

**ASSET PRICING MODEL TERHADAP OPTIMASI PEMBENTUKAN  
PORTOFOLIO SAHAM SYARIAH DI INDONESIA**



Oleh:

**Zahra Laradiva Farizka Putri Hassany S.E.I.**

**NIM: 1520311044**

**TESIS**

Diajukan kepada Program Studi Magister Hukum Islam  
Fakultas Syari'ah Dan Hukum UIN Sunan Kalijaga Yogyakarta  
untuk Memenuhi Sebagian Syarat  
Memperoleh Gelar Magister Ekonomi

**YOGYAKARTA**

**2018**

**ASSET PRICING MODEL TERHADAP OPTIMASI PEMBENTUKAN  
PORTOFOLIO SAHAM SYARIAH DI INDONESIA**



**TESIS**

DIAJUKAN KEPADA PROGRAM STUDI HUKUM ISLAM  
UNIVERSITAS ISLAM NEGERI SUNAN KALIJAGA YOGYAKARTA  
UNTUK MEMENUHI SEBAGIAN SYARAT GUNA MEMPEROLEH GELAR  
MAGISTER EKONOMI DALAM ILMU HUKUM ISLAM

**Oleh:**

**ZAHRA LARADIVA FARIZKA PUTRI HASSANY**

**NIM: 1520311044**

**PEMBIMBING:**

**Dr. H. Syafiq Mahmadah Hanafi, M.Ag.**

**JURUSAN KEUANGAN DAN PERBANKAN SYARIAH  
FAKULTAS SYARIAH DAN HUKUM  
UNIVERSITAS ISLAM NEGERI SUNAN KALIJAGA  
YOGYAKARTA**

**2018**

## PERNYATAAN KEASLIAN

Yang bertanda tangan di bawah ini:

Nama : Zahra Laradiva Farizka Putri Hassany S.E.I.

NIM : 1520311044

Jenjang : Magister

Program Studi : Hukum Islam

Konsentrasi : Keuangan dan Perbankan Syariah

menyatakan bahwa naskah tesis ini secara keseluruhan adalah hasil penelitian/karya saya sendiri, kecuali pada bagian-bagian yang dirujuk sumbernya.

Yogyakarta, 18 Juli 2018

Saya yang menyatakan,



**Zahra Laradiva Farizka Putri Hassany S.E.I.**

NIM: 1520311044

## PERNYATAAN BEBAS PLAGIASI

Yang bertanda tangan di bawah ini:

Nama : Zahra Laradiva Farizka Putri Hassany, S.E.I.

NIM : 1520311044

Jenjang : Magister

Program Studi : Hukum Islam

Konsentrasi : Keuangan dan Perbankan Syariah

menyatakan bahwa naskah tesis ini secara keseluruhan benar-benar bebas dari plagiasi. Jika kemudian hari terbukti melakukan plagiasi, maka saya siap ditindak sesuai ketentuan hukum yang berlaku.

Yogyakarta, 18 Juli 2018

Saya yang menyatakan,



**Zahra Laradiva Farizka Putri Hassany, S.E.I.**

NIM: 1520311044



KEMENTERIAN AGAMA  
UNIVERSITAS ISLAM NEGERI SUNAN KALIJAGA  
FAKULTAS SYARIAH DAN HUKUM

Jl. Marsda Adisucipto Telp. (0274) 512840 Fax. (0274) 545614 Yogyakarta 55281

PENGESAHAN TUGAS AKHIR

Nomor : UIN.02/ 75 /PP.00.9/ 1806 /2018

Tugas Akhir dengan judul : ASSET PRICING MODEL TERHADAP OPTIMASI PEMBENTUKAN PORTOFOLIO SAHAM SYARIAH DI INDONESIA


yang dipersiapkan dan disusun oleh:

Nama : ZAHRA LARADIVA FARIZKA PUTRI HASSANY,  
S.E.I.  
Nomor Induk Mahasiswa : 1520311044  
Telah diujikan pada : Jumat, 27 Juli 2018  
Nilai ujian Tugas Akhir : A


dinyatakan telah diterima oleh Fakultas Syari'ah dan Hukum UIN Sunan Kalijaga Yogyakarta

TIM UJIAN TUGAS AKHIR


Ketua Sidang/Penguji I

  
Dr. H. Syafiq Mahmadah Hanafi, M.Ag.  
NIP. 19670518 199703 1 003

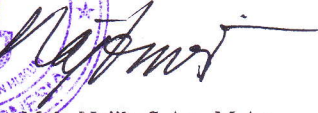
Penguji II

  
Dr. H. Abdul Mujib, M.Ag.  
NIP. 19701209 200312 1 002

Penguji III

  
Dr. Sunaryati, SE., M.Si.  
NIP. 19751111 200212 2 002

Yogyakarta, 27 Juli 2018  
UIN Sunan Kalijaga  
Fakultas Syaria'ah dan Hukum  
DEKAN

  
Dr. H. Agus Moh. Najib, S.Ag., M.Ag.  
NIP. 19710430 199503 1 001

## NOTA DINAS PEMBIMBING

Kepada Yth.,  
Dekan Fakultas Syari'ah dan Hukum  
UIN Sunan Kalijaga  
Yogyakarta

*Assalāmu'alaikum wr. wb.*

Setelah melakukan bimbingan, arahan, dan koreksi terhadap penulisan tesis yang berjudul:

### **ASSET PRICING MODEL TERHADAP OPTIMASI PEMBENTUKAN PORTOFOLIO SAHAM SYARIAH DI INDONESIA**

Yang ditulis oleh:

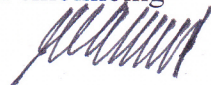
Nama : Zahra Laradiva Farizka Putri Hassany, S.E.I.  
NIM : 1520311044  
Jenjang : Magister  
Prodi Studi : Hukum Islam  
Konsentrasi : Keuangan dan Perbankan Syariah

Saya berpendapat bahwa tesis tersebut sudah dapat diajukan kepada Magister Ekonomi Fakultas Syari'ah dan Hukum UIN Sunan Kalijaga Yogyakarta untuk diujikan dalam rangka memperoleh gelar Magister Ekonomi.

*Wassalāmu'alaikum wr. wb.*

Yogyakarta, 23 Juli 2018

Pembimbing



**Dr. H. Syafiq Mahmadah Hanafi, M.Ag.**

NIP. 19670518 199703 1 003

## MOTO

“And let there be (arising) from you a nation inviting to (all that is) good, enjoining what is right and forbidding what is wrong, and those **will be the successful.**”

[QS. Ali-Imran (3): 104]

“My **success** is not but **through Allah**”

[QS. Hud (11): 88]

**Perjuangan sesungguhnya** ialah ketika merasa ingin menyerah dan berhasil mengatasinya.

[Dhea\_Zahra]

“Watch your **thoughts**, they become words.  
Watch your words, they become actions.  
Watch your actions, they become habits.  
Watch your habits, they become character.  
Watch your character, they **become destiny.**”

[Lao Tzu]

## ABSTRAK

Penelitian ini dilakukan untuk mengidentifikasi dan menganalisis hasil penggunaan beberapa *asset pricing model*, yakni: *Capital Asset Pricing Model* (CAPM), *Shariah Compliant Asset Pricing Model* (SCAPM), dan *Fama-French Multifactor Model* dalam memprediksi *return* portofolio atas saham syariah yang ada di Indonesia sebagai upaya optimalisasi portofolio. Penelitian ini termasuk penelitian yang inovatif dikarenakan penelitian ini menunjukkan analisis yang lebih komprehensif dan detail terhadap diversifikasi aset atas saham syariah bagi para investor dengan mengklasifikasikan penggunaan metode konvensional (CAPM) dan metode syariah (SCAPM). Metode konvensional dengan menggunakan IHSG ( $R_m$ ) dan BI rate ( $R_f$ ), dan metode syariah menggunakan ISSI ( $R_m$ ) dan SBIS. Penggunaan fitur *Solver Excel* juga diuji guna memperlihatkan pengaruh atas metode CAPM maupun SCAPM terhadap portofolio yang terbentuk berdasarkan rasio Sharpe.

Penelitian ini merupakan penelitian kuantitatif. Periode penelitian yakni Januari 2013 hingga Desember 2017, di mana pasar saham di Indonesia secara umum dalam keadaan yang terus berkembang. Sampel dipilih secara *purposive sampling* dengan kriteria-kriteria tertentu. Ada dua metode analisis yang digunakan, yakni analisis uji t untuk mengetahui nilai signifikansi di dari masing-masing variabel, dan uji *paired sample t test*. Uji determinasi dengan *adusted R-squared* ( $R^2$ ) dilakukan untuk melihat model terbaik yang mampu menjelaskan *expected return* portofolio. Penelaahan melalui nilai AIC juga dilakukan guna memperoleh kesimpulan yang lebih valid. Pengujian diagnostik model dilakukan untuk mengetahui kebermaknaan atas model regresi yang diperoleh.

Hasil penelitian ditemukan bahwa kondisi pasar ( $R_m - R_f$ ) masih menjadi faktor terkuat dalam memprediksi *return* dengan pengaruh yang positif signifikan. Dalam *Fama-French Multifactor Model*, hanya variabel *size* (SMB) yang secara positif berpengaruh secara parsial pada metode konvensional, sedangkan *book-to-market ratio* (HML), profitabilitas operasional (RMW), dan Investasi (CMA) tidak berpengaruh signifikan secara parsial terhadap *return* pada metode konvensional maupun syariah. Meskipun demikian, seluruh model dalam penelitian masih layak untuk digunakan dalam memprediksi *return* portofolio. Adapun SCAPM dapat lebih mencerminkan sensitivitas *return* yang diperoleh terhadap kondisi pasar saham syariah yang sebenarnya. Di samping itu, ditemukan bahwa penggunaan fitur *Solver Excel* pada (S)CAPM merupakan model terbaik yang mampu menggambarkan kondisi pasar yang dapat digunakan investor sebab lebih mampu menghasilkan *return* tinggi yang meminimumkan risiko sehingga meningkatkan kinerja portofolio saham syariah yang terbentuk.

Kata kunci: *asset pricing model*, portofolio optimal, saham syariah, *capital asset pricing model*, *syariah capital asset pricing model*, *Fama-French multifactor model*.



## PEDOMAN TRANSLITERASI ARAB-LATIN

Berdasarkan Surat Keputusan Bersama Menteri Agama RI dan Menteri Pendidikan dan Kebudayaan RI Nomor 158/1987 dan 0543b/U/1987, tanggal 10 September 1987.

### A. Konsonan tunggal

Huruf Arab	Nama	Huruf Latin	Keterangan
ا	Alif	tidak dilambangkan	tidak dilambangkan
ب	ba'	b	be
ت	ta'	t	te
ث	ša'	š	es (dengan titik di atas)
ج	jim	j	je
ح	ħa	ħ	ha (dengan titik di bawah)
خ	kha	kh	ka dan ha
د	dal	d	de
ذ	zal	z	zet (dengan titik di atas)
ر	ra'	r	er
ز	zai	z	zet
س	sin	s	es
ش	syin	sy	es dan ye
ص	šad	š	es (dengan titik di bawah)
ض	dad	ḍ	de (dengan titik di bawah)
ط	ṭa'	ṭ	te (dengan titik di bawah)
ظ	ẓa'	ẓ	zet (dengan titik di bawah)
ع	'ain	‘	koma terbalik di atas
غ	gain	g	ge

Huruf Arab	Nama	Huruf Latin	Keterangan
ف	fa'	f	ef
ق	qaf	q	qi
ك	kaf	k	ka
ل	lam	l	el
م	mim	m	em
ن	nun	n	en
و	wawu	w	we
هـ	ha'	h	ha
ء	hamzah	`	apostrof
ي	ya'	y	ye

### B. Konsonan Rangkap karena *Syaddah* ditulis rangkap

متعدين                      ditulis                      muta' aqqidīn

عدة                              ditulis                              'iddah

### C. *Ta' Marbutah*

1. Bila dimatikan ditulis h

هبة                              ditulis                              hibah

جزية                              ditulis                              jizyah

(ketentuan ini tidak diperlakukan terhadap kata-kata Arab yang sudah terserap ke dalam bahasa Indonesia, seperti salat, zakat, dan sebagainya, kecuali bila dikehendaki lafal aslinya).

2. Bila diikuti dengan kata sandang 'al' serta bacaan kedua itu terpisah, maka ditulis dengan h.

كرامة الأولياء                      ditulis                      karāmah al-auliya'

3. Bila ta' marbutah hidup atau dengan harakat, fathah, kasrah, dan dammah ditulis t.

زكاة الفطر                      ditulis                      zakātul fiṭri

#### D. Vokal Pendek

-----	kasrah	ditulis	i
ˆ	fathah	ditulis	a
-----ˆ	dammah	ditulis	u

#### E. Vokal Panjang

fathah + alif	ditulis	ā
جاهلية	ditulis	jāhiliyyah
fathah + yā' mati	ditulis	ā
يسعى	ditulis	yas'ā
kasrah + yā' mati	ditulis	î
كريم	ditulis	karîm
dammah + wāwu mati	ditulis	ū
فروض	ditulis	furūd

#### F. Vokal Rangkap

fathah + yā' mati	ditulis	ai
بينكم	ditulis	bainakum
fathah + wāwu mati	ditulis	au
قول	ditulis	qaulun

### G. Vokal Pendek yang Berurutan dalam Satu Kata Dipisahkan dengan Apostrof

أَنْتُمْ	ditulis	a'antum
أَعَدْتُ	ditulis	u'iddat
لَنْنُ شَكَرْتُمْ	ditulis	la'in syakartum

### H. Kata Sandang Alif + Lam

1. Bila diikuti huruf Qamariyyah ditulis dengan menggunakan huruf “l”.

الْقُرْآنُ	ditulis	al-Qur'ān
الْقِيَاسُ	ditulis	al-Qiyās

2. Bila diikuti huruf Syamsiyyah ditulis dengan menggunakan huruf Syamsiyyah yang mengikutinya, dengan menghilangkan huruf l (el) nya.

السَّمَاءُ	ditulis	as-Samā'
الشَّمْسُ	ditulis	asy-Syams

### I. Penulisan Kata-kata dalam Rangkaian Kalimat

Ditulis menurut penulisannya.

ذَوِي الْفُرُوضِ	ditulis	ẓawī al-furūd
أَهْلُ السُّنَّةِ	ditulis	ahl as-sunnah

## HALAMAN PERSEMBAHAN

*Tesis Ini Saya Persembahkan Untuk:*

*Papah, Mamah, Mas, dan Adik tercinta beserta Keluarga Besar terkasih*

*Sahabat-sahabatku yang tak lelah menegur dan menyemangatiku*

*Seluruh umat muslim yang senantiasa selalu berjuang dalam menegakkan hukum-hukum-Nya, apapun bidang yang digeluti.*



## KATA PENGANTAR

*Alhamdulillah*, segala puji syukur atas kehadiran Allah swt. yang telah melimpahkan kasih sayang serta karunia-Nya kepada seluruh makhluk ciptaan-Nya. Shalawat serta salam selalu tercurah kepada Rasulullah terakhir, Muhammad saw. beserta keluarga, sahabat, dan pengikutnya sampai akhir zaman.

Tesis ini disusun sebagai persyaratan medapatkan gelas Magister untuk Program Studi Hukum Islam konsentrasi Keuangan dan Perbankan Syariah di UIN Sunan Kalijaga Yogyakarta. Atas penyelesaian tesis ini, penyusun dengan segala kerendahan hati mengucapkan terima kasih sedalam-dalamnya kepada:

1. Prof. Drs. KH. Yudian Wahyudi, MA., Ph.D., selaku Rektor Universitas Islam Negeri Sunan Kalijaga Yogyakarta.
2. Dr. H. Agus Moh. Najib, S.Ag., M.Ag., selaku Dekan Magister Fakultas Syari'ah dan Hukum UIN Sunan Kalijaga Yogyakarta
3. Dr. H. Syafiq Mahmadah Hanafi, M.Ag. selaku dosen pembimbing tesis yang telah membimbing, mengarahkan, memberi masukan, kritik, saran dan motivasi dalam menyempurnakan penelitian ini.
4. Bapak Dr. H. Abdul Mujib, M.Ag. dan Ibu Dr. Sunaryati, SE., M.Si. selaku dosen penguji tesis I dan II yang telah memberi masukan, kritik, dan saran sehingga penelitian ini dapat terselesaikan dengan lebih baik.
5. Seluruh Dosen Magister Fakultas Syari'ah dan Hukum UIN Sunan Kalijaga Yogyakarta yang telah memberikan pengetahuan dan wawasan untuk penulis

selama menempuh pendidikan beserta seluruh karyawan Fakultas Syari'ah dan Hukum UIN Sunan Kalijaga Yogyakarta atas pelayanannya.

6. Orang tua tercinta, Drs. Hasanuddin Noor dan Dra. Rahmi Tri Mei Maharani, M.M. atas segala bentuk do'a, curahan kasih sayang, dukungan, dan motivasi kehidupan terbaik.
7. Saudara kandungku, Egha Ezar Junaeka Putra Hassany, S.E.I., M.E. dan Thalitha Aqila Kharisma Nadia Hassany tersayang dan terkasih, kakek, nenek, beserta keluarga besar. Doa kalian merupakan hadiah terbesar.
8. Seluruh sahabat-sahabatku, terkhusus Ermin Tri Setyawati yang melalui tahap ini bersama, Rabbani Ischak yang turut membantu terkait Statistika, seluruh teman-teman KPS Non-Reg C angkatan 2015 yang telah kebersamai dalam meraih ilmu, serta seluruh pihak yang secara langsung ataupun tidak langsung selalu menyemangati dan mendo'akan tiada henti maupun membantu dalam penyelesaian tesis ini.

