di pasar dan dengan uang yang diperolehnya dari hasil penjualan tersebut dibelanjakan untuk pembelian barang yang diinginkannya. Dalam perkembangannya, perantara tersebut disebut sebagai uang yang bentuk atau wujudnya dapat berupa antara lain, uang logam, uang kertas, dan instrumen kredit. Pada umumnya alat penukar bagi suatu negara itu

diciptakan atau dibuat oleh pemerintah dan bank sentral yang disebut dengan uang kartal dan oleh bank umum yang disebut dengan uang giral.

Dalam perekonomian kredit (M – C – M'), fungsi uang sebagai standar atau ukuran pembayaran masa depan merupakan angsuran utang pembayaran. Begitu uang diterima umum sebagai alat penukar ataupun satuan hitung maka secara langsung uang akan bertindak sebagai unit atau satuan untuk pembayaran angsuran utang ataupun juga untuk menyatakan besarnya utang. Dengan menggunakan uang dapat dilakukan pembayaran utang piutang secara tepat dan cepat, baik secara kontan atau angsuran. Nilai fisik maupun bentuk uang tidak menjadi masalah selama uang tersebut dapat berfungsi sebagai alat penukar, satuan hitung, ataupun sebagai standar pembayaran cicilan utang. Kemampuan uang memenuhi fungsi-fungsi tersebut tergantung pada kesediaan masyarakat untuk menerima uang sebagai alat untuk memenuhi tujuan dalam perekonomian.

Dalam perekonomian kredit (M – C – M'), fungsi uang sebagai alat penimbun kekayaan akan mempengaruhi pemilikan uang tunai oleh seseorang atau pun masyarakat. Seperti diketahui bahwa uang bernilai karena berfungsi sebagai alat penukar, yaitu dengan uang dapat dibeli suatu barang atau jasa yang dibutuhkan. Apabila uang dibelanjakan untuk saat ini, maka uang mempunyai nilai saat ini juga dan apabila uang akan dibelanjakan untuk masa yang mendatang, maka uang tersebut akan mempunyai nilai juga di waktu yang akan datang. Dengan demikian, menyimpan uang berarti menimbun kekayaan dalam bentuk uang tunai. Penyimpanan uang ini dimaksudkan untuk mempermudah pertukaran atau transaksi di saat ini ataupun di masa yang akan datang. Uang dipilih untuk disimpan karena uang bersifat likuid, yaitu mudah diambil untuk keperluan transaksi atau pembayaran angsuran utang. Dengan demikian, penumpukan uang tunai akan mengubah dari sekedar uang sebagai alat pembayaran menjadi uang yang digunakan untuk "mencari uang". Hal ini akan berdampak pada penumpukan akumulasi uang sebagai modal yang jauh lebih bernilai daripada uang digunakan hanya untuk transaksi pembayaran semata. Pembiaran kondisi ini dalam jangka waktu tertentu akan berdampak negatif bagi perekonomian karena terhambatnya proses menghasilkan dan mempertukarkan barang/jasa. Kondisi ini, di Indonesia ditunjukkan dengan pertumbuhan yang lambat dari sektor riil karena belum optimalnya peran Lembaga Keuangan Bank dalam intermediation role.

Menurut Salim (2010), perbankan nasional lambat menyalurkan kreditnya ke sektor riil. Di tengah macetnya pergerakan sekor riil, harapan banyak bertumpu pada sektor perbankan. Fungsi perbankan sebagai intermediasi sektor riil yang kurang optimal dalam beberapa tahun ini telah menyadarkan banyak kalangan tentang perlunya perbankan meningkatkan penyerapan kredit terhadap sektor ini. Memang tampaknya ada alasan untuk menyalahkan bank sebagai penyebab disintermediasi perbankan. Kurangnya permintaan kredit karena sektor riil mati suri. Hal ini menjadi salah satu penyebab perbankan enggan menyalurkan kreditnya. Adapun yang datang ke bank meminta dana adalah yang tidak bankable, yang dicurigai memiliki niat tidak terpuji, sementara pengusaha yang bankable, yang usahanya sehat lebih memilih menggunakan dana sendiri atau mengeluarkan obligasi yang tenornya lebih panjang dari yang bank minati. Meskipun demikian, peran bank senantiasa sebagai pendukung dan tidak memegang kemudi. Bank tidak bisa beroperasi tanpa perusahaan selaku pengguna kredit, bahkan perusahaan dapat beroperasi tanpa bank. Oleh karena itu, prinsip utamanya adalah banks follow the business dan tidak pernah terbalik. Kausalitas berawal dari sisi permintaan ke penawaran. Karena itu, disintermediasi perbankan mesti diurut dari kurangnya aktivitas bisnis yang layak dibiayai akibat dari iklim usaha yang kurang mendukung.