Semoga Allah swt. memberkahi dan membalas kebaikan dan jasa-jasa mereka semua dengan rahmat dan kebaikan yang terbaik dari-Nya. Semoga tesis ini dapat bermanfaat bagi yang membaca dan mempelajarinya

Yogyakarta, 24 Agustus 2018



Zahra Laradiva Farizka Putri Hassany

## DAFTAR ISI

<b>HALAMAN JUDUL</b> .....	<b>i</b>
<b>HALAMAN PERNYATAAN KEASLIAN</b> .....	<b>ii</b>
<b>HALAMAN PERNYATAAN BEBAS PLAGIASI</b> .....	<b>iii</b>
<b>HALAMAN PENGESAHAN</b> .....	<b>iv</b>
<b>NOTA DINAS PEMBIMBING</b> .....	<b>v</b>
<b>MOTO</b> .....	<b>vi</b>
<b>ABSTRAK</b> .....	<b>vii</b>
<b>PEDOMAN TRANSLITERASI</b> .....	<b>vii</b>
<b>HALAMAN PERSEMBAHAN</b> .....	<b>xii</b>
<b>KATA PENGANTAR</b> .....	<b>xiii</b>
<b>DAFTAR ISI</b> .....	<b>xv</b>
<b>DAFTAR TABEL</b> .....	<b>xx</b>
<b>DAFTAR GAMBAR</b> .....	<b>xxii</b>
<b>DAFTAR SINGKATAN</b> .....	<b>xxiii</b>
<b>DAFTAR LAMPIRAN</b> .....	<b>xxiv</b>
<b>BAB I PENDAHULUAN</b> .....	<b>1</b>
A. Latar Belakang .....	1
B. Rumusan Masalah .....	10
C. Tujuan dan Kegunaan Penelitian .....	10
D. Sistematika Pembahasan .....	11
<b>BAB II LANDASAN TEORI</b> .....	<b>13</b>



A. Kajian Pustaka .....	13
B. Landasan Teori .....	21
1. Investasi Saham Syariah .....	21
a. Tingkat Pengembalian .....	25
b. Risiko .....	26
2. Diversifikasi .....	28
3. Portofolio Optimal dan Perspektif Syariah .....	29
4. Pengukuran Kinerja Portofolio Metode Sharpe .....	30
5. <i>Capital Asset Pricing Model</i> (CAPM) .....	31
a. Tingkat Pengembalian Bebas Risiko .....	33
b. Beta .....	34
c. Premi Pasar .....	35
6. <i>Shariah Compliant Asset Pricing Model</i> (SCAPM) .....	36
7. <i>Fama-French Multifactor Model</i> .....	38
a. Ukuran Perusahaan ( <i>Size</i> ) .....	39
b. Rasio <i>Book-to-Market</i> (BE/ME) .....	40
c. Profitabilitas Operasional .....	41
d. Investasi .....	41
8. Analisis Gaya .....	42
<b>BAB III METODE PENELITIAN .....</b>	<b>44</b>
A. Jenis dan Sifat Penelitian .....	44
B. Populasi dan Sampel .....	44
1. Populasi .....	44

2. Sampel .....	45
C. Jenis dan Sumber Data .....	46
D. Pembentukan Portofolio .....	48
1. CAPM .....	49
2. SCAPM .....	49
3. <i>Fama-French Multifactor Model</i> .....	49
a. SMB .....	52
b. HML .....	53
c. RMW .....	53
d. CMA .....	54
E. Model Regresi Linier .....	54
F. Definisi Operasional dan Pengukuran Variabel .....	56
1. Variabel Dependen (Y) .....	57
a. <i>Excess Return</i> .....	57
2. Variabel Independen (X) .....	59
a. Beta .....	59
b. <i>SMB (Small Minus Big)</i> .....	59
c. <i>HML (High Minus Low)</i> .....	60
d. <i>RMW (Robust Minus Weak)</i> .....	60
e. <i>CMA (Conservative Minus Aggressive)</i> .....	60
G. Teknik Analisis Data .....	61
1. Statistik Deskriptif .....	61
2. Uji Model .....	62

a.	Uji Statistik F .....	62
b.	Koefisien Determinasi .....	62
c.	Uji Statistik t .....	64
d.	AIC ( <i>Akaike Information Criterion</i> ) .....	65
3.	Uji Diagnostik Model .....	66
a.	Multikolinearitas .....	66
b.	Heteroskedastisitas .....	67
c.	Autokorelasi .....	67
d.	Normalitas .....	68
H.	Kerangka Penelitian .....	69
<b>BAB IV</b>	<b>HASIL DAN PEMBAHASAN .....</b>	<b>70</b>
A.	Deskripsi Data Penelitian .....	70
B.	Analisis Deskripsi Statistik .....	78
C.	Analisis Regresi Linier .....	83
1.	Uji Determinasi .....	96
2.	Uji F .....	97
3.	Uji t .....	98
D.	Pengujian Diagnostik Model .....	100
1.	Pengujian Multikolinieritas .....	101
2.	Pengujian Heteroskedastisitas .....	102
3.	Pengujian Autorokelasi .....	103
4.	Pengujian Normalitas .....	104
E.	Pembahasan Analisis Hasil Penelitian .....	105

<b>BAB V PENUTUP .....</b>	<b>114</b>
A. Kesimpulan .....	114
B. Saran .....	116
<b>DAFTAR PUSTAKA .....</b>	<b>118</b>
<b>LAMPIRAN-LAMPIRAN .....</b>	<b>121</b>
<b>DAFTAR RIWAYAT HIDUP .....</b>	<b>226</b>



## DAFTAR TABEL

Tabel 3.2.2.1.	Proses Penyaringan Sampel Penelitian .....	46
Tabel 3.2.2.2.	Sampel Penelitian .....	46
Tabel 3.3.1.	Sumber Data .....	48
Tabel 3.4	Ringkasan Klasifikasi Portofolio .....	51
Tabel 4.1.1	Deskripsi Data .....	71
Tabel 4.1.2	Jumlah Emiten per tahun pada setiap kategori portofolio .....	74
Tabel 4.1.3	Ringkasan Deskripsi Data Pembentukan Portofolio Size- B/M, Size-OP, dan Size-Inv Metode Konvensional .....	76
Tabel 4.1.4	Ringkasan Deskripsi Data Pembentukan Portofolio Size- B/M, Size-OP, dan Size-Inv Metode Syariah .....	78
Tabel 4.2.1	Ringkasan Statistik Deskripsi Variabel Metode Konvensional .....	79
Tabel 4.2.2	Ringkasan Statistik Deskripsi Variabel Metode Syariah .....	81
Tabel 4.3.1	Ringkasan Output Uji Regresi 6 Model .....	84
Tabel 4.3.2	Uji Regresi Portofolio Kombinasi Size dengan FF5FM Metode Konvensional .....	89
Tabel 4.3.3	Uji Regresi Portofolio Kombinasi Size dengan FF3FM Metode Konvensional .....	90
Tabel 4.3.4	Uji Regresi Portofolio Kombinasi Size dengan FF5FM Metode Syariah .....	91

Tabel 4.3.5	Uji Regresi Portofolio Kombinasi Size dengan FF3FM	
	Metode Syariah .....	92
Tabel 4.4.1	Uji Multikolinearitas: Variance Inflation Factors .....	102
Tabel 4.4.2	Heteroskedasticity Test: Glejser .....	103
Tabel 4.4.3	Autokorelasi (Breusch-Godfrey Serial Correlation LM Test)	104
Tabel 4.4.4	Uji Normalitas .....	105
Tabel 4.5.	Perbandingan Model dengan Adjusted R-squared .....	107



## DAFTAR GAMBAR

Gambar 1.1. Perkembangan Industri Jasa Keuangan Syariah di Indonesia Tahun 2010 s.d. 2014 .....	2
Gambar 3.8. Kerangka Penelitian .....	69



## DAFTAR SINGKATAN

BE/ME	: <i>Book Equity per Market Equity/Book-to-market ratio</i>
CAPM	: <i>Capital Asset Pricing Model</i>
FF3FM	: <i>Fama-French Three Factor Model</i>
FF5FM	: <i>Fama-French Five Factor Model</i>
IHSG	: <i>Indeks Harga Saham Gabungan/Jakarta Composite Index</i>
INV	: <i>Investment</i>
ISSI	: <i>Indeks Saham Syariah Indonesia / Islamic Stock Shariah Index</i>
Mkt	: <i>Market</i>
OP	: <i>Operational Profitability</i>
SBIS	: <i>Sertifikat Bank Indonesia Syariah</i>
SCAPM	: <i>Shariah Capital Asset Pricing Model</i>





## DAFTAR LAMPIRAN

Lampiran 1	Terjemahan Teks Arab .....	124
Lampiran 2	Sampel Penelitian .....	125
Lampiran 3	<i>Adjusted Close Price</i> per Emiten .....	126
Lampiran 4	Harga Penutup Indeks dan <i>Return Risk-free</i> .....	128
Lampiran 5	<i>Return Saham</i> per Emiten .....	129
Lampiran 6	<i>Return Indeks Pasar</i> dan <i>Return Risk-free</i> .....	131
Lampiran 7	<i>Excess Return CAPM</i> .....	132
Lampiran 8	<i>Excess Return SCAPM</i> .....	134
Lampiran 9	Data Laporan Keuangan Perusahaan .....	136
Lampiran 10	Pembentukan Portofolio Berdasarkan Kombinasi <i>Size</i> .....	140
Lampiran 11	<i>Excess Return</i> Portofolio Kombinasi <i>Size</i> -BE/ME Metode Konvensional .....	143
Lampiran 12	<i>Excess Return</i> Portofolio Kombinasi <i>Size</i> -OP Metode Konvensional .....	145
Lampiran 13	<i>Excess Return</i> Portofolio Kombinasi <i>Size</i> -Inv Metode Konvensional .....	147
Lampiran 14	<i>Excess Return</i> Portofolio Kombinasi <i>Size</i> -BE/ME Metode Syariah .....	149
Lampiran 15	<i>Excess Return</i> Portofolio Kombinasi <i>Size</i> -OP Metode Syariah .....	151

Lampiran 16	<i>Excess Return</i> Portofolio Kombinasi <i>Size-Inv</i> Metode Syariah .....	153
Lampiran 17	SMB (BM), (OP), (INV) Metode Konvensional .....	155
Lampiran 18	SMB (BM), (OP), (INV) Metode Syariah .....	156
Lampiran 19	Variabel Y dan X Model Regresi Metode Konvensional .....	157
Lampiran 20	Variabel Y dan X Model Regresi Metode Syariah .....	159
Lampiran 21	Output Deskripsi Statistik <i>Excess Return</i> Metode Konvensional dan Syariah .....	161
Lampiran 22	Output Uji Model Regresi Kombinasi <i>Size</i> Metode Konvensional .....	162
Lampiran 23	Output Uji Model Regresi Kombinasi <i>Size</i> Metode Syariah ..	179
Lampiran 24	Output Uji Model Regresi Metode Konvensional .....	196
Lampiran 25	Output Uji Model Regresi Metode Syariah .....	199
Lampiran 26	Output Uji Diagnostik Model Metode Konvensional .....	202
Lampiran 27	Output Uji Diagnostik Model Metode Syariah .....	214

# BAB I

## PENDAHULUAN

### A. Latar Belakang Masalah

Selama tahun 2017, Indonesia adalah negara dengan kenaikan indeks saham tertinggi di seluruh dunia yakni sebesar 227,60%. Hal tersebut tidak lepas dari kontribusi pasar modal Indonesia yang semakin bergairah. Laporan Grup Bank Dunia menyatakan bahwa Indonesia terus memperbaiki iklim investasinya bagi pengusaha lokal selama periode waktu Juni 2012 sampai Juni 2013 dengan menerapkan reformasi regulasi yang ke-10 sejak tahun 2009.<sup>1</sup> Diketahui pula Bursa Efek Indonesia (BEI) merupakan bursa dengan keuntungan tertinggi di dunia dalam sepuluh tahun terakhir. Berdasarkan jumlah Single Investor Identification (SID) yang terkonsolidasi terdiri dari investor saham, Surat Utang, Reksa Dana, Surat Berharga Negara (SBN) dan Efek lain yang tercatat di KSEI (PT Kustodian Sentral Efek Indonesia), pada tahun 2017 terjadi peningkatan jumlah investor baru di pasar modal Indonesia sebesar 25,24% dibandingkan tahun 2016 yang sebesar 894.116.<sup>2</sup> Pasar Modal Indonesia per Oktober 2017 bahkan memiliki ROE (*Return On Equity*) tertinggi di Asia Tenggara, di mana ROE merupakan rasio profitabilitas yang mengukur kemampuan suatu perusahaan untuk menghasilkan laba dari

---

<sup>1</sup> ---, "Indonesia Terus Memperbaiki Regulasi bagi Kemudahan Dunia Usaha", dalam [www.worldbank.org](http://www.worldbank.org) diakses tanggal 29 Januari 2018.

<sup>2</sup> Wilfridus Setu Embu, "Per Desember 2017, Investor Pasar Modal Capai 1,1 juta didominasi anak muda", dalam [www.merdeka.com](http://www.merdeka.com) diakses tanggal 09 Januari 2017.

investasi pemegang saham di perusahaan tersebut. Hasil survei dari UNCTAD (United Nations Conference on Trade and Development – Konferensi PBB tentang perdagangan dan pembangunan), Indonesia naik ke peringkat 4 sebagai negara tujuan investasi yang prospektif 2017-2019 dari tahun sebelumnya 2016 berada di peringkat ke-8. Pada Mei 2017, Indonesia mendapatkan predikat *investment grade* (yakni peringkat utang menjadi BBB-, dari sebelumnya BB+) dari Lembaga Pemeringkat Standard and Poor's, yang mana menyusul sebelumnya kenaikan peringkat yang sama oleh Fitch pada tahun 2016 dan Moody's pada Februari 2017.

Indonesia sebagai negara dengan penduduk beragama Islam terbesar di dunia sudah diakui dunia meskipun bukan negara Islam. Laju pertumbuhan lembaga keuangan syariah di Indonesia juga terus menunjukkan kondisi yang semakin baik. Dapat terlihat dari grafik di bawah terkait laju perkembangan industri jasa keuangan syariah di Indonesia dari tahun 2010 hingga 2014, di mana secara umum terjadi peningkatan.



Sumber: Roadmap IKNB Syariah 2015-2019, hlm. 5

Dari grafik di atas terlihat bahwa pasar modal syariah di Indonesia masih jauh di bawah jenis industri lainnya. Meskipun demikian, sosialisasi dan edukasi pasar modal (literasi) kepada masyarakat terus diupayakan peningkatannya oleh BEI di seluruh Indonesia. Hal ini disebabkan semakin kuatnya investor maka diharapkan dapat menunjang pembangunan ekonomi nasional.

Pasar modal syariah memiliki kualifikasi khusus yang menjadi pembeda antara konvensional dengan syariah, yakni terdapat *sharia screening* dari segi kualitatif maupun kuantitatifnya. Derigs dan Marzban (2008)<sup>3</sup> membuktikan secara empiris terdapat perbedaan karakter *screening* kualitatif maupun kuantitatif antar negara maupun antar institusi (manajer portofolio), seperti yang diterbitkan Dow Jones Islamic Index Group (DJIM), the Financial Times Islamic Index Series (FTSE International Limited), the Standard & Poor's Islamic Index Group, the Morgan Stanley Capital International Islamic Index Series (MSCI), Dubai Islamic Bank, the HSBC Amanah Fund, the Meezan Islamic Fund, the Amiri Capital Islamic Fund, dan the Azzad Islamic Fund. *Screening* kualitatif yakni terkait dengan bisnis inti sektor-sektor yang dilarang dalam syariah, sedangkan *screening* kuantitatif (seperti: rasio likuiditas, rasio bunga, rasio hutang, *non-permissible ratio*) ini terkait dengan pengukuran nilai perusahaan dan nilai ambang batas maksimum

---

<sup>3</sup> Ulrich Derigs dan Shehab Marzban, "Review and Analysis of Current Shariah-compliant Equity Screening Practices," *International Journal of Islamic and Middle Eastern Finance and Management*, University of Cologne, Germany Vol. 1 No. 4 (2008).

rasio yang diterima. Seperti halnya di Indonesia<sup>4</sup> terdapat batasan modal atas hutang tidak boleh lebih dari 45%, sedangkan di DJIM maupun di KLSESI (Kuala Lumpur Stock Exchange Shari'ah Index)<sup>5</sup> tidak boleh lebih dari 33% yang berarti pendekatan yang diterapkan lebih ketat. Namun, Ashraf (2016)<sup>6</sup> membuktikan bahwa perbedaan kriteria *screening* pada ekuitas Islam (berdasarkan perbandingan kinerja 29 indeks ekuitas Islam dengan indeks konvensional) tidak berpengaruh signifikan terhadap kinerja indeks yang dapat menimbulkan *abnormal return*. Hal ini mengimplikasikan bahwa meskipun terdapat perbedaan kualifikasi tertentu, transaksi dalam ekonomi Islam tetap tidak hanya mempertimbangkan aspek ekonomi namun juga aspek modal, hukum, moral, dan secara umum konsep Islami mengedepankan segi kemaslahatan umat dapat diterapkan dalam aktivitas investasi di pasar modal.

Kinerja keuangan indeks syariah menjadi salah satu peluang investasi yang menarik bagi investor. Jawadi, dkk (2012)<sup>7</sup> yang membuktikan dampak krisis terhadap pasar syariah yang kurang signifikan jika dibandingkan dampaknya terhadap pasar konvensional. Bahkan di pasar saham Australia,

---

<sup>4</sup> DSN-MUI, Fatwa No. 80/DSN-MUI/III/2011 tentang Penerapan Prinsip Syariah dalam Mekanisme Perdagangan Efek Bersifat Ekuitas di Pasar Reguler Bursa Efek (8 Maret 2011).

<sup>5</sup> Egi Arvian Firmansyah, "Seleksi Saham Syariah: Perbandingan antara Bursa Efek Indonesia dan Malaysia," *Jurnal Inspirasi Bisnis dan Manajemen*, Universitas Padjadjaran, Bandung, Indonesia, Vol. 1 No. 1 (2017), hlm. 7-8.

<sup>6</sup> Dawood Ashraf, "Does *Shari'ah* Screening Cause Abnormal Returns? Empirical Evidence from Islamic Equity Indexes," *Journal of Business Ethics*, Vol. 134, Issue 2 (Maret 2016).

<sup>7</sup> Fredj Jawadi, Nabila Jawadi, W. Louhichi, "Conventional and Islamic Price Performance: An Empirical Investigation," *Jurnal International Economics*, Vol. 137 (Mei 2012).

Reddy dan Fu<sup>8</sup> membuktikan secara statistik, kinerja saham syariah di Australian Stock Exchange (ASX) selama periode 2001 hingga 2013 berbeda secara signifikan dengan saham konvensional dalam hal risiko, namun dalam hal hubungan antara rasio keuangan dan *return* saham, DER dan ROE berhubungan positif signifikan secara statistik dengan *return* portofolio syariah maupun konvensional, sedangkan NPM berhubungan negatif signifikan dengan *return* portofolio syariah, dan disimpulkan kinerja saham syariah lebih baik jika dibandingkan dengan *return* portofolio konvensional.

Dalam berinvestasi, hubungan antara risiko dan tingkat pengembalian (*return*) atas dana yang diinvestasikan tidak diragukan lagi. Dalam mengharapkan tingkat pengembalian tertentu, investor perlu mempertimbangkan risiko utama dalam menginvestasikan dana, meliputi risiko pasar, risiko daya beli (atau risiko inflasi), risiko suku bunga, risiko likuiditas, risiko politik, hingga risiko masyarakat (*societal risk*). Tahap akhir dari proses alokasi aset yakni mencari bauran aset yang optimal.<sup>9</sup>

Pembentukan portofolio oleh investor dapat dilakukan dengan mendiversifikasi aset sehingga dapat meminimalisasi risiko dan mengoptimalkan tingkat pengembaliannya. Pemodal perlu menghadapi risiko *unsystematic* (yakni risiko yang dapat dihindari dengan melakukan diversifikasi, seperti: laba perusahaan, likuiditas, penjualan, total nilai

---

<sup>8</sup> Krishna Reddy dan Mingli Fu, "Does Shariah Compliant Stocks Perform Better than The Conventional Stocks? A Comparative Study of Stocks Listed on The Australian Study Exchange," *Asian Journal of Finance and Accounting*, University of Waikato, Vol. 6 No. 2 (2014), hlm. 155-166.

<sup>9</sup> Zvi Bodie dkk, *Manajemen Portofolio dan Investasi*, ed. 9, buku 2 (Jakarta: Salemba Empat, 2014), hlm. 513-514.

kekayaan, pertumbuhan aktiva tahunan, dan penjualan) dan risiko sistematis (dari eksternal perusahaan yang bersifat makro ekonomi, seperti: kebijakan pemerintah, pergerakan suku bunga, fluktuasi nilai tukar mata uang, sentimen pasar, dan penggabungan usaha).<sup>10</sup> Analisis fundamental guna memperkirakan harga saham pada masa yang akan datang dapat dilakukan sehingga diperoleh taksiran harga saham yang disebut juga dengan *share price forecasting model*.<sup>11</sup>

Pada tahun 1952, berkembang teori portofolio modern (*Modern Portfolio Selection*) yang dikenalkan oleh Harry Markowitz yakni Metode Markowitz. Kerangka kerja dari teori portofolio modern yakni pengurangan risiko melalui diversifikasi dapat dicapai. Barulah 12 tahun kemudian muncul *Capital Asset Pricing Model* (CAPM) yang dikenalkan oleh Treynor dan Sharpe While Linter yang digunakan untuk memprediksi *return* sehingga dapat diketahui efek risiko terhadap nilai suatu aset.

CAPM mengasumsikan terdapat hubungan linear antara premi *expected risk* dalam suatu aset dengan risiko sistematisnya (beta pasar). Sehingga implikasinya, CAPM penting dalam penganggaran modal, analisis *cost-benefit*, pemilihan portofolio, dan permasalahan ekonomi lainnya yang memerlukan pengetahuan mengenai hubungan antara risiko dan tingkat

---

<sup>10</sup> Indah Yuliana, *Investasi Produk Keuangan Syariah* (Malang: UIN-Maliki Press, 2010), hlm. 60.

<sup>11</sup> *Ibid.*, hlm. 91.



pengembalian (*return*).<sup>12</sup> Ansari<sup>13</sup> membuktikan bahwa meskipun banyak pertentangan untuk menghilangkan beta atau tidak yang berhubungan dengan risiko agregat, namun CAPM masih layak untuk digunakan. Sehingga CAPM merupakan model regresi yang paling sering digunakan dan masih lebih disukai oleh perusahaan keuangan karena proses penerapannya yang sederhana dan mudah, meskipun perusahaan kecil perlu memahami keterbatasan dari penggunaan CAPM. Meskipun demikian, penelitian Roll (1988)<sup>14</sup> menyatakan bahwa CAPM tidak dapat menjelaskan *return* historis dan variasi pada *return cross sectional* yang dapat dijelaskan oleh pengaruh ekonomi yang sistematis hanya kurang dari 40%. Sehingga penggunaan variabel-variabel lain selain beta mampu menjelaskan variansi *return* dengan lebih baik dibandingkan CAPM.

Banz (1981) memperkenalkan anomali mengenai hubungan ekspektasi tingkat pengembalian (*expected return*) dan ukuran perusahaan (*size*), yang kemudian dipopulerkan oleh Fama dan French (1992). Penemuan yang menyatakan ekspektasi tingkat pengembalian tampaknya berhubungan dengan ukuran perusahaan dan rasio nilai buku saham terhadap pasarnya (*book-to-market ratio*) dikenal dengan Model Tiga Faktor Fama-French (FF *Three-*

---

<sup>12</sup> Rowland Bismark Fernando Pasaribu, "Model Fama dan French Sebagai Pembentukan Portofolio Saham di Indonesia," *Jurnal Akuntansi dan Bisnis*, Universitas Sebelas Maret, Vol. 9, No. 1 (Februari, 2009), hlm. 2.

<sup>13</sup> Valeed A. Ansari, "Capital Asset Pricing Model: Should We Stop Using It?," *Vikalpa: The Journal for Decision Makers*, Aligarh Muslim University, Aligarh, Vol. 25 No. 1 (Januari, 2000), hlm. 55-63.

<sup>14</sup> Febriyanti Dimaelita Siagian, "Pengujian Validitas Model CAPM Beta, Model Tiga Faktor Fama-French, dan Model Empat Faktor Carhart pada Pasar Modal Indonesia," *tesis*, Manajemen, Universitas Gadjah Madha (2012), hlm. 31.

*Factor Model*). Temuan terbaru dari Fama dan French (2014)<sup>15</sup> menemukan tingkat pengembalian saham rata-rata di Amerika Utara, Eropa, dan Asia Pasifik meningkat dengan memperhatikan *book-to-market ratio* dan profitabilitas namun berhubungan negatif dengan investasi, sedangkan bagi Jepang hubungan rata-rata *return* dan B/M kuat, namun *return* rata-rata menunjukkan sedikit berhubungan dengan profitabilitas maupun investasi.

Model pembentukan portofolio yang digunakan pun semakin berkembang terhadap pasar lingkup keuangan syariah, seperti munculnya *Islamic Capital Asset Pricing Model* (ICAPM). Studi empiris dari Sadaf dan Andleeb<sup>16</sup> yang mengacu pada penelitian Hanif<sup>17</sup>, menginisiasi menghilangkan *return* bebas risiko (*risk free return – Rf*) yang tidak diperkenankan dalam kerangka syariah dan memasukkan tingkat inflasi, tingkat pengembalian yang diperoleh antara memasukkan Inflasi (ICAPM) maupun Rf memberikan hasil yang hampir sama. Effendi<sup>18</sup> yang telah secara empiris membandingkan ketiga model SCAPM antara tanpa *risk free*, dengan inflasi, serta dengan zakat, memperlihatkan hasil di mana SCAPM inflasi memiliki volatilitas yang lebih tinggi yang menandakan lebih menguntungkan

---

<sup>15</sup> Eugene F. Fama dan Kenneth R. French, “International Tests of A Five-Factor Asset Pricing Model,” *Journal of Financial Economics* (2016).

<sup>16</sup> Rabeea Sadaf dan Sumera Andleeb, “Islamic Capital Asset Pricing Model (ICAPM),” *Jurnal Islamic Banking and Finance*, American Research Institute for Policy Development, Vol. 2, No. 1 (Maret 2014).

<sup>17</sup> Muhammad Hanif, “Risk and Return Shari’a Framework An Attempt to Develop Shari’a Compliant Asset Pricing Model - SCAPM,” *Pakistan Journal of Commerce and Social Sciences*, Vol. 5, No. 2 (2011).

<sup>18</sup> Kharisya Ayu Effendi, “Optimalisasi *Shari’a Compliant Asset Pricing Model* Terhadap *Rate of Return* Pada *Jakarta Islamic Index*,” *Jurnal Manajemen*, Vol. 19, No. 03 (Oktober 2016), hlm. 370.

diiringi dengan risiko yang lebih besar. Meskipun demikian, Muhammad<sup>19</sup> menolak adanya inflasi sebagai konsep dasar dari total nilai pasar karena kondisi yang tidak lengkap (*non exhausted condition*) sebagaimana dalam perekonomian selalu ada keadaan inflasi atau deflasi. Pada penelitian Hasanah<sup>20</sup> dan Quthbi<sup>21</sup> menggunakan Rf dengan proksi tingkat imbalan Sertifikat Bank Indonesia Syariah (SBIS).

Berdasarkan uraian di atas, maka penting kiranya dilakukan penelitian lanjutan terkait penggunaan beberapa model pembentuk portofolio saham syariah khususnya, agar didapat kolaborasi saham-saham yang mampu memberikan hasil yang lebih optimal dengan mempertimbangkan jenis-jenis risiko yang ada. Maka, penelitian ini bertujuan untuk mengidentifikasi hasil pembentukan portofolio yang baik (efisien) seoptimal mungkin pada saham syariah di Indonesia dengan menggunakan 3 metode pembentukan portofolio, yakni: *Capital Asset Pricing Model (CAPM)*, *Shariah Compliant Asset Pricing Model (SCAPM)*, *Fama-French Multifactor Model*. Hal ini dilakukan sebagai upaya untuk melihat sensitivitas berbagai model dalam mempengaruhi *return* portofolio sebagai suatu model estimator *return* saham syariah di Indonesia.

---

<sup>19</sup> Muhamad, *Manajemen Keuangan Syari'ah: Analisis Fiqh dan Keuangan* (Yogyakarta: UPP STIM YKPN, 2014).

<sup>20</sup> Shofia Mauizotun Hasanah, "Penentuan Portofolio Optimum Saham Syariah dengan Pendekatan *Shariah Compliant Asset Pricing Model (SCAPM)* dalam Rangka Pengembangan Pasar Modal," *tesis*, Pascasarjana Hukum Islam, Universitas Islam Negeri Sunan Kalijaga, Yogyakarta (2016).

<sup>21</sup> Zainul Hasan Quthbi, "Analisis Saham Syariah dengan Pendekatan *Shariah Compliant Asset Pricing Model (SCAPM)* Pada *Jakarta Islamic Index (JII)*," *Jurnal Ekonomi Islam*, Universitas Islam Negeri Sunan Kalijaga, Yogyakarta, Vol. 8, No. 1 (2017).

## B. Rumusan Masalah

Berdasarkan latar belakang di atas, maka rumusan masalah dalam penelitian ini yakni bagaimana perbedaan hasil pembentukan portofolio optimal saham syariah di Indonesia dengan menggunakan *Capital Asset Pricing Model (CAPM)*, *Shariah Compliant Asset Pricing Model (SCAPM)*, dan *Fama-French Multifactor Model*.

## C. Tujuan dan Kegunaan Penelitian

Tujuan yang ingin dicapai penelitian ini adalah untuk mengidentifikasi dan menganalisis perbedaan hasil pembentukan portofolio optimal saham syariah di Indonesia dengan menggunakan *Capital Asset Pricing Model (CAPM)*, *Shariah Compliant Asset Pricing Model (SCAPM)*, dan *Fama-French Multifactor Model*.

Adapun kegunaan dari penelitian ini yakni:

### 1. Manfaat Praktis

Bagi calon investor, investor, analis/konsultan keuangan, dan pembuat kebijakan, penelitian ini diharapkan dapat dijadikan salah satu tolak ukur dalam pertimbangan pengambilan keputusan berinvestasi. Penelaahan atas beberapa metode yang dapat menjadikan portofolio lebih optimal, diharapkan dapat lebih secara tepat pula dalam memilih dan menganalisis saham-saham syariah yang relevan dimasukkan dalam portofolio investasi investor guna mendapatkan hasil *return* yang diharapkan yang telah disesuaikan dengan risiko.

## 2. Manfaat Teoritis

Bagi kalangan akademisi, diharapkan penelitian ini dapat menjadi bahan masukan untuk pengembangan dunia ilmu pengetahuan, khususnya di bidang pasar modal, sebagai penyumbang wawasan dan ilmu pengetahuan yang lebih mendalam, serta sebagai dasar penelitian selanjutnya mengenai beberapa metode pembentukan portofolio optimal, khususnya dalam berinvestasi secara syariah.

### D. Sistematika Pembahasan

Penulisan penelitian ini disusun berdasarkan sistematika sebagai berikut:

Bab *pertama* merupakan bagian pendahuluan yang menjadi gambaran awal penelitian. Bab ini berisikan gambaran singkat mengenai hal-hal yang mendorong dilakukannya penelitian, perumusan masalah sebagai acuan pertanyaan, tujuan dilakukannya penelitian sebagai jawaban dari rumusan masalah dan rangkaian manfaat dari penelitian, serta sistematika pembahasan atau gambaran umum atas isi penelitian.

Bab *kedua* menguraikan berbagai landasan yang dijadikan sebagai acuan dalam penelitian ini, seperti ulasan singkat dari beberapa hasil penelitian terdahulu yang dijadikan sebagai bahan rujukan penelitian, membahas teori-teori yang berkaitan dengan masalah yang akan diteliti di antaranya: investasi, diversifikasi, portofolio optimal, CAPM, SCAPM, *Fama-French Multifactor Model*, dan analisis gaya.

Bab *ketiga* mendeskripsikan mengenai metode penelitian yang digunakan dalam penelitian ini. Metode-metode penelitian ini di antaranya berisi uraian mengenai jenis dan sifat penelitian, populasi dan sampel, metode pengamatan, teknik pengumpulan data, definisi operasional variabel, serta teknik penganalisisan data untuk menguji hipotesis yang diajukan.

Bab *keempat* membahas hasil analisis dari pengolahan data, baik analisis secara deskriptif maupun hasil pengujian hipotesis yang dilakukan. Adapun pembahasan yang dilakukan yakni pengaruh variabel independen terhadap variabel dependen yang diteliti pada masing-masing *asset pricing model* guna dikomparasikan.

Bab *kelima* merupakan penutup dari seluruh rangkaian penelitian. Bab ini memaparkan kesimpulan dari hasil analisis data serta saran-saran yang diberikan untuk penelitian selanjutnya.



## BAB V

### PENUTUP

#### A. Kesimpulan

Penelitian ini dilakukan untuk mengidentifikasi dan menganalisis perbedaan hasil penggunaan beberapa *asset pricing model*, yakni: *Capital Asset Pricing Model (CAPM)*, *Shariah Compliant Asset Pricing Model (SCAPM)*, dan *Fama-French Multifactor Model* dalam memprediksi *return* portofolio saham syariah yang ada di Indonesia. Penelitian ini bertujuan untuk mendapatkan estimasi koefisien regresi yang sebenarnya (*true coefficient regression*). Berdasarkan hasil dari *goodness of fit* serta uji diagnostik model, maka dapat disimpulkan bahwa model regresi dengan *Fama-French multifactor model* tidak dapat digunakan dalam membentuk portofolio saham syariah di Indonesia, baik dengan metode konvensional yang mengacu pada IHSG dan *BI rate*, maupun metode syariah dengan mengacu pada ISSI dan SBIS. Hal tersebut dapat terjadi dengan beberapa kemungkinan alasan, yakni:

1. *Adjusted R<sup>2</sup>* yang memiliki nilai kisaran 70-80% yang mana hanya sekitar 20% pengaruh faktor lain di luar penelitian, namun pada uji parsial hanya variabel *market (R<sub>m</sub>-R<sub>f</sub>)* dan *SMB* yang secara konsisten berpengaruh signifikan pada seluruh model di tingkat kepercayaan 95%, baik dengan metode konvensional maupun metode syariah. Adapun penggunaan fitur *Solver Excel* meskipun premi pasar hanya berpengaruh sebesar kurang lebih 33%, namun mampu meningkatkan kinerja portofolio yang

mempertimbangkan risiko tiap emiten dengan asumsi mengalokasikan seluruh asetnya (berdasarkan *Sharpe ratio*). Perbandingan nilai AIC juga membuktikan bahwa penggunaan fitur *Solver Excel* merupakan model yang lebih baik. Sehingga hal ini menunjukkan bahwa kondisi pasar sebenarnya menuju pada pembentukan iklim pasar yang dituju dalam Islam yang menyeimbangkan antara pengaruh mekanisme pasar, pertumbuhan harta, pendapatan, dan faktor lainnya di luar penelitian ini.

2. Variabel HML, RMW, dan CMA tidak berpengaruh signifikan pada seluruh model di tingkat kepercayaan 95% dengan metode konvensional maupun metode syariah.
3. Dari hasil uji diagnostik model, menunjukkan model telah memenuhi asumsi BLUE, di mana; tidak terjadi multikolinieritas, tidak terdapat signifikansi yang berarti yang menunjukkan tidak adanya heteroskedastisitas dan data residualnya terdistribusi normal, serta tidak terdapat autokorelasi.

Penelitian ini membuktikan bahwa (S)CAPM masih menjadi model yang lebih mampu menjelaskan *expected return* portofolio saham syariah agar tercapai hasil yang optimum. Di samping itu, sebagai investor saham syariah di pasar modal Indonesia, investor dapat menggunakan model 2 di mana pengaruh pasar berkontribusi sebesar kurang lebih 33% dengan pengaturan proporsi menggunakan fitur *Solver Excel* yang dimungkinkan mampu diperoleh *return* optimum dengan mempertimbangkan kinerja terbaik dan pengaruh faktor lainnya. Meskipun demikian, berdasarkan uji F dapat



disimpulkan bahwa seluruh model dalam penelitian ini masih layak untuk digunakan dalam memperhitungkan *excess return* yang diharapkan.