Dalam perekonomian modern (M – M'), uang berfungsi sebagai komoditi yang diperdagangkan. Uang dalam pasar uang bukan hanya sebagai alat transaksi untuk membeli mata uang lain tetapi juga menjadi komoditi yang diperdagangkan untuk memperoleh keuntungan. Nilai tukar antarmata uang yang disebut dengan kurs mata uang selalu mengalami perubahan. Perubahan kurs mata uang disebabkan oleh faktor-faktor yang mempengaruhi permintaan, penawaran mata uang di pasar mata uang asing, dan faktor-faktor lainnya seperti kondisi politik. Perubahan kurs mata uang mengakibatkan nilai tukar antarmata uang menjadi lebih tinggi atau lebih rendah sehingga menarik bagi pelaku ekonomi untuk memperoleh laba dari selisih harga jual dengan harga beli.

Dalam perekonomian modern (M – M'), tujuan permintaan uang untuk spekulasi berkaitan dengan transaksi di pasar modal. Pasar modal merupakan pasar untuk berbagai instrumen keuangan jangka panjang yang bisa diperjualbelikan, baik surat utang (obligasi), ekuiti (saham), reksa dana, instrumen derivatif, maupun instrumen

lainnya. Pasar modal merupakan sarana pendanaan bagi perusahaan maupun institusi lain (misalnya pemerintah), dan sebagai sarana bagi kegiatan berinvestasi. Dengan demikian, pasar modal memfasilitasi berbagai sarana dan prasarana kegiatan jual beli dan kegiatan terkait lainnya. Instrumen keuangan yang diperdagangkan di pasar modal merupakan instrumen jangka panjang (jangka waktu lebih dari 1 tahun) seperti saham, obligasi, waran, right, reksa dana, dan berbagai instrumen derivatif seperti option, futures, dan lain-lain. Nampak dengan semakin berkembangnya suatu perekonomian, semakin terlihat orang untuk "mencari uang" ketimbang "memanfaatkan barang dan jasa", yaitu menggunakan uang bukan sebagai alat pembayaran tetapi sebagai komoditas yang diperdagangkan agar uangnya semakin ber"uang". Hal inilah yang menjelaskan terjadinya perbedaan jumlah uang beredar uang kartal, uang giral, dan uang kuasi di Indonesia tahun 1990-2011.

Hipotesis penelitian 2 dan 3 ditolak. Uang kartal dan uang giral merupakan jumlah uang beredar dalam arti sempit atau M1. Dengan demikian, hasil penelitian ini mendukung temuan Hutabarat (2005) yang menyatakan bahwa determinan inflasi di Indonesia adalah ekspektasi inflasi yang terkait dengan pola pembentukan ekspektasi inflasi yang masih didominasi oleh inflasi masa lalu (ekspektasi adaptif), bukan jumlah uang beredar. Hasil penelitian ini juga mendukung temuan Andrianus dan Amelia Niko (2006) yang menyatakan bahwa jumlah uang beredar berpengaruh tidak signifikan terhadap inflasi di Indonesia selama periode 1997.3-2005.2. Hasil penelitian ini juga mendukung temuan Tanuwidjaja dan Een Meng Choy (2006) yang melakukan penelitian tentang peranan kredibilitas bank sentral dalam pencapaian target inflasi dan usulan aturan terhadap kebijakan moneter di Indonesia dan temuan Subekti et al (2010).

Inflasi disebabkan bukan oleh perubahan jumlah uang beredar tetapi oleh kemampuan Bank Indonesia dalam membangun kredibilitasnya selaku Bank Sentral yang berpotensi penting dalam pembentukan ekspektasi yang berhubungan dengan inflasi. Dengan kata lain, bagaimana masyarakat melihat dan percaya kepada Bank Indonesia mampu memenuhi target inflasi atau sebaliknya cenderung memiliki dampak yang signifikan terhadap hasil ekonomi. Dalam sebuah kasus di mana Bank Sentral tidak memiliki kredibilitas sama sekali di mata publik, akan membutuhkan waktu yang sangat panjang bagi tingkat inflasi untuk dapat dibawa ke tingkat yang ditargetkan. Hasil penelitian ini tidak mendukung temuan penelitian Arifin (1998) yang menunjukkan bahwa uang beredar berpengaruh cukup kuat terhadap inflasi, temuan Zulverdi et al (2000) yang menjelaskan bahwa M0, MI, dan M2 berpengaruh searah terhadap inflasi underlying, dan temuan Algifari (2010).