## B. Saran

Beberapa saran yang dapat diberikan untuk menyempurnakan penelitian ini di antaranya sebagai berikut:

1. Penelitian selanjutnya dapat mengambil populasi saham-saham yang termasuk dalam indeks JII 70, sehingga dapat dilakukan diversifikasi portofolio yang lebih luas dan beragam yang dapat memenuhi karakteristik persepsi investor.
2. Coba menggunakan *zero beta version* yang diharapkan menghasilkan hasil yang lebih realistis.
3. Untuk memperoleh gambaran yang lebih komprehensif dalam membandingkan peranan model-model penilaian aset, seperti ICAPM (Merton, 1973) dan model APT (Rose, 1976), Model empat faktor (Carhart, 1997 - diprosikan dengan mengukur pengaruh beta, ukuran perusahaan, rasio *book-to-market equity*, dan momentum terhadap *return* saham).
4. Jika dengan FF3FM, dapat menambahkan faktor lain: PER, momentum, maupun *distress risk*.
5. Perhatikan kondisi *up* dan *down market* dalam menggunakan CAPM.
6. Baiknya perhitungan *return* dengan menggunakan yang diterapkan Perez (1979) dalam pengujian CAPM di Manila Stock Exchange (MSE). *Return* saham individu yang digunakan merupakan jumlah harga saham pada

akhir periode ditambah dividen atau semua distribusi yang dibayarkan pada periode tersebut dibagi dengan harga saham pada awal periode. Diharapkan dapat mempertimbangkan nilai dividen dalam perhitungan nilai *return*, sehingga *return* yang diperoleh akan lebih baik dan akurat.

7. Dapat menggunakan Q-scoreor Tobin Q guna memperkirakan nilai bisnis suatu perusahaan.



## DAFTAR PUSTAKA

### I. Al-Qur'an/Hadis

Departemen Agama RI, *Al-Qur'an dan Terjemahnya*, Bandung: Diponegoro, 2003.

### II. Fikih, Ekonomi, dan Metodologi Penelitian

\_\_\_\_\_, *Himpunan Hadits Pilihan: Hadits Shahih Bukhari*, edisi ke-1992, Surabaya: Al-Ikhlās, t.t.

Algifari, *Statistik Deskriptif Plus untuk Ekonomi dan Bisnis*, Yogyakarta: UUP STIM YKPN, 2010.

Arifin, Zaenal, *Teori Keuangan dan Pasar Modal*, Yogyakarta: Ekonisia, 2017.

Ash-Shawi, Shalah dan Abdullah al-Mushlih, *Fikih Ekonomi Keuangan Islam*, alih bahasa Abu Umar Basyir, cet. ke-3, Jakarta: Darul Haq, 2011.

Asnawi, Said Kelana dan Chandra Wijaya, *Metodologi Penelitian Keuangan: Prosedur, Ide dan Kontrol*, edisi pertama, Yogyakarta: Graha Ilmu, 2006.

Baqi, Muhammad Fuad Abdul, *Ṣahih Al-Bukhāri jilid 1: Al-Imam Al-Hafiz Abu Abdullah Muhammad bin Ismail Al-Bukhāri*, terj. Muhammad Iqbal (Jakarta: Pustaka as-Sunnah, 2010), hadis no. 1404.

Brealey, dkk, *Dasar-Dasar Manajemen Keuangan Perusahaan*, jilid 2, edisi 5, Jakarta: Erlangga, 2008.

Bodie, Zvi dkk, *Manajemen Portofolio dan Investasi*, ed. 9, buku 2, Jakarta: Salemba Empat, 2014.

Ghozali, Imam, *Aplikasi Analisis Multivariate dengan Program IBM SPSS 19*, edisi ke-5, Semarang: Badan Penerbit Universitas Diponegoro, 2011.

Haming, Murdifin, *Studi Kelayakan Investasi Proyek dan Bisnis*, Jakarta: Bumi Aksara, 2010.

Hoetoro, Arif, *Ekonomi Islam: Pengantar Analisis Kesejahteraan dan Metodologi*, Malang: BPFE Universitas Brawijaya, 2007.

Karim, Adiwarmān Abdul, *Ekonomi Mikro Islami*, edisi ketiga, Jakarta: RajaGrafindo Persada, 2007.

Kuncoro, Mudrajad, *Metode Penelitian: Teori dan Aplikasi untuk Bisnis dan Ekonomi*, cet. ke-3, Yogyakarta: UPP STIM YKPN.

- Muhamad, *Manajemen Keuangan Syari'ah: Analisis Fiqh dan Keuangan*, Yogyakarta: UPP STIM YKPN, 2014.
- Muis, Saludin, *Meramal pergerakan harga saham: menggunakan Pendekatan Model ARIMA, Indkes Tunggal, dan Markowitz*, Bandung: Graha Ilmu, 2008.
- Samsul, Mohamad, *Pasar Modal dan Manajemen Portofolio*, Jakarta: Erlangga, 2015.
- Sekaran, Uma, *Metodologi Penelitian untuk Bisnis*, edisi 1, Jakarta: Salemba Empat, 2006.
- Subagyo, Pangestu, *Statistika Terapan*, Yogyakarta: BPFPE, 2012.
- Suharyadi dan Purwanto, *Statistik: Untuk Ekonomi dan Keuangan Modern*, edisi 2, Jakarta: Salemba Empat, 2009.
- Syamsul Hadi, *Metode Penelitian Kuantitatif untuk Akuntansi dan Keuangan*, edisi I, Yogyakarta: Ekonisia, 2006.
- Winaryo, Wing Wahyu, *Analisis Ekonometrika dan Statistika dengan Eview*, Yogyakarta: UPP STIM YKPN, 2009.
- Tandelilin, Eduardus, *Portofolio dan Investasi: Teori dan Aplikasi*, edisi ke-1, Yogyakarta: Kanisius, 2010.
- Yuliana, Indah, *Investasi Produk Keuangan Syariah*, Malang: UIN-Maliki Press, 2010.

### III. Jurnal

- Akbar, Kabul Hidayat, "Analisis Tiga Faktor Model Fama dan French dan Januari Effect di Bursa Efek Jakarta periode 1998-2002," *tesis*, Manajemen, Universitas Gadjah Mada, Yogyakarta.
- Ansari, Valeed A., "Capital Asset Pricing Model: Should We Stop Using It?," *Vikalpa: The Journal for Decision Makers*, Aligarh Muslim University, Aligarh, Vol. 25 No. 1, Januari 2000.
- Ashraf, Dawood, "Does Shari'ah Screening Cause Abnormal Returns? Empirical Evidence from Islamic Equity Indexes," *Journal of Business Ethics*, Vol. 134, Issue 2, Maret 2016.
- Bachtiar, Nelayesiana, "Analisis Keterkaitan Indeks Saham, Tingkat Suku Bunga SBI dan Pertumbuhan Ekonomi di Indonesia Periode 1998-2013", *tesis*, Universitas Terbuka, Yogyakarta 2015.
- Black, Fischer, "Beta and Return", *the Journal of Portfolio Management*, 1993.

- Candra, Antoni, "Prediksi *Return* Saham: Perbandingan Berdasarkan Capital Asset Pricing Model dan Arbitrage Price Theory Pada Perusahaan LQ-45 di Bursa Efek Indonesia," *tesis*, Universitas Katolik Widya Mandala Surabaya, 2014.
- Carhart, Mark M., "On Persistence in Mutual Fund Performance", *The Journal of Finance*, 1997.
- Chandra, Teddy, "The Impact of Fuel Price Increase on Stock Price in Indonesia Stock Exchange," *Journal of Economics, Bussiness, and Accountancy Ventura*, Vol. 16, No. 3, STIE Pelita Indonesia (Desember 2013).
- Derigs, Ulrich dan Shehab Marzban, "Review and Analysis of Current Shariah-compliant Equity Screening Practices," *International Journal of Islamic and Middle Eastern Finance and Management*, University of Cologne, Germany Vol. 1 No. 4 (2008).
- Effendi, Kharisya Ayu, "Optimalisasi *Shari'a Compliant Asset Pricing Model* Terhadap *Rate of Return* Pada *Jakarta Islamic Index*," *Jurnal Manajemen*, Vol. 19, No. 03, Oktober 2016.
- Elton, Edwin J., Martin J. Gruber, dan Christopher R. Blake, "Fundamental Economic Variables, Expected *Returns*, and Bond Fund Performance", *The Journal of finance*, Vol. 50, No. 4, September, 1995.
- Fama, Eugene F. dan Kenneth R. French, *A Five-Factor Asset Pricing Model*, *Journal of Financial Economics*, September, 2014.
- Fama, Eugene F. dan Kenneth R. French, "International Tests of A Five-Factor Asset Pricing Model," *Journal of Financial Economics*, 2016.
- Fama, Eugene F. dan Kenneth R. French, "Size and Book-to-Market Factors in Earnings and *Returns*", *The Journal of Finance*, Vol. L, No. 1, Maret, 1995.
- Firmansyah, Egi Arvian, "Seleksi Saham Syariah: Perbandingan antara Bursa Efek Indonesia dan Malaysia", *Jurnal Inspirasi Bisnis dan Manajemen*, Universitas Padjadjaran, Bandung, Indonesia, Vol. 1 No. 1, 2017.
- Hanif, Muhammad, "Risk and *Return* Shari'a Framework An Attempt to Develop Shari'a Compliant Asset Pricing Model - SCAPM," *Pakistan Journal Commerce and Social Sciences*, Vol. 5, No. 2, Januari 2011.
- Hasanah, Shofia Mauizotun, "Penentuan Portofolio Optimum Saham Syariah dengan Pendekatan *Shariah Compliant Asset Pricing Model* (SCAPM) dalam Rangka Pengembangan Pasar Modal," *tesis*, Pascasarjana Hukum Islam, Universitas Islam Negeri Sunan Kalijaga, Yogyakarta, 2016.

- Jawadi, Fredj, Nabila Jawadi, W. Louhichi, "Conventional and Islamic Price Performance: An Empirical Investigation," *Journal International Economics*, Vol. 137, Mei 2012.
- Kurniawan, Muhammad Arif, "Pengaruh Faktor-Faktor Fundamental Perusahaan dan Risiko Sistematis terhadap *Return* Saham Perusahaan-Perusahaan yang Terdaftar di Jakarta Islamic Indeks (JII) Tahun 2008-2012," *tesis*, Magister Hukum Islam, Keuangan dan Perbankan Syari'ah, Universitas Islam Negeri Sunan Kalijaga, Yogyakarta, 2016.
- Liani, Miza, "Analisis Perbandingan Saham-Saham Efisien Pembentukan Portofolio Dengan *Capital Asset Pricing Model* (CAPM) dan *Fama-French Three Factor Model* (Studi Kasus Pada Perusahaan Kompas 100 Tahun 2013-2015)," *Jurnal KURS*, Universitas Riau, Vol. 2, No. 1, Juni 2017.
- Pasaribu, Rowland Bismark Fernando, "Model Fama dan French Sebagai Pembentukan Portofolio Saham di Indonesia," *Jurnal Akuntansi dan Bisnis*, Universitas Sebelas Maret, Vol. 9, No. 1, Februari, 2009.
- Prawesti, Laksmi W., "Analisis Perbandingan Kinerja Portofolio Optimal Saham Syariah dan Portofolio Optimal Saham Nonsyariah di bursa Efek Indonesia," *tesis*, Magister Manajemen, Universitas Gadjah Mada, Yogyakarta, 2016.
- Quthbi, Zainul Hasan, "Analisis Saham Syariah dengan Pendekatan *Shariah Compliant Asset Pricing Model* (SCAPM) Pada *Jakarta Islamic Index* (JII)," *Jurnal Ekonomi Islam*, Universitas Islam Negeri Sunan Kalijaga, Yogyakarta, Vol. 8, No. 1, 2017.
- Rakhmawati, Uly dan Maswar Patuh Priyadi, "Analisis *Three Factor Fama and French Model* Dan *Capital Asset Pricing Model*," *Jurnal Ilmu & Riset Akuntansi*, Vol. 4, No. 8, 2015.
- Reddy, Krishna dan Mingli Fu, "Does Shariah Compliant Stocks Perform Better than The Conventional Stocks? A Comparative Study of Stocks Listed on The Australian Study Exchange," *Asian Journal of Finance and Accounting*, University of Waikato, Vol. 6 No. 2, 2014.
- Sadaf, Rabeea dan Sumera Andleeb, "Islamic Capital Asset Pricing Model (ICAPM)," *Journal Islamic Banking and Finance*, American Research Institute for Policy Development, Vol. 2, No. 1, Maret 2014.
- Siagian, Febriyanti Dimaelita, "Pengujian Validitas Model CAPM Beta, Model Tiga Faktor Fama-French, dan Model Empat Faktor Carhart pada Pasar Modal Indonesia," *tesis*, Manajemen, Universitas Gadjah Madha, 2012.

Tahir, Imran dan Mark Brimble, "Islamic Investment Behavior," *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 4, Issue: 2 (2011)

Utami, Dwi Setiyani, "Pengujian Validitas Beta: Model CAPM, Model Tiga Faktor Fama dan French, dan Model Empat Faktor Carhart di Bursa Efek Indonesia," *tesis*, Manajemen, Universitas Gadjah Mada, Yogyakarta, 2011.

Witrayana, Putu Dicka, "Evaluasi Kinerja Portofolio Data Envelopment Analysis (DEA): Perbandingan dengan Indeks Kompas 100 dan IHSG," *tesis*, Magister Manajemen, Universitas Gadjah Mada, Yogyakarta, 2013.

Yufang, Shao, "The Comparison of Fama-French Five-Factor Model in Chinese A-share Stock Market and in Real Estate Sector", *master's thesis*, Aalto University School of Business, 2017.

#### **IV. Fatwa dan Peraturan Perundang-Undangan**

DSN-MUI, Fatwa No. 80/DSN-MUI/III/2011 tentang Penerapan Prinsip Syariah dalam Mekanisme Perdagangan Efek Bersifat Ekuitas di Pasar Reguler Bursa Efek (8 Maret 2011).

Panduan IDX Fact Book.

Pasal 27 Undang-Undang Nomor 19 Tahun 2008 tentang Surat Berharga Syariah Negara.

Peraturan Bank Indonesia Nomor 10/11/PBI/2008 Sertifikat bank Indonesia Syariah.

Pasal 16 Undang-Undang Nomor 24 Tahun 2002 tentang Surat Utang Negara.

Peraturan Bank Indonesia Nomor 18/12/PBI/2016 tentang Operasi Moneter.

Peraturan Bank Indonesia Nomor 19/9/PBI/2017 tentang Penerbitan dan Transaksi Surat Berharga Komersial di Pasar Uang.

Republik Indonesia, Undang-Undang Nomor 8 Tahun 1995 tentang Pasar Modal.

#### **V. Lain-Lain**

\_\_\_\_\_, "Indonesia Terus Memperbaiki Regulasi bagi Kemudahan Dunia Usaha", dalam [www.worldbank.org](http://www.worldbank.org) diakses tanggal 29 Januari 2018.

Embu, Wilfridus Setu, “Per Desember 2017, Investor Pasar Modal Capai 1,1 juta didominasi anak muda”, dalam [www.merdeka.com](http://www.merdeka.com) diakses tanggal 09 Januari 2017.

The Modern Index Strategy, “Emerging Markets” ,dalam [www.msci.com/acwi](http://www.msci.com/acwi) diakses tanggal 12 Juli 2018.





Lampiran 11

Tabel *Excess Return* Portofolio Kombinasi Size-BE/ME  
Metode Konvensional

Tahun	Bulan	SL	SM	SH	BL	BM	BH	Small	Big	Low	Medium	High
2013	1	0.00639	0	0.09706	0.05173	0.04615	0.00741	0	0.02678	0.02627	0.00741	0.09706
	2	0.15142	0	0.08576	0.11859	0.03085	0.04992	0	0.04038	0.09113	0.04992	0.08576
	3	0.03091	0	-0.02849	0.00121	-0.00698	0.01513	0	0.00408	0.01196	0.01513	-0.02849
	4	0.06708	0	-0.03413	0.01648	0.13611	0.05002	0	0.09307	0.1016	0.05002	-0.03413
	5	0.0655	0	-0.01788	0.02381	0.14527	-0.02407	0	0.0606	0.10538	-0.02407	-0.01788
	6	-0.04327	0	-0.09798	-0.07062	0.00316	0.02492	0	0.01404	-0.02005	0.02492	-0.09798
	7	-0.10079	0	-0.15563	-0.12821	0.02816	-0.02979	0	-0.00081	-0.03631	-0.02979	-0.15563
	8	-0.07681	0	0.03502	-0.0209	-0.01396	-0.0785	0	-0.04623	-0.04539	-0.0785	0.03502
	9	-0.0702	0	0.04164	-0.01428	-0.04027	0.0123	0	-0.01399	-0.05524	0.0123	0.04164
	10	0.14464	0	0.04502	0.09483	-0.01103	0.06963	0	0.0293	0.06681	0.06963	0.04502
	11	-0.05638	0	-0.02243	-0.03941	-0.12654	-0.05393	0	-0.09023	-0.09146	-0.05393	-0.02243
	12	-0.02727	0	-0.03593	-0.0316	-0.02906	0.02696	0	-0.00105	-0.02816	0.02696	-0.03593
2014	1	0	0.00443	0.00301	0.00372	0.09316	-0.00636	0	0.0434	0.09316	-0.00096	0.00301
	2	0	0.00312	0.0399	0.02151	0.00981	0.04389	0	0.02685	0.00981	0.02351	0.0399
	3	0	0.06774	0.01548	0.04161	-0.02875	-0.00081	0	-0.01478	-0.02875	0.03347	0.01548
	4	0	0.00937	0.0298	0.01958	0.00816	0.00829	0	0.00822	0.00816	0.00883	0.0298
	5	0	-0.07947	0.02175	-0.02886	-0.00216	0.06669	0	0.03226	-0.00216	-0.00639	0.02175
	6	0	0.05747	-0.07048	-0.0065	0.01387	-0.00404	0	0.00492	0.01387	0.02672	-0.07048
	7	0	-0.00085	0.03963	0.01939	0.04629	0.05994	0	0.05312	0.04629	0.02955	0.03963
	8	0	0.06541	0.03111	0.04826	-0.00299	-0.01323	0	-0.00811	-0.00299	0.02609	0.03111
	9	0	-0.04112	-0.01675	-0.02893	0.03586	0.00267	0	0.01926	0.03586	-0.01922	-0.01675
	10	0	-0.09204	-0.05895	-0.0755	-0.02921	-0.05528	0	-0.04224	-0.02921	-0.07366	-0.05895
	11	0	-0.03148	0.02	-0.00574	0.02321	0.03721	0	0.03021	0.02321	0.00286	0.02
	12	0	-0.0943	-0.01615	-0.05523	0.06439	0.02119	0	0.04279	0.06439	-0.03655	-0.01615
2015	1	0.01249	0.11513	0.02993	0.05252	0.1015	0.01523	0.02475	0.04716	0.05699	0.06518	0.02734
	2	-0.03895	0.05925	-0.0367	-0.00546	-0.01076	0.01197	0.1415	0.04757	-0.02485	0.03561	0.0524
	3	0.02645	-0.00025	-0.00288	0.00777	0.05498	0.03019	0.04311	0.04276	0.04071	0.01497	0.02012
	4	-0.04451	-0.06659	-0.07146	-0.06085	-0.02333	-0.16855	-0.02477	-0.07222	-0.03392	-0.11757	-0.04811
	5	-0.02879	0.03013	-0.00621	-0.00162	0.03488	0.08071	-0.01189	0.03457	0.00305	0.05542	-0.00905
	6	-0.04247	-0.02576	-0.09381	-0.05401	-0.09699	0.00326	-0.00256	-0.0321	-0.06973	-0.01125	-0.04819
	7	0.00562	0.01346	-0.17034	-0.05042	-0.00184	-0.03552	-0.13297	-0.05678	0.00189	-0.01103	-0.15165
	8	-0.03013	-0.06297	-0.08911	-0.06074	0.00827	-0.07602	0.05716	-0.00353	-0.01093	-0.0695	-0.01598
	9	-0.1916	-0.05344	-0.02408	-0.08971	-0.04236	-0.10993	-0.09648	-0.08292	-0.11698	-0.08169	-0.06028
	10	0.03297	0.0692	0.04916	0.05044	0.01168	0.06687	0.04415	0.0409	0.02232	0.06803	0.04665
	11	-0.07499	0.03009	-0.10815	-0.05102	-0.03191	0.04046	-0.111	-0.03415	-0.05345	0.03527	-0.10957
	12	-0.01755	0.10792	-0.00927	0.02703	0.02972	0.02904	0.03285	0.03054	0.00608	0.06848	0.01179

2016	1	0.00526	-0.01383	0.10915	0.03353	0.02941	0.0666	0.02016	0.03872	0.01733	0.02638	0.06465
	2	-0.0324	0.03418	0.12932	0.0437	0.13388	0.00693	-0.11985	0.00698	0.05074	0.02055	0.00474
	3	0.10012	-0.04416	0.03864	0.03154	-0.0417	0.03782	-0.02022	-0.00803	0.02921	-0.00317	0.00921
	4	-0.05528	-0.02362	0.06281	-0.00536	-0.00726	-0.01047	-0.03716	-0.0183	-0.03127	-0.01704	0.01283
	5	0.03359	-0.03022	-0.04726	-0.01463	0.0299	0.00569	-0.0487	-0.00437	0.03175	-0.01227	-0.04798
	6	0.06218	0.06488	0.1075	0.07819	0.04766	0.10806	0.06574	0.07382	0.05492	0.08647	0.08662
	7	0.09846	0.02036	0.17622	0.09835	0.01438	0.04654	0.0568	0.03924	0.05642	0.03345	0.11651
	8	0.06482	0.00419	0.02128	0.03009	0.0764	0.02003	0.16998	0.0888	0.07061	0.01211	0.09563
	9	-0.04976	-0.00458	0.06584	0.00383	-0.04208	0.01367	-0.0618	-0.03007	-0.04592	0.00454	0.00202
	10	0.01051	0.03718	0.04492	0.03087	-0.00877	-0.01275	0.17962	0.0527	0.00087	0.01222	0.11227
	11	-0.17941	-0.15687	-0.00267	-0.11298	-0.09204	-0.10183	-0.00871	-0.06753	-0.13572	-0.12935	-0.00569
	12	0.03303	-0.04134	0.06983	0.02051	-0.03006	0.06767	0.00788	0.01516	0.00148	0.01316	0.03885
2017	1	-0.04781	0.10265	0.01508	0.02331	0.0202	-0.01572	0	0.00224	-0.0138	0.04346	0.01508
	2	0.04974	-0.05387	0.00435	7.3E-05	0.00325	0.04483	0	0.02404	0.0265	-0.00452	0.00435
	3	0.00256	-0.01983	0.01139	-0.00196	-0.00113	0.06041	0	0.02964	0.00071	0.02029	0.01139
	4	0.02484	0.0767	-0.0012	0.03345	0.04637	0.03219	0	0.03928	0.0356	0.05445	-0.0012
	5	-0.03276	-0.02635	-0.03735	-0.03215	0.01022	0.00261	0	0.00642	-0.01127	-0.01187	-0.03735
	6	0.04977	-0.01176	0.01033	0.01611	0.0294	0.02472	0	0.02706	0.03958	0.00648	0.01033
	7	0.07598	0.05192	0.03077	0.05289	-0.01942	0.00155	0	-0.00893	0.02828	0.02674	0.03077
	8	-0.01826	-0.02203	0.01191	-0.00946	0.03906	-0.00575	0	0.01666	0.0104	-0.01389	0.01191
	9	-0.03021	0.05781	-0.01358	0.00467	-0.01937	0.015	0	-0.00218	-0.02479	0.0364	-0.01358
	10	-0.04336	0.04458	-0.02212	-0.00697	0.00708	-0.02243	0	-0.00768	-0.01814	0.01107	-0.02212
	11	-0.00354	-0.1633	-0.07865	-0.08183	-0.02687	-0.00104	0	-0.01395	-0.0152	-0.08217	-0.07865
	12	0.05118	-0.00354	0.04977	0.03247	0.08932	0.05068	0	0.07	0.07025	0.02357	0.04977

## Lampiran 12

**Tabel *Excess Return* Portofolio Kombinasi *Size-Operational Profitability*  
Metode Konvensional**

Tahun	Bulan	SW	SN	SR	BW	BN	BR	Small	Big	Weak	Neutral	Robust
2013	1	0.09706	0.00639	0	0.05173	0	-0.00719	0.03006	0.01144	0.09706	-0.0004	0.03006
	2	0.08576	0.15142	0	0.11859	0	0.014	0.0675	0.04075	0.08576	0.08271	0.0675
	3	-0.02849	0.03091	0	0.00121	0	0.02672	3.9E-05	0.01338	-0.02849	0.02881	3.9E-05
	4	-0.03413	0.06708	0	0.01648	0	0.11007	0.03869	0.07438	-0.03413	0.08857	0.03869
	5	-0.01788	0.0655	0	0.02381	0	0.00606	0.01228	0.00917	-0.01788	0.03578	0.01228
	6	-0.09798	-0.04327	0	-0.07062	0	-0.04168	0.06206	0.01019	-0.09798	-0.04247	0.06206
	7	-0.15563	-0.10079	0	-0.12821	0	-0.04519	-0.0002	-0.0227	-0.15563	-0.07299	-0.0002
	8	0.03502	-0.07681	0	-0.0209	0	-0.07598	-0.05867	-0.06733	0.03502	-0.0764	-0.05867
	9	0.04164	-0.0702	0	-0.01428	0	0.02188	-0.01162	0.00513	0.04164	-0.02416	-0.01162
	10	0.04502	0.14464	0	0.09483	0	0.07379	0.03997	0.05688	0.04502	0.10922	0.03997
	11	-0.02243	-0.05638	0	-0.03941	0	-0.03663	-0.08967	-0.06315	-0.02243	-0.04651	-0.08967
	12	-0.03593	-0.02727	0	-0.0316	0	0.02379	0.0104	0.0171	-0.03593	-0.00174	0.0104
2014	1	-0.04736	0.05659	0	0.00461	0	0.00314	0.08683	0.04499	-0.04736	0.02986	0.08683
	2	0.03103	0.0172	0	0.02412	0	0.04091	0.0118	0.02636	0.03103	0.02906	0.0118
	3	-0.00521	0.07002	0	0.0324	0	-0.02714	-0.01119	-0.01917	-0.00521	0.02144	-0.01119
	4	0.0713	-0.00735	0	0.03198	0	-0.00785	0.01891	0.00553	0.0713	-0.0076	0.01891
	5	0.01998	0.00895	0	0.01446	0	-0.02049	0.05596	0.01774	0.01998	-0.00577	0.05596
	6	-0.06218	-0.00719	0	-0.03469	0	0.00789	0.00592	0.0069	-0.06218	0.00035	0.00592
	7	0.02522	0.02676	0	0.02599	0	0.04577	0.05574	0.05075	0.02522	0.03626	0.05574
	8	0.04353	-0.01663	0	0.01345	0	0.00503	-0.01517	-0.00507	0.04353	-0.0058	-0.01517
	9	-0.00295	-0.07886	0	-0.04091	0	-0.00324	0.0398	0.01828	-0.00295	-0.04105	0.0398
	10	-0.10435	-0.02706	0	-0.06571	0	-0.03954	-0.0397	-0.03962	-0.10435	-0.0333	-0.0397
	11	-0.0157	0.04618	0	0.01524	0	0.03272	0.0262	0.02946	-0.0157	0.03945	0.0262
	12	-0.03079	-0.02401	0	-0.0274	0	0.09028	0.01833	0.05431	-0.03079	0.03314	0.01833
2015	1	0.02993	0.06834	0.10608	0.06812	0.02475	0.07214	0.04459	0.04716	0.02734	0.07024	0.07533
	2	-0.0367	-0.0043	0.08816	0.01572	0.1415	-0.01319	0.0144	0.04757	0.0524	-0.00875	0.05128
	3	-0.00288	0.03562	-0.04529	-0.00419	0.04311	0.05086	0.03431	0.04276	0.02012	0.04324	-0.00549
	4	-0.07146	-0.01811	-0.14146	-0.07701	-0.02477	-0.17152	-0.02037	-0.07222	-0.04811	-0.09482	-0.08091
	5	-0.00621	0.00825	0.01497	0.00567	-0.01189	0.05854	0.05705	0.03457	-0.00905	0.0334	0.03601
	6	-0.09381	0.01808	-0.13017	-0.06863	-0.00256	-0.05627	-0.03746	-0.0321	-0.04819	-0.01909	-0.08381
	7	-0.17034	-0.0153	0.06314	-0.04083	-0.13297	-0.04429	0.00693	-0.05678	-0.15165	-0.0298	0.03504
	8	-0.08911	-0.02037	-0.11534	-0.07494	0.05716	-0.046	-0.02175	-0.00353	-0.01598	-0.03319	-0.06855
	9	-0.02408	-0.07958	-0.13933	-0.081	-0.09648	-0.08303	-0.06927	-0.08292	-0.06028	-0.0813	-0.1043
	10	0.04916	0.01761	0.13614	0.06764	0.04415	0.09156	-0.01301	0.0409	0.04665	0.05459	0.06156
	11	-0.10815	-0.02395	0.03309	-0.03301	-0.111	-0.0264	0.03495	-0.03415	-0.10957	-0.02518	0.03402
	12	-0.00927	0.06926	0.05977	0.03992	0.03285	0.03262	0.02614	0.03054	0.01179	0.05094	0.04296

2016	1	0.10915	-0.01383	0.00526	0.03353	0.02016	0.06505	0.03096	0.03872	0.06465	0.02561	0.01811
	2	0.12932	0.03418	-0.0324	0.0437	-0.11985	0.06366	0.07715	0.00698	0.00474	0.04892	0.02237
	3	0.03864	-0.04416	0.10012	0.03154	-0.02022	0.00864	-0.01252	-0.00803	0.00921	-0.01776	0.0438
	4	0.06281	-0.02362	-0.05528	-0.00536	-0.03716	-0.04075	0.02302	-0.0183	0.01283	-0.03218	-0.01613
	5	-0.04726	-0.03022	0.03359	-0.01463	-0.0487	0.01439	0.0212	-0.00437	-0.04798	-0.00791	0.02739
	6	0.1075	0.06488	0.06218	0.07819	0.06574	0.09103	0.06469	0.07382	0.08662	0.07796	0.06343
	7	0.17622	0.02036	0.09846	0.09835	0.0568	0.03128	0.02963	0.03924	0.11651	0.02582	0.06404
	8	0.02128	0.00419	0.06482	0.03009	0.16998	0.09656	-0.00013	0.0888	0.09563	0.05038	0.03234
	9	0.06584	-0.00458	-0.04976	0.00383	-0.0618	-0.02378	-0.00463	-0.03007	0.00202	-0.01418	-0.02719
	10	0.04492	0.03718	0.01051	0.03087	0.17962	-0.00617	-0.01535	0.0527	0.11227	0.0155	-0.00242
	11	-0.00267	-0.15687	-0.17941	-0.11298	-0.00871	-0.08835	-0.10552	-0.06753	-0.00569	-0.12261	-0.14246
	12	0.06983	-0.04134	0.03303	0.02051	0.00788	0.03753	7.1E-05	0.01516	0.03885	-0.0019	0.01655
2017	1	0.0246	0.01696	0	0.02078	0.02389	-0.04403	0.00446	-0.00523	0.02424	-0.01353	0.00446
	2	-0.00396	0.00561	0	0.00083	0.11662	0.027	-0.00088	0.04758	0.05633	0.01631	-0.00088
	3	0.02681	-0.01225	0	0.00728	0.06841	0.04657	0.02133	0.04544	0.04761	0.01716	0.02133
	4	-0.02272	0.0478	0	0.01254	0.01102	0.03303	0.04842	0.03082	-0.00585	0.04041	0.04842
	5	-0.07595	-0.00642	0	-0.04118	0.04294	-0.02656	0.00397	0.00678	-0.01651	-0.01649	0.00397
	6	0.02612	0.00559	0	0.01585	-0.01573	0.02855	0.04005	0.01762	0.00519	0.01707	0.04005
	7	0.04738	0.04182	0	0.0446	0.0882	-0.1165	-0.00196	-0.01009	0.06779	-0.03734	-0.00196
	8	0.01974	-0.01468	0	0.00253	0.00287	-0.01637	0.02479	0.00377	0.01131	-0.01552	0.02479
	9	-0.02157	0.01	0	-0.00579	0.05105	-0.00037	-0.0148	0.01196	0.01474	0.00481	-0.0148
	10	-0.01787	-0.0098	0	-0.01383	0.07674	0.00904	-0.04631	0.01316	0.02944	-0.00038	-0.04631
	11	-0.05979	-0.09441	0	-0.0771	-0.02921	0.00029	-0.00931	-0.01274	-0.0445	-0.04706	-0.00931
	12	0.05636	0.02808	0	0.04222	0.05162	0.0364	0.08088	0.0563	0.05399	0.03224	0.08088

### Lampiran 13

**Tabel *Excess Return* Portofolio Kombinasi *Size-Investment*  
Metode Konvensional**

Tahun	Bulan	SC	SI	SA	BC	BI	BA	Small	Big	Conservative	Intermediate	Aggressive
2013	1	0.02882	0.05183	0.07444	0.0517	0.03926	-0.0009	0	0.01918	0.03404	0.02546	0.07444
	2	0.18302	0.16367	0.07114	0.13928	0.03507	0.05345	0	0.04426	0.10905	0.10856	0.07114
	3	0.01555	-0.04432	0.00171	-0.00902	-0.02264	0.03294	0	0.00515	-0.00354	-0.00569	0.00171
	4	-0.01831	0.1094	-0.01977	0.02377	0.0528	0.07686	0	0.06483	0.01725	0.09313	-0.01977
	5	-0.00479	0.09769	-0.00518	0.02924	-0.08983	0.07621	0	-0.00681	-0.04731	0.08695	-0.00518
	6	-0.005	-0.07214	-0.1011	-0.05942	0.08345	-0.02136	0	0.03105	0.03923	-0.04675	-0.1011
	7	-0.12831	0.00246	-0.18087	-0.10224	0.02565	-0.04743	0	-0.01089	-0.05133	-0.02249	-0.18087
	8	0.02001	-0.0634	-0.00173	-0.01504	-0.07584	-0.05877	0	-0.0673	-0.02791	-0.06108	-0.00173
	9	0.07518	-0.14063	0.01666	-0.01626	-0.01372	0.01212	0	-0.0008	0.03073	-0.06426	0.01666
	10	-0.06445	0.09081	0.13266	0.05301	0.08571	0.03202	0	0.05887	0.01063	0.06141	0.13266
	11	-0.00625	-0.06976	-0.03468	-0.0369	-0.01866	-0.10165	0	-0.06016	-0.01246	-0.08571	-0.03468
	12	-0.0138	0.01804	-0.05553	-0.01709	0.00811	0.02086	0	0.01448	-0.00285	0.01945	-0.05553
2014	1	0.00942	-0.00055	0.00301	0.00396	0.07492	0.03898	0	0.05695	0.04217	0.01921	0.00301
	2	-0.02323	0.02947	0.0399	0.01538	0.00506	0.0357	0	0.02038	-0.00909	0.03259	0.0399
	3	0.08317	0.05231	0.01548	0.05032	-0.01881	-0.01675	0	-0.01778	0.03218	0.01778	0.01548
	4	0.03852	-0.01978	0.0298	0.01618	0.00491	0.01041	0	0.00766	0.02171	-0.00469	0.0298
	5	-0.0074	-0.15153	0.02175	-0.04573	0.08869	-0.01682	0	0.03593	0.04064	-0.08418	0.02175
	6	0.07268	0.04225	-0.07048	0.01482	-0.02551	0.02819	0	0.00134	0.02359	0.03522	-0.07048
	7	-0.01495	0.01324	0.03963	0.01264	0.06078	0.04573	0	0.05326	0.02291	0.02949	0.03963
	8	-0.03955	0.17037	0.03111	0.05398	0.00102	-0.0125	0	-0.00574	-0.01926	0.07894	0.03111
	9	-0.11337	0.03114	-0.01675	-0.03299	0.05092	0.00369	0	0.02731	-0.03122	0.01741	-0.01675
	10	-0.08598	-0.09811	-0.05895	-0.08101	-0.0579	-0.02746	0	-0.04268	-0.07194	-0.06278	-0.05895
	11	0.00096	-0.06392	0.02	-0.01432	0.02951	0.02835	0	0.02893	0.01523	-0.01778	0.02
	12	-0.06113	-0.12747	-0.01615	-0.06825	0.00837	0.07294	0	0.04065	-0.02638	-0.02727	-0.01615
2015	1	0.03925	0.05902	0.10608	0.06812	0.02475	0.04459	0.07214	0.04716	0.032	0.0518	0.08911
	2	-0.00836	-0.03263	0.08816	0.01572	0.1415	0.0144	-0.01319	0.04757	0.06657	-0.00912	0.03748
	3	0.01927	0.01347	-0.04529	-0.00419	0.04311	0.03431	0.05086	0.04276	0.03119	0.02389	0.00279
	4	-0.01486	-0.07471	-0.14146	-0.07701	-0.02477	-0.02037	-0.17152	-0.07222	-0.01981	-0.04754	-0.15649
	5	-0.01961	0.02165	0.01497	0.00567	-0.01189	0.05705	0.05854	0.03457	-0.01575	0.03935	0.03676
	6	-0.01492	-0.06081	-0.13017	-0.06863	-0.00256	-0.03746	-0.05627	-0.0321	-0.00874	-0.04913	-0.09322
	7	-0.14784	-0.03781	0.06314	-0.04083	-0.13297	0.00693	-0.04429	-0.05678	-0.1404	-0.01544	0.00943
	8	-0.00421	-0.10527	-0.11534	-0.07494	0.05716	-0.02175	-0.046	-0.00353	0.02647	-0.06351	-0.08067
	9	-0.04005	-0.06361	-0.13933	-0.081	-0.09648	-0.06927	-0.08303	-0.08292	-0.06826	-0.06644	-0.11118
	10	0.05115	0.01563	0.13614	0.06764	0.04415	-0.01301	0.09156	0.0409	0.04765	0.00131	0.11385
	11	-0.0289	-0.1032	0.03309	-0.03301	-0.111	0.03495	-0.0264	-0.03415	-0.06995	-0.03412	0.00334
	12	0.04203	0.01796	0.05977	0.03992	0.03285	0.02614	0.03262	0.03054	0.03744	0.02205	0.0462