Hipotesis penelitian 4 diterima. Dengan demikian, hasil penelitian ini tidak mendukung temuan Nugroho dan Maruto Umar Basuki (2012) yang menyatakan bahwa jumlah uang beredar berpengaruh negatif signifikan terhadap inflasi di Indonesia selama periode 2000.1-2011.4. Variabel jumlah uang beredar yang digunakan dalam penelitian (M2) adalah jumlah uang beredar dalam arti luas yang terdiri atas uang kartal, uang giral, dan uang kuasi dan adanya persentase uang kuasi yang terdiri atas deposito berjangka, tabungan, dan rekening valas milik swasta domestik yang cukup besar. Uang kuasi merupakan uang yang nilainya tidak likuid, sehingga walaupun nilainya tinggi namun tidak mampu untuk mempengaruhi peningkatan inflasi yang ada dalam perekonomian. Oleh karena itu, hasil penelitian ini yang menyatakan bahwa uang kuasi berpengaruh signifikan terhadap inflasi karena uang kuasi yang berupa deposito berjangka, tabungan, dan rekening valas dapat menjadi alat penjamin pelaku ekonomi dalam bertransaksi. Hal ini nampak dengan semakin meningkatnya alat pembayaran dengan menggunakan uang plastik yang dijamin oleh deposito berjangka, tabungan, dan rekening valas. Hal ini ditunjukkan dengan rincian perhitungan apabila rata-rata pemakaian satu kartu kredit sekitar Rp 2-3 juta per bulan dengan jumlah transaksi sekitar 17 juta transaksi per bulan, maka volume transaksi mencapai sekitar Rp 17-18 triliun per bulan (http://swa.co.id/business-research).

5. PENUTUP

Semakin berkembang suatu perekonomian, semakin terlihat orang untuk "mencari uang" ketimbang "memanfaatkan barang dan jasa", yaitu menggunakan uang bukan sebagai alat pembayaran tetapi sebagai komoditas yang diperdagangkan agar uangnya semakin ber"uang". Simpulan penelitian ini adalah (1) ada

perbedaan jumlah uang beredar uang kartal, uang giral, dan uang kuasi di Indonesia tahun 1990-2011; (2) jumlah uang beredar uang kartal berpengaruh tidak signifikan terhadap tingkat inflasi di Indonesia tahun 1990-2011; (3) jumlah uang beredar uang giral berpengaruh tidak signifikan terhadap tingkat inflasi di Indonesia tahun 1990-2011; dan (4) jumlah uang beredar uang kuasi berpengaruh signifikan positif terhadap tingkat inflasi di Indonesia tahun 1990-2011. Saran bagi pengambil keputusan adalah berkaitan dengan perlunya Bank Indonesia dan pemerintah untuk mengendalikan pemilikan dan penggunaan kartu kredit sebagai alat pembayaran, agar uang kuasi yang berupa deposito berjangka, tabungan, dan rekening valas yang dapat menjadi alat penjamin pelaku ekonomi dalam bertransaksi tidak menimbulkan kenaikan laju inflasi yang tidak terkendali di Indonesia.

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A. Judul Artikel
Judul artikel terdiri dari 10 – 15 kata.

B. Abstrak (Abstract**)**
Abstrak untuk artikel dalam bahasa Indonesia harus ditulis menggunakan bahasa Inggris dan sebaliknya. Panjang abstrak kurang lebih 100 kata, dan ditempatkan setelah judul artikel.

C. Kata Kunci (Keywords**)**
Setelah abstrak cantumkan 4 (empat) kata kunci yang berkaitan dengan isi artikel.

D. SKEMA PENULISAN

1. PENDAHULUAN
Berisi latar belakang/ dan atau motivasi penelitian, rumusan masalah, dan tujuan penelitian

2. KAJIAN TEORITIS DAN PENGEMBANGAN HIPOTESIS* (jika ada)
Berisi kajian teoritis dan atau hasil-hasil riset terdahulu yang berkenaan dengan topik penelitian, serta berisi pengembangan hipotesis (jika ada) atau kerangka model penelitian.

3. METODE PENELITIAN
Pada bagian ini, berisi paling tidak berupa populasi atau sampel penelitian, cara pengumpulan data, definisi operasional variable, dan alat analisis data.

4. HASIL DAN PEMBAHASAN

Pada bagian ini berupa hasil analisis data dan disertai dengan pembahasan serta diskusi.

5. PENUTUP
Pada bagian ini setidaknya berupa simpulan, keterbatasan penelitian, implikasi, dan atau saran.

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