2016	1	0.03084	0.17467	-0.02023	0.06176	0.02016	0.0417	0.06692	0.04293	0.0255	0.10818	0.02334
	2	0.11828	0.12265	-0.03229	0.06954	-0.11985	0.10492	-0.03315	-0.01603	-0.00079	0.11378	-0.03272
	3	-0.05479	0.01889	0.08989	0.018	-0.02022	-0.00831	0.01719	-0.00378	-0.0375	0.00529	0.05354
	4	0.04772	-0.01956	-0.02638	0.00059	-0.03716	-0.03177	0.05985	-0.00303	0.00528	-0.02567	0.01674
	5	-0.05219	-0.0341	0.00855	-0.02591	-0.0487	0.0118	0.03576	-0.00038	-0.05044	-0.01115	0.02215
	6	0.08231	0.04045	0.10094	0.07457	0.06574	0.07382	0.09	0.07652	0.07402	0.05713	0.09547
	7	0.12599	0.15613	0.04176	0.10796	0.0568	0.02211	0.05551	0.0448	0.0914	0.08912	0.04863
	8	0.04031	-0.05362	0.04437	0.01036	0.16998	0.06733	-0.00911	0.07606	0.10514	0.00686	0.01763
	9	0.00728	0.08913	-0.01547	0.02698	-0.0618	-0.02537	0.01931	-0.02262	-0.02726	0.03188	0.00192
	10	0.10455	-0.02722	-0.00359	0.02458	0.17962	-0.006	-0.02506	0.04952	0.14208	-0.01661	-0.01432
	11	0.02407	-0.11917	-0.21373	-0.10294	-0.00871	-0.09122	-0.11407	-0.07133	0.00768	-0.1052	-0.1639
	12	-0.00606	0.04121	0.03046	0.02187	0.00788	0.0092	0.0476	0.02156	0.00091	0.02521	0.03903
2017	1	0.04935	0.0246	-0.04781	0.00871	0.02389	0.01048	-0.0258	0.00285	0.03662	0.01754	-0.03681
	2	-0.01645	-0.00396	0.04974	0.00978	0.11662	0.02322	-0.01103	0.04293	0.05008	0.00963	0.01936
	3	-0.01965	0.02681	0.00256	0.00324	0.06841	0.03476	0.02052	0.04123	0.02438	0.03078	0.01154
	4	0.05928	-0.02272	0.02484	0.02047	0.01102	0.02792	0.06123	0.03339	0.03515	0.0026	0.04304
	5	0.00675	-0.07595	-0.03276	-0.03399	0.04294	0.00322	-0.01054	0.01187	0.02484	-0.03637	-0.02165
	6	-0.0165	0.02612	0.04977	0.01979	-0.01573	0.03994	0.03441	0.01954	-0.01612	0.03303	0.04209
	7	0.02474	0.04738	0.07598	0.04937	0.0882	-0.0587	-0.00249	0.009	0.05647	-0.00566	0.03674
	8	-0.01289	0.01974	-0.01826	-0.0038	0.00287	0.01079	0.01822	0.01063	-0.00501	0.01527	-2.4E-05
	9	0.03011	-0.02157	-0.03021	-0.00723	0.05105	-0.01778	-0.00461	0.00955	0.04058	-0.01968	-0.01741
	10	0.00698	-0.01787	-0.04336	-0.01808	0.07674	0.00909	-0.07403	0.00393	0.04186	-0.00439	-0.0587
	11	-0.13984	-0.05979	-0.00354	-0.06772	-0.02921	-0.00466	-0.00916	-0.01434	-0.08453	-0.03222	-0.00635
	12	0.01653	0.05636	0.05118	0.04136	0.05162	0.08335	0.05617	0.06372	0.03408	0.06985	0.05368

Lampiran 14

Tabel *Excess Return* Portofolio Kombinasi *Size-BE/ME*  
Metode Syariah

Tahun	Bulan	SL	SM	SH	BL	BM	BH	Small	Big	Low	Medium	High
2013	1	0.00581	0	0.13059	0.0682	0.02633	0.00683	0	0.01658	0.01607	0.00683	0.13059
	2	0.15081	0	0.03652	0.09366	0.08284	0.04931	0	0.06607	0.11683	0.04931	0.03652
	3	0.03029	0	-0.05113	-0.01042	0.02125	0.01451	0	0.01788	0.02577	0.01451	-0.05113
	4	0.06644	0	-0.04268	0.01188	0.13834	0.04938	0	0.09386	0.10239	0.04938	-0.04268
	5	0.06471	0	-0.02521	0.01975	0.12348	-0.02486	0	0.04931	0.09409	-0.02486	-0.02521
	6	-0.04413	0	-0.14533	-0.09473	-0.04925	0.02405	0	-0.0126	-0.04669	0.02405	-0.14533
	7	-0.1015	0	-0.17001	-0.13576	-0.02082	-0.03051	0	-0.02566	-0.06116	-0.03051	-0.17001
	8	-0.07749	0	0.04184	-0.01782	-0.05472	-0.07918	0	-0.06695	-0.0661	-0.07918	0.04184
	9	-0.07189	0	0.02318	-0.02436	-0.05578	0.0106	0	-0.02259	-0.06384	0.0106	0.02318
	10	0.14294	0	0.09805	0.1205	0.05242	0.06793	0	0.06017	0.09768	0.06793	0.09805
	11	-0.05815	0	-0.0323	-0.04523	-0.10707	-0.05571	0	-0.08139	-0.08261	-0.05571	-0.0323
	12	-0.02904	0	-0.04878	-0.03891	-0.00093	0.02519	0	0.01213	-0.01498	0.02519	-0.04878
2014	1	0	0.00265	0.00123	0.00194	0.08264	-0.00814	0	0.03725	0.08264	-0.00275	0.00123
	2	0	0.0014	0.03818	0.01979	0.00036	0.04218	0	0.02127	0.00036	0.02179	0.03818
	3	0	0.06607	0.01381	0.03994	-0.04682	-0.00248	0	-0.02465	-0.04682	0.0318	0.01381
	4	0	0.00768	0.02811	0.0179	-0.01291	0.0066	0	-0.00315	-0.01291	0.00714	0.02811
	5	0	-0.08116	0.02006	-0.03055	-0.00018	0.06499	0	0.0324	-0.00018	-0.00809	0.02006
	6	0	0.05579	-0.07216	-0.00819	-0.01527	-0.00572	0	-0.01049	-0.01527	0.02503	-0.07216
	7	0	-0.00248	0.03801	0.01776	0.04497	0.05831	0	0.05164	0.04497	0.02792	0.03801
	8	0	0.06392	0.02962	0.04677	0.0178	-0.01473	0	0.00153	0.0178	0.0246	0.02962
	9	0	-0.04251	-0.01815	-0.03033	0.04361	0.00127	0	0.02244	0.04361	-0.02062	-0.01815
	10	0	-0.0934	-0.06031	-0.07686	-0.04352	-0.05664	0	-0.05008	-0.04352	-0.07502	-0.06031
	11	0	-0.03265	0.01883	-0.00691	0.02385	0.03603	0	0.02994	0.02385	0.00169	0.01883
	12	0	-0.09551	-0.01736	-0.05643	0.07626	0.01998	0	0.04812	0.07626	-0.03776	-0.01736
2015	1	0.01125	0.11389	0.02869	0.05128	0.10026	0.01398	0.02351	0.04592	0.05575	0.06394	0.0261
	2	-0.04011	0.05809	-0.03786	-0.00663	-0.01192	0.0108	0.14033	0.04641	-0.02602	0.03445	0.05124
	3	0.02531	-0.00139	-0.00402	0.00663	0.05384	0.02906	0.04198	0.04162	0.03958	0.01383	0.01898
	4	-0.04565	-0.06773	-0.0726	-0.06199	-0.02447	-0.16969	-0.02591	-0.07336	-0.03506	-0.11871	-0.04925
	5	-0.02992	0.02899	-0.00735	-0.00276	0.03374	0.07957	-0.01303	0.03343	0.00191	0.05428	-0.01019
	6	-0.04361	-0.0269	-0.09495	-0.05515	-0.09813	0.00213	-0.0037	-0.03323	-0.07087	-0.01239	-0.04932
	7	0.00449	0.01232	-0.17148	-0.05156	-0.00298	-0.03666	-0.13411	-0.05791	0.00075	-0.01217	-0.15279
	8	-0.03138	-0.06422	-0.09036	-0.06199	0.00702	-0.07727	0.05591	-0.00478	-0.01218	-0.07075	-0.01723
	9	-0.19323	-0.05508	-0.02572	-0.09135	-0.044	-0.11157	-0.09811	-0.08456	-0.11862	-0.08333	-0.06192
	10	0.03133	0.06756	0.04752	0.0488	0.01004	0.06523	0.04251	0.03926	0.02068	0.0664	0.04502
	11	-0.07663	0.02845	-0.10979	-0.05266	-0.03355	0.03882	-0.11264	-0.03579	-0.05509	0.03363	-0.11121
	12	-0.01919	0.10628	-0.01091	0.02539	0.02808	0.02741	0.03121	0.0289	0.00445	0.06684	0.01015

2016	1	0.00391	-0.01517	0.1078	0.03218	0.02806	0.06525	0.01881	0.03738	0.01599	0.02504	0.06331
	2	-0.03384	0.03274	0.12788	0.04226	0.13243	0.00548	-0.1213	0.00554	0.04929	0.01911	0.00329
	3	0.09841	-0.04586	0.03693	0.02983	-0.0434	0.03611	-0.02193	-0.00974	0.0275	-0.00487	0.0075
	4	-0.05699	-0.02532	0.06111	-0.00707	-0.00897	-0.01218	-0.03887	-0.02001	-0.03298	-0.01875	0.01112
	5	0.03188	-0.03193	-0.04897	-0.01634	0.02819	0.00398	-0.05041	-0.00608	0.03004	-0.01397	-0.04969
	6	0.06048	0.06319	0.10581	0.07649	0.04597	0.10637	0.06405	0.07213	0.05322	0.08478	0.08493
	7	0.09676	0.01867	0.17453	0.09665	0.01268	0.04484	0.0551	0.03754	0.05472	0.03176	0.11481
	8	0.06208	0.00146	0.01854	0.02736	0.07366	0.0173	0.16724	0.08607	0.06787	0.00938	0.09289
	9	-0.05242	-0.00725	0.06318	0.00117	-0.04474	0.011	-0.06446	-0.03273	-0.04858	0.00188	-0.00064
	10	0.00792	0.03459	0.04232	0.02827	-0.01137	-0.01535	0.17702	0.0501	-0.00173	0.00962	0.10967
	11	-0.18201	-0.15947	-0.00527	-0.11558	-0.09463	-0.10443	-0.01131	-0.07012	-0.13832	-0.13195	-0.00829
	12	0.03043	-0.04394	0.06724	0.01791	-0.03266	0.06507	0.00528	0.01256	-0.00112	0.01056	0.03626
2017	1	-0.05041	0.10005	0.01249	0.02071	0.0176	-0.03812	0	-0.01026	-0.0164	0.03096	0.01249
	2	0.04714	-0.05648	0.00174	-0.00253	0.00064	0.00632	0	0.00348	0.02389	-0.02508	0.00174
	3	-9.4E-05	-0.02248	0.00873	-0.00461	-0.00378	0.05376	0	0.02499	-0.00194	0.01564	0.00873
	4	0.02217	0.07402	-0.00387	0.03077	0.04369	0.0401	0	0.0419	0.03293	0.05706	-0.00387
	5	-0.03543	-0.02902	-0.04003	-0.03483	0.00755	-0.02023	0	-0.00634	-0.01394	-0.02462	-0.04003
	6	0.04709	-0.01444	0.00765	-0.01344	0.02673	0.04228	0	0.0345	0.03691	0.01392	0.00765
	7	0.07334	0.04928	0.02813	0.05025	-0.02206	-0.04441	0	-0.03324	0.02564	0.00243	0.02813
	8	-0.02063	-0.02439	0.00955	-0.01182	0.0367	-0.01242	0	0.01214	0.00804	-0.01841	0.00955
	9	-0.03245	0.05557	-0.01582	0.00244	-0.0216	-0.00526	0	-0.01343	-0.02703	0.02515	-0.01582
	10	-0.04562	0.04232	-0.02437	-0.00923	0.00482	-0.07428	0	-0.03473	-0.0204	-0.01598	-0.02437
	11	-0.0058	-0.16556	-0.08091	-0.08409	-0.02913	0.01079	0	-0.00917	-0.01746	-0.07739	-0.08091
	12	0.04894	-0.00579	0.04752	0.03022	0.08707	0.04796	0	0.06751	0.068	0.02108	0.04752



Lampiran 15

Tabel *Excess Return* Portofolio Kombinasi *Size-Operational Profitability*  
Metode Syariah

Tahun	Bulan	SW	SN	SR	BW	BN	BR	Small	Big	Weak	Neutral	Robust
2013	1	0.09647	0.00581	0	0.05114	0	-0.00778	0.02948	0.01085	0.09647	-0.00098	0.02948
	2	0.08515	0.15081	0	0.11798	0	0.01339	0.0669	0.04014	0.08515	0.0821	0.0669
	3	-0.02911	0.03029	0	0.00059	0	0.0261	-0.00058	0.01276	-0.02911	0.02819	-0.00058
	4	-0.03477	0.06644	0	0.01584	0	0.10942	0.03805	0.07373	-0.03477	0.08793	0.03805
	5	-0.01866	0.06471	0	0.02302	0	0.00528	0.0115	0.00839	-0.01866	0.03499	0.0115
	6	-0.09884	-0.04413	0	-0.07149	0	-0.04254	0.06119	0.00932	-0.09884	-0.04334	0.06119
	7	-0.15635	-0.1015	0	-0.12893	0	-0.04591	-0.00092	-0.02341	-0.15635	-0.07371	-0.00092
	8	0.03434	-0.07749	0	-0.02157	0	-0.07666	-0.05935	-0.068	0.03434	-0.07707	-0.05935
	9	0.03995	-0.07189	0	-0.01597	0	0.02019	-0.01331	0.00344	0.03995	-0.02585	-0.01331
	10	0.04332	0.14294	0	0.09313	0	0.07209	0.03826	0.05518	0.04332	0.10751	0.03826
	11	-0.02421	-0.05815	0	-0.04118	0	-0.03841	-0.09144	-0.06492	-0.02421	-0.04828	-0.09144
	12	-0.03771	-0.02904	0	-0.03337	0	0.02202	0.00863	0.01532	-0.03771	-0.00351	0.00863
2014	1	-0.04914	0.0548	0	0.00283	0	0.00136	0.08505	0.0432	-0.04914	0.02808	0.08505
	2	0.02931	0.01549	0	0.0224	0	0.0392	0.01008	0.02464	0.02931	0.02734	0.01008
	3	-0.00688	0.06834	0	0.03073	0	-0.02882	-0.01287	-0.02084	-0.00688	0.01976	-0.01287
	4	0.06962	-0.00903	0	0.03029	0	-0.00953	0.01723	0.00385	0.06962	-0.00928	0.01723
	5	0.01829	0.00725	0	0.01277	0	-0.02219	0.05427	0.01604	0.01829	-0.00747	0.05427
	6	-0.06386	-0.00888	0	-0.03637	0	0.0062	0.00424	0.00522	-0.06386	-0.00134	0.00424
	7	0.02359	0.02513	0	0.02436	0	0.04414	0.05411	0.04913	0.02359	0.03464	0.05411
	8	0.04203	-0.01813	0	0.01195	0	0.00354	-0.01666	-0.00656	0.04203	-0.00729	-0.01666
	9	-0.00435	-0.08025	0	-0.0423	0	-0.00464	0.0384	0.01688	-0.00435	-0.04244	0.0384
	10	-0.10572	-0.02843	0	-0.06707	0	-0.0409	-0.04106	-0.04098	-0.10572	-0.03466	-0.04106
	11	-0.01688	0.04501	0	0.01406	0	0.03155	0.02503	0.02829	-0.01688	0.03828	0.02503
	12	-0.03199	-0.02522	0	-0.0286	0	0.08908	0.01712	0.0531	-0.03199	0.03193	0.01712
2015	1	0.02869	0.06709	0.10484	0.06688	0.02351	0.0709	0.04334	0.04592	0.0261	0.069	0.07409
	2	-0.03786	-0.00546	0.087	0.01456	0.14033	-0.01436	0.01324	0.04641	0.05124	-0.00991	0.05012
	3	-0.00402	0.03448	-0.04643	-0.00532	0.04198	0.04972	0.03317	0.04162	0.01898	0.0421	-0.00663
	4	-0.0726	-0.01925	-0.1426	-0.07815	-0.02591	-0.17265	-0.0215	-0.07336	-0.04925	-0.09595	-0.08205
	5	-0.00735	0.00711	0.01383	0.00453	-0.01303	0.0574	0.05591	0.03343	-0.01019	0.03226	0.03487
	6	-0.09495	0.01694	-0.1313	-0.06977	-0.0037	-0.05741	-0.0386	-0.03323	-0.04932	-0.02023	-0.08495
	7	-0.17148	-0.01644	0.062	-0.04197	-0.13411	-0.04543	0.00579	-0.05791	-0.15279	-0.03094	0.0339
	8	-0.09036	-0.02162	-0.11659	-0.07619	0.05591	-0.04725	-0.023	-0.00478	-0.01723	-0.03444	-0.0698
	9	-0.02572	-0.08122	-0.14097	-0.08264	-0.09811	-0.08467	-0.07091	-0.08456	-0.06192	-0.08294	-0.10594
	10	0.04752	0.01598	0.1345	0.066	0.04251	0.08992	-0.01465	0.03926	0.04502	0.05295	0.05992
	11	-0.10979	-0.02559	0.03145	-0.03464	-0.11264	-0.02804	0.03332	-0.03579	-0.11121	-0.02682	0.03238
	12	-0.01091	0.06762	0.05814	0.03828	0.03121	0.03098	0.02451	0.0289	0.01015	0.0493	0.04132

2016	1	0.1078	-0.01517	0.00391	0.03218	0.01881	0.0637	0.02961	0.03738	0.06331	0.02426	0.01676
	2	0.12788	0.03274	-0.03384	0.04226	-0.1213	0.06222	0.0757	0.00554	0.00329	0.04748	0.02093
	3	0.03693	-0.04586	0.09841	0.02983	-0.02193	0.00693	-0.01422	-0.00974	0.0075	-0.01946	0.04209
	4	0.06111	-0.02532	-0.05699	-0.00707	-0.03887	-0.04246	0.02131	-0.02001	0.01112	-0.03389	-0.01784
	5	-0.04897	-0.03193	0.03188	-0.01634	-0.05041	0.01268	0.01949	-0.00608	-0.04969	-0.00962	0.02569
	6	0.10581	0.06319	0.06048	0.07649	0.06405	0.08934	0.063	0.07213	0.08493	0.07626	0.06174
	7	0.17453	0.01867	0.09676	0.09665	0.0551	0.02959	0.02794	0.03754	0.11481	0.02413	0.06235
	8	0.01854	0.00146	0.06208	0.02736	0.16724	0.09383	-0.00287	0.08607	0.09289	0.04764	0.02961
	9	0.06318	-0.00725	-0.05242	0.00117	-0.06446	-0.02645	-0.00729	-0.03273	-0.00064	-0.01685	-0.02986
	10	0.04232	0.03459	0.00792	0.02827	0.17702	-0.00877	-0.01795	0.0501	0.10967	0.01291	-0.00502
	11	-0.00527	-0.15947	-0.18201	-0.11558	-0.01131	-0.09095	-0.10811	-0.07012	-0.00829	-0.12521	-0.14506
	12	0.06724	-0.04394	0.03043	0.01791	0.00528	0.03494	-0.00253	0.01256	0.03626	-0.0045	0.01395
2017	1	0.02201	0.01436	0	0.01818	0.02129	-0.04662	0.00186	-0.00782	0.02165	-0.01613	0.00186
	2	-0.00657	0.003	0	-0.00178	0.11401	0.0244	-0.00349	0.04497	0.05372	0.0137	-0.00349
	3	0.02416	-0.0149	0	0.00463	0.06576	0.04392	0.01868	0.04278	0.04496	0.01451	0.01868
	4	-0.02539	0.04512	0	0.00986	0.00835	0.03036	0.04575	0.02815	-0.00852	0.03774	0.04575
	5	-0.07862	-0.0091	0	-0.04386	0.04026	-0.02923	0.00129	0.00411	-0.01918	-0.01916	0.00129
	6	0.02344	0.00291	0	-0.01318	-0.0184	0.02587	0.03738	0.01495	0.00252	0.01439	0.03738
	7	0.04474	0.03918	0	0.04196	0.08556	-0.11915	-0.0046	-0.01273	0.06515	-0.03998	-0.0046
	8	0.01738	-0.01704	0	0.00017	0.00051	-0.01873	0.02243	0.0014	0.00895	-0.01789	0.02243
	9	-0.02381	0.00777	0	-0.00802	0.04881	-0.00261	-0.01704	0.00972	0.0125	0.00258	-0.01704
	10	-0.02013	-0.01206	0	-0.01609	0.07448	0.00678	-0.04856	0.0109	0.02718	-0.00264	-0.04856
	11	-0.06205	-0.09667	0	-0.07936	-0.03147	-0.00197	-0.01157	-0.015	-0.04676	-0.04932	-0.01157
	12	0.05411	0.02583	0	0.03997	0.04938	0.03415	0.07863	0.05406	0.05174	0.02999	0.07863

## Lampiran 16

**Tabel *Excess Return* Portofolio Kombinasi *Size-Investment* Metode Syariah**

Tahun	Bulan	SC	SI	SA	BC	BI	BA	Small	Big	Conservative	Intermediate	Aggressive
2013	1	0.02824	0.05124	0.07385	0.05111	0.03867	-0.00149	0	0.01859	0.03345	0.02488	0.07385
	2	0.18242	0.16306	0.07053	0.13867	0.03446	0.05285	0	0.04366	0.10844	0.10795	0.07053
	3	0.01493	-0.04494	0.00109	-0.00964	-0.02326	0.03232	0	0.00453	-0.00416	-0.00631	0.00109
	4	-0.01895	0.10876	-0.02041	0.02313	0.05216	0.07622	0	0.06419	0.01661	0.09249	-0.02041
	5	-0.00558	0.0969	-0.00596	0.02845	-0.09061	0.07543	0	-0.00759	-0.0481	0.08616	-0.00596
	6	-0.00587	-0.07301	-0.10197	-0.06028	0.08258	-0.02223	0	0.03018	0.03836	-0.04762	-0.10197
	7	-0.12903	0.00174	-0.18159	-0.10296	0.02494	-0.04815	0	-0.01161	-0.05205	-0.02321	-0.18159
	8	0.01934	-0.06408	-0.0024	-0.01572	-0.07652	-0.05944	0	-0.06798	-0.02859	-0.06176	-0.0024
	9	0.07349	-0.14232	0.01497	-0.01795	-0.01541	0.01043	0	-0.00249	0.02904	-0.06595	0.01497
	10	-0.06616	0.0891	0.13096	0.0513	0.08401	0.03032	0	0.05716	0.00893	0.05971	0.13096
	11	-0.00802	-0.07154	-0.03646	-0.03867	-0.02044	-0.10342	0	-0.06193	-0.01423	-0.08748	-0.03646
	12	-0.01557	0.01627	-0.0573	-0.01887	0.00633	0.01909	0	0.01271	-0.00462	0.01768	-0.0573
2014	1	0.00763	-0.00234	0.00123	0.00218	0.07314	0.03719	0	0.05517	0.04039	0.01743	0.00123
	2	-0.02495	0.02775	0.03818	0.01366	0.00334	0.03399	0	0.01866	-0.0108	0.03087	0.03818
	3	0.0815	0.05064	0.01381	0.04865	-0.02048	-0.01842	0	-0.01945	0.03051	0.01611	0.01381
	4	0.03683	-0.02147	0.02811	0.01449	0.00323	0.00873	0	0.00598	0.02003	-0.00637	0.02811
	5	-0.0091	-0.15323	0.02006	-0.04742	0.08699	-0.01852	0	0.03424	0.03895	-0.08587	0.02006
	6	0.071	0.04057	-0.07216	0.01314	-0.02719	0.0265	0	-0.00034	0.0219	0.03354	-0.07216
	7	-0.01657	0.01162	0.03801	0.01102	0.05915	0.04411	0	0.05163	0.02129	0.02786	0.03801
	8	-0.04104	0.16888	0.02962	0.05249	-0.00047	-0.01399	0	-0.00723	-0.02076	0.07744	0.02962
	9	-0.11476	0.02974	-0.01815	-0.03439	0.04952	0.0023	0	0.02591	-0.03262	0.01602	-0.01815
	10	-0.08734	-0.09947	-0.06031	-0.08237	-0.05926	-0.02883	0	-0.04404	-0.0733	-0.06415	-0.06031
	11	-0.00022	-0.06509	0.01883	-0.01549	0.02833	0.02717	0	0.02775	0.01406	-0.01896	0.01883
	12	-0.06234	-0.12868	-0.01736	-0.06946	0.00716	0.07173	0	0.03945	-0.02759	-0.02848	-0.01736
2015	1	0.03801	0.05778	0.10484	0.06688	0.02351	0.04334	0.0709	0.04592	0.03076	0.05056	0.08787
	2	-0.00953	-0.03379	0.087	0.01456	0.14033	0.01324	-0.01436	0.04641	0.0654	-0.01028	0.03632
	3	0.01813	0.01233	-0.04643	-0.00532	0.04198	0.03317	0.04972	0.04162	0.03005	0.02275	0.00165
	4	-0.016	-0.07585	-0.1426	-0.07815	-0.02591	-0.0215	-0.17265	-0.07336	-0.02095	-0.04868	-0.15763
	5	-0.02075	0.02051	0.01383	0.00453	-0.01303	0.05591	0.0574	0.03343	-0.01689	0.03821	0.03562
	6	-0.01605	-0.06195	-0.1313	-0.06977	-0.0037	-0.0386	-0.05741	-0.03323	-0.00988	-0.05027	-0.09436
	7	-0.14898	-0.03894	0.062	-0.04197	-0.13411	0.00579	-0.04543	-0.05791	-0.14154	-0.01658	0.00829
	8	-0.00546	-0.10652	-0.11659	-0.07619	0.05591	-0.023	-0.04725	-0.00478	0.02522	-0.06476	-0.08192
	9	-0.04168	-0.06525	-0.14097	-0.08264	-0.09811	-0.07091	-0.08467	-0.08456	-0.0699	-0.06808	-0.11282
	10	0.04951	0.01399	0.1345	0.066	0.04251	-0.01465	0.08992	0.03926	0.04601	-0.00033	0.11221
	11	-0.03054	-0.10484	0.03145	-0.03464	-0.11264	0.03332	-0.02804	-0.03579	-0.07159	-0.03576	0.0017
	12	0.04039	0.01632	0.05814	0.03828	0.03121	0.02451	0.03098	0.0289	0.0358	0.02041	0.04456

2016	1	0.0295	0.17332	-0.02157	0.06041	0.01881	0.04035	0.06557	0.04158	0.02415	0.10684	0.022
	2	0.11683	0.1212	-0.03374	0.0681	-0.1213	0.10348	-0.0346	-0.01747	-0.00223	0.11234	-0.03417
	3	-0.05649	0.01719	0.08818	0.01629	-0.02193	-0.01002	0.01548	-0.00549	-0.03921	0.00358	0.05183
	4	0.04601	-0.02127	-0.02809	-0.00112	-0.03887	-0.03348	0.05815	-0.00473	0.00357	-0.02737	0.01503
	5	-0.0539	-0.03581	0.00684	-0.02762	-0.05041	0.0101	0.03405	-0.00209	-0.05215	-0.01286	0.02045
	6	0.08061	0.03875	0.09925	0.07287	0.06405	0.07212	0.0883	0.07482	0.07233	0.05544	0.09378
	7	0.1243	0.15443	0.04006	0.10627	0.0551	0.02041	0.05381	0.04311	0.0897	0.08742	0.04694
	8	0.03757	-0.05635	0.04164	0.00762	0.16724	0.06459	-0.01185	0.07333	0.10241	0.00412	0.01489
	9	0.00461	0.08647	-0.01813	0.02432	-0.06446	-0.02804	0.01664	-0.02529	-0.02992	0.02921	-0.00075
	10	0.10196	-0.02981	-0.00619	0.02199	0.17702	-0.00859	-0.02766	0.04692	0.13949	-0.0192	-0.01692
	11	0.02147	-0.12177	-0.21633	-0.10554	-0.01131	-0.09382	-0.11667	-0.07393	0.00508	-0.10779	-0.1665
	12	-0.00865	0.03861	0.02786	0.01927	0.00528	0.00661	0.045	0.01896	-0.00169	0.02261	0.03643
2017	1	0.04675	0.02201	-0.05041	0.00612	0.02129	0.00788	-0.0284	0.00026	0.03402	0.01494	-0.0394
	2	-0.01906	-0.00657	0.04714	0.00717	0.11401	0.02061	-0.01364	0.04033	0.04747	0.00702	0.01675
	3	-0.0223	0.02416	-9.4E-05	0.00059	0.06576	0.03211	0.01787	0.03858	0.02173	0.02813	0.00889
	4	0.0566	-0.02539	0.02217	0.01779	0.00835	0.02524	0.05856	0.03071	0.03247	-7.7E-05	0.04036
	5	0.00407	-0.07862	-0.03543	-0.03666	0.04026	0.00054	-0.01322	0.00919	0.02217	-0.03904	-0.02433
	6	-0.01918	0.02344	0.04709	0.01712	-0.0184	0.03727	0.03174	0.01687	-0.01879	0.03035	0.03941
	7	0.0221	0.04474	0.07334	0.04673	0.08556	-0.06134	-0.00513	0.00636	0.05383	-0.0083	0.0341
	8	-0.01525	0.01738	-0.02063	-0.00616	0.00051	0.00843	0.01585	0.00826	-0.00737	0.0129	-0.00239
	9	0.02787	-0.02381	-0.03245	-0.00946	0.04881	-0.02002	-0.00685	0.00732	0.03834	-0.02192	-0.01965
	10	0.00472	-0.02013	-0.04562	-0.02034	0.07448	0.00683	-0.07629	0.00168	0.0396	-0.00665	-0.06095
	11	-0.1421	-0.06205	-0.0058	-0.06998	-0.03147	-0.00692	-0.01142	-0.0166	-0.08679	-0.03448	-0.00861
	12	0.01428	0.05411	0.04894	0.03911	0.04938	0.0811	0.05393	0.06147	0.03183	0.06761	0.05143

Lampiran 17

**Tabel SMB (B/M), (OP), (INV)  
Metode Konvensional**

Tahun	Bulan	SMB (B/M)	SMB (OP)	SMB (Inv)	Tahun	Bulan	SMB (B/M)	SMB (OP)	SMB (Inv)
2013	1	0.0249451	0.0402908	0.0325195	2016	1	-0.0051958	-0.0051958	0.0188366
	2	0.0782075	0.0778377	0.0950142		2	0.0367171	0.0367171	0.0855697
	3	-0.0028646	-0.0121667	-0.0141724		3	0.0395683	0.0395683	0.0217801
	4	-0.0765898	-0.0578995	-0.0410578		4	0.0129367	0.0129367	0.0036189
	5	-0.0367875	0.0146371	0.0360481		5	-0.0102595	-0.0102595	-0.025534
	6	-0.0846601	-0.0808121	-0.0904623		6	0.0043657	0.0043657	-0.0019524
	7	-0.1273951	-0.1055118	-0.0913527		7	0.0591122	0.0591122	0.0631573
	8	0.0253356	0.0464297	0.0522643		8	-0.0587093	-0.0587093	-0.0657078
	9	-0.0002897	-0.019411	-0.0154607		9	0.0339018	0.0339018	0.0496035
	10	0.0655297	0.0379495	-0.0058623		10	-0.0218257	-0.0218257	-0.0249365
	11	0.0508267	0.0237424	0.0232559		11	-0.0454591	-0.0454591	-0.0316116
	12	-0.0305496	-0.0486967	-0.0315768		12	0.0053458	0.0053458	0.0003108
2014	1	-0.0396803	-0.0403715	-0.0529908	2017	1	0.0210679	0.0260087	0.0058592
	2	-0.0053443	-0.0022397	-0.0050023		2	-0.0239668	-0.0467546	-0.0331574
	3	0.0563901	0.0515726	0.0681009		3	-0.0316011	-0.0381533	-0.0379881
	4	0.0113592	0.0264436	0.008517		4	-0.005832	-0.0182858	-0.0129241
	5	-0.0611217	-0.0032713	-0.0816585		5	-0.0385694	-0.0479666	-0.0458554
	6	-0.0114207	-0.0415909	0.013482		6	-0.0109518	-0.001773	0.0002514
	7	-0.0337254	-0.0247654	-0.0406117		7	0.0618232	0.054687	0.0403624
	8	0.056375	0.0185156	0.0597154		8	-0.026118	-0.0012345	-0.014429
	9	-0.048198	-0.0591856	-0.0602998		9	0.006857	-0.0177423	-0.0167764
	10	-0.0332541	-0.0260891	-0.0383328		10	0.0007091	-0.026992	-0.0220171
	11	-0.0359494	-0.014223	-0.0432459		11	-0.0678787	-0.0643557	-0.0533802
	12	-0.0980178	-0.0817028	-0.1089063		12	-0.0375273	-0.0140838	-0.0223594
2015	1	0.0053596	0.0209586	0.0209586					
	2	-0.0530321	-0.0318473	-0.0318473					
	3	-0.0349911	-0.046948	-0.046948					
	4	0.0113642	-0.0047939	-0.0047939					
	5	-0.0361885	-0.0288959	-0.0288959					
	6	-0.0219188	-0.0365347	-0.0365347					
	7	0.0063561	0.0159427	0.0159427					
	8	-0.0572088	-0.0714101	-0.0714101					
	9	-0.0067838	0.0019266	0.0019266					
	10	0.0095437	0.0267386	0.0267386					
	11	-0.0168702	0.0011437	0.0011437					
	12	-0.0035048	0.0093826	0.0093826					

Lampiran 18

Tabel SMB (B/M), (OP), (INV)  
Metode Syariah

Tahun	Bulan	SMB (B/M)	SMB (OP)	SMB (Inv)
2013	1	0.0516176	0.0402908	0.0325195
	2	0.0275895	0.0778377	0.0950142
	3	-0.0282999	-0.0121667	-0.0141724
	4	-0.0819805	-0.0578995	-0.0410578
	5	-0.0295553	0.0146371	0.0360481
	6	-0.0821292	-0.0808121	-0.0904623
	7	-0.1100915	-0.1055118	-0.0913527
	8	0.0491271	0.0464297	0.0522643
	9	-0.0017698	-0.019411	-0.0154607
	10	0.0603216	0.0379495	-0.0058623
	11	0.0361589	0.0237424	0.0232559
	12	-0.0510382	-0.0486967	-0.0315768
2014	1	-0.0353091	-0.0403715	-0.0529908
	2	-0.0014778	-0.0022397	-0.0050023
	3	0.0645877	0.0515726	0.0681009
	4	0.02105	0.0264436	0.008517
	5	-0.0629551	-0.0032713	-0.0816585
	6	0.002307	-0.0415909	0.013482
	7	-0.0338804	-0.0247654	-0.0406117
	8	0.0452339	0.0185156	0.0597154
	9	-0.0527726	-0.0591856	-0.0602998
	10	-0.0267805	-0.0260891	-0.0383328
	11	-0.0368537	-0.014223	-0.0432459
	12	-0.104555	-0.0817028	-0.1089063
2015	1	0.0053596	0.0209586	0.0209586
	2	-0.0530321	-0.0318473	-0.0318473
	3	-0.0349911	-0.046948	-0.046948
	4	0.0113642	-0.0047939	-0.0047939
	5	-0.0361885	-0.0288959	-0.0288959
	6	-0.0219188	-0.0365347	-0.0365347
	7	0.0063561	0.0159427	0.0159427
	8	-0.0572088	-0.0714101	-0.0714101
	9	-0.0067838	0.0019266	0.0019266
	10	0.0095437	0.0267386	0.0267386
	11	-0.0168702	0.0011437	0.0011437
	12	-0.0035048	0.0093826	0.0093826
2016	1	-0.0051958	-0.0051958	0.0188366
	2	0.0367171	0.0367171	0.0855697
	3	0.0395683	0.0395683	0.0217801
	4	0.0129367	0.0129367	0.0036189
	5	-0.0102595	-0.0102595	-0.025534
	6	0.0043657	0.0043657	-0.0019524
	7	0.0591122	0.0591122	0.0631573
	8	-0.0587093	-0.0587093	-0.0657078
	9	0.0339018	0.0339018	0.0496035
	10	-0.0218257	-0.0218257	-0.0249365
	11	-0.0454591	-0.0454591	-0.0316116
	12	0.0053458	0.0053458	0.0003108
2017	1	0.0309701	0.0260087	0.0058592
	2	-0.0060193	-0.0467546	-0.0331574
	3	-0.0296009	-0.0381533	-0.0379881
	4	-0.0111247	-0.0182858	-0.0129241
	5	-0.0284881	-0.0479666	-0.0458554
	6	-0.0210651	-0.001773	0.0002514
	7	0.0834851	0.054687	0.0403624
	8	-0.0239628	-0.0012345	-0.014429
	9	0.0158688	-0.0177423	-0.0167764
	10	0.0255024	-0.026992	-0.0220171
	11	-0.0749217	-0.0643557	-0.0533802
	12	-0.0372904	-0.0140838	-0.0223594

## Lampiran 1

### TERJEMAHAN TEKS ARAB

No.	Hlm.	No. Footnote	Surat/Riwayah	Terjemahan
1	29	BAB II. 36	Al-Bukhāri: no.287	Tiada seorang makan makanan yang lebih baik, kecuali dari hasil usaha sendiri. Dan nabi Daud as. Juga makan dari hasil tangannya sendiri.” (Matan lain, Ibn Majah: 2129, dan Ahmad: 16552 dan 16560)
2	37	BAB II. 53	At-Taubah (9): 34 dalam Al-Bukhāri: no.1404	‘... Dan orang-orang yang menyimpan emas dan perak dan tidak menafkahkannya pada jalan Allah, maka beritahukanlah kepada mereka, (bahwa mereka akan mendapat) siksa yang pedih.



## Lampiran 2

### Tabel Sampel Penelitian

No.	Sampel Penelitian	Kode Saham	Industri
1	Adaro Energy Tbk	ADRO	Pertambangan - Sub. Sek, Batubara
2	AKR Corporindo Tbk	AKRA	Perdagangan, Jasa, & Investasi
			Sub. Sek. Perdagangan Besar Barang Produksi
3	Astra International Tbk	ASII	Aneka Industri
			Sub. Sek. Otomotif
4	Bumi Serpong Damai Tbk	BSDE	Properti, Real Estat dan Konstruksi Bangunan
			Sub. Sek. Properti & Real Estat
5	Indofood CBP Sukses Makmur Tbk	ICBP	Industri Barang Konsumsi
			Sub. Sek. Makanan & Minuman
6	Indofood Sukses Makmur Tbk	INDF	Industri Barang Konsumsi
			Sub. Sek. Makanan & Minuman
7	Kalbe Farma Tbk	KLBF	Industri Barang Konsumsi
			Sub. Sek. Farmasi
8	Telekomunikasi Indonesia (Persero) Tbk	TLKM	Infrastruktur Utilitas dan Transportasi
			Sub. Sek Telekomunikasi
9	United Tractors Tbk	UNTR	Pertambangan
			Sub. Sek. Jasa Pertambangan
10	Unilever Indonesia Tbk	UNVR	Industri Barang Konsumsi
			Sub. Sek. kosmetik dan keperluan rumah tangga



### Lampiran 3

**Tabel Adjusted Close Price per Emiten**

Date		Adj. Close									
Tahun	Bulan	ADRO	AKRA	ASII	ICBP	INDF	KLBF	TLKM	UNTR	BSDE	UNVR
2012	12	1,447.50	3,671.91	6,585.90	3,468.48	5,140.88	966.48	1,316.28	16,303.90	1,066.12	18,914.15
2013	1	1,492.73	3,548.29	6,411.44	3,425.65	5,316.63	1,022.78	1,426.58	16,428.67	1,356.88	19,902.59
	2	1,420.36	4,097.70	6,934.82	3,639.76	6,415.11	1,210.44	1,581.00	16,054.35	1,550.72	20,624.68
	3	1,185.14	4,578.44	6,891.21	4,110.79	6,546.93	1,163.53	1,617.77	15,139.34	1,696.10	20,579.55
	4	1,112.77	4,715.79	6,411.44	4,902.97	6,459.05	1,304.28	1,720.72	15,971.17	1,676.72	23,693.56
	5	841.36	4,898.93	6,149.75	5,609.51	6,459.05	1,445.03	1,625.12	14,265.91	2,132.24	27,529.66
	6	778.03	4,853.15	6,236.05	5,224.12	6,459.05	1,351.19	1,943.83	14,234.90	1,744.56	27,755.31
	7	633.28	3,978.94	5,790.62	4,795.92	5,712.09	1,361.87	2,056.14	14,320.14	1,544.35	28,703.05
	8	841.36	3,656.95	5,389.73	4,431.95	5,861.66	1,285.68	1,900.63	13,467.75	1,280.44	28,470.73
	9	814.22	3,679.95	5,746.07	4,542.75	6,357.65	1,123.78	1,814.24	13,893.95	1,407.51	27,512.58
	10	922.78	4,515.05	5,924.25	4,963.78	5,996.93	1,238.06	2,030.22	14,916.81	1,534.58	27,375.71
	11	1,022.30	4,352.14	5,620.80	4,431.95	5,996.93	1,161.87	1,879.03	15,721.84	1,319.54	24,273.13
	12	986.11	4,072.86	6,115.43	4,520.59	5,951.84	1,190.44	1,857.43	16,367.95	1,260.89	23,725.61
2014	1	859.45	4,096.13	5,778.18	4,875.14	6,290.01	1,338.06	1,965.42	16,626.39	1,407.51	26,374.30
	2	900.17	4,245.08	6,250.33	4,952.70	6,470.37	1,380.92	2,008.62	16,346.41	1,500.37	26,397.40
	3	886.60	4,501.09	6,632.55	4,476.27	6,583.09	1,395.20	1,913.59	17,875.52	1,598.11	27,020.96
	4	1,072.06	4,440.58	6,677.51	4,431.95	6,357.65	1,471.39	1,956.78	18,693.92	1,524.80	27,020.96
	5	1,167.05	3,840.12	6,362.75	4,520.59	6,154.74	1,466.63	2,376.09	18,672.38	1,573.67	26,905.48
	6	1,063.01	4,030.97	6,676.14	4,431.95	6,042.02	1,580.91	2,274.59	20,206.00	1,451.49	27,044.05
	7	1,072.06	4,110.32	7,089.09	4,631.39	6,380.19	1,665.16	2,445.30	20,031.05	1,564.09	28,764.76
	8	1,194.19	4,904.36	6,951.44	4,830.91	6,327.27	1,597.78	2,459.14	19,375.01	1,583.82	29,022.01
	9	1,180.62	5,091.19	6,469.66	5,221.99	6,442.32	1,636.28	2,689.82	17,406.90	1,524.61	29,746.97
	10	995.16	4,644.37	6,217.29	5,083.96	6,281.26	1,641.09	2,537.57	16,072.95	1,583.82	28,437.36
	11	995.16	4,385.04	6,604.53	5,175.98	6,166.22	1,684.41	2,606.78	16,192.61	1,746.65	29,746.97
	12	940.88	3,885.24	6,882.61	6,027.14	6,212.23	1,761.41	2,643.69	15,331.06	1,781.18	30,214.69

2015	1	904.69	4,427.47	7,276.57	6,671.26	6,948.50	1,795.10	2,611.39	15,817.06	1,993.35	33,876.06
	2	868.50	4,592.50	7,276.57	6,579.24	6,810.45	1,737.35	2,708.28	18,335.42	2,190.71	34,041.54
	3	868.50	4,832.97	7,948.61	6,751.78	6,856.46	1,795.10	2,666.76	19,263.24	2,106.83	37,492.98
	4	841.36	4,903.70	6,349.62	6,073.15	6,212.23	1,727.72	2,413.00	18,909.79	1,840.39	40,282.49
	5	778.03	5,163.03	6,766.75	6,487.23	6,718.42	1,689.22	2,694.38	18,803.36	1,879.86	40,944.41
	6	702.43	5,620.45	6,696.67	5,931.11	6,246.09	1,629.13	2,774.88	18,872.82	1,660.77	37,351.13
	7	545.31	5,454.44	6,294.40	5,847.90	5,794.85	1,648.59	2,784.35	16,626.61	1,780.11	38,218.45
	8	549.93	5,430.73	5,608.17	6,061.85	4,868.62	1,609.68	2,718.05	17,714.98	1,596.13	37,955.70
	9	494.48	5,644.98	4,945.60	5,895.45	5,224.87	1,337.35	2,504.97	16,186.63	1,397.24	36,307.53
	10	549.93	5,693.23	5,649.65	6,275.80	5,248.61	1,390.84	2,538.11	17,023.34	1,611.05	35,352.06
	11	508.34	5,886.22	5,673.59	6,002.42	4,631.13	1,298.44	2,774.88	15,330.41	1,675.69	35,113.20
	12	475.99	6,923.54	5,745.41	6,406.54	4,916.12	1,283.85	2,940.61	15,941.75	1,790.06	35,352.06
2016	1	500.23	7,092.41	6,176.31	6,870.10	5,889.85	1,298.44	3,163.17	16,364.98	1,720.44	35,389.03
	2	576.46	7,888.50	6,511.46	7,488.17	6,697.33	1,264.40	3,077.93	14,601.51	1,675.69	42,934.52
	3	614.57	6,706.43	6,942.37	7,226.68	6,863.57	1,405.43	3,148.96	14,389.90	1,824.86	41,391.66
	4	714.61	6,416.94	6,439.65	7,262.34	6,768.58	1,337.35	3,362.05	13,943.15	1,839.78	41,054.17
	5	676.50	6,175.70	6,319.95	7,702.12	6,578.58	1,390.84	3,504.11	13,355.33	1,819.89	41,560.42
	6	809.90	6,147.78	7,208.49	8,189.44	6,887.32	1,488.10	3,854.92	14,340.29	2,104.14	43,464.87
	7	990.93	6,535.04	7,525.08	8,442.33	8,094.84	1,650.99	4,097.07	15,260.78	2,084.19	43,865.40
	8	1,095.74	6,462.43	7,939.08	9,792.13	7,705.90	1,769.27	4,077.70	18,167.59	2,144.03	44,449.62
	9	1,148.15	6,310.28	8,036.50	9,301.29	8,459.47	1,690.42	4,174.55	17,150.21	2,193.89	43,378.55
	10	1,295.84	6,946.20	8,064.79	9,227.67	8,265.00	1,715.06	4,087.38	20,606.06	2,163.97	43,305.51
	11	1,457.82	6,530.40	7,402.94	8,491.42	7,365.57	1,439.07	3,661.21	20,508.40	1,695.28	39,459.38
	12	1,615.03	5,870.03	8,113.82	8,417.79	7,705.90	1,493.29	3,854.92	20,752.55	1,750.13	37,779.74
2017	1	1,639.89	6,530.40	7,795.15	8,246.00	7,705.90	1,429.22	3,767.00	21,338.50	1,824.92	40,476.10
	2	1,639.89	6,212.44	8,040.28	8,172.38	7,900.37	1,508.07	3,747.54	24,072.96	1,824.92	41,433.97
	3	1,693.10	6,114.61	8,457.00	8,000.58	7,778.82	1,517.93	4,020.08	25,879.65	1,879.76	42,563.77
	4	1,717.29	6,628.24	8,775.67	8,614.13	8,143.46	1,562.28	4,253.70	26,270.29	1,785.03	43,718.12
	5	1,470.58	6,481.49	8,579.57	8,540.50	8,508.09	1,517.93	4,234.23	27,531.56	1,804.97	45,363.69
	6	1,544.68	6,431.12	8,863.06	8,638.67	8,362.24	1,601.71	4,520.00	27,209.41	1,824.92	47,942.57
	7	1,745.10	6,800.72	7,919.65	8,350.00	8,375.00	1,735.00	4,690.00	29,836.19	1,790.00	48,089.93
	8	1,784.20	6,677.52	7,820.35	8,725.00	8,375.00	1,710.00	4,690.00	30,034.43	1,835.00	50,137.35
	9	1,784.20	7,100.00	7,845.17	8,725.00	8,425.00	1,665.00	4,680.00	31,719.53	1,770.00	48,575.20
	10	1,784.20	7,450.00	7,944.48	8,800.00	8,200.00	1,600.00	4,030.00	34,371.09	1,720.00	49,195.10
	11	1,662.00	6,350.00	7,975.00	8,450.00	7,325.00	1,600.00	4,150.00	33,500.00	1,650.00	48,897.55
	12	1,818.42	6,350.00	8,300.00	8,900.00	7,625.00	1,690.00	4,440.00	35,400.00	1,700.00	55,900.00

## Lampiran 4

### Tabel Harga Penutup Indeks dan Risk-free rate

Date		IHSG	BI rate (%)	ISSI	SBIS (%)	Date		IHSG	BI rate (%)	ISSI	SBIS (%)
Tahun	Bulan					Tahun	Bulan				
2012	12	4,316.69		144.995							
2013	1	4,453.70	5.75	147.51	4.84	2016	1	4,615.16	7.25	144.883	6.65
	2	4,795.79	5.75	157.642	4.86		2	4,770.96	7	151.147	6.55
	3	4,940.99	5.75	162.641	4.87		3	4,845.37	6.75	155.912	6.6
	4	5,034.07	5.75	166.912	4.89		4	4,838.58	6.75	157.46	6.6
	5	5,068.63	5.75	169.814	5.02		5	4,796.87	6.75	156.351	6.6
	6	4,818.90	6	164.24	5.28		6	5,016.65	6.5	165.941	6.4
	7	4,610.38	6.5	154.202	5.52		7	5,215.99	6.5	173.745	6.4
	8	4,195.09	7	143.922	5.86		8	5,386.08	5.25	178.665	6.4
	9	4,316.18	7.25	145.155	6.96		9	5,364.80	5	176.929	6.15
	10	4,510.63	7.25	151.308	6.97		10	5,422.54	4.75	179.221	5.9
	11	4,256.44	7.5	143.029	7.22		11	5,148.91	4.75	169.997	5.9
	12	4,274.18	7.5	143.706	7.22		12	5,296.71	4.75	172.077	5.9
2014	1	4,418.76	7.5	146.858	7.23	1	5,294.10	4.75	172.298	5.9	
	2	4,620.22	7.5	152.878	7.17	2	5,386.69	4.75	174.745	5.91	
	3	4,768.28	7.5	157.354	7.13	3	5,568.11	4.75	180.492	5.95	
	4	4,840.15	7.5	158.831	7.14	4	5,685.30	4.75	184.691	5.97	
	5	4,893.91	7.5	161.081	7.15	5	5,738.16	4.75	183.122	5.97	
	6	4,878.58	7.5	159.747	7.14	6	5,829.71	4.75	185.217	5.97	
	7	5,088.80	7.5	167.342	7.09	7	5,840.94	4.75	184.543	5.94	
	8	5,136.86	7.5	168.982	6.97	8	5,864.06	4.5	186.085	5.5	
	9	5,137.58	7.5	166.756	6.88	9	5,900.85	4.25	184.229	5.2	
	10	5,089.55	7.5	163.412	6.85	10	6,005.78	4.25	185.852	5.22	
	11	5,149.89	7.75	166.105	6.87	11	5,952.14	4.25	180.161	5.22	
	12	5,226.95	7.75	168.638	6.9	12	6,355.65	4.25	189.86	5.21	
2015	1	5,289.40	7.75	171.497	6.93						
	2	5,450.29	7.5	174.317	6.67						
	3	5,518.68	7.5	174.098	6.65						
	4	5,086.43	7.5	161.71	6.65						
	5	5,216.38	7.5	167.066	6.65						
	6	4,910.66	7.5	157.919	6.65						
	7	4,802.53	7.5	154.497	6.65						
	8	4,509.61	7.5	142.306	6.75						
	9	4,223.91	7.5	134.392	7.1						
	10	4,455.18	7.5	140.956	7.1						
	11	4,446.46	7.5	139.799	7.1						
	12	4,593.01	7.5	145.061	7.1						

## Lampiran 5

### Tabel Return Saham per Emiten

Date		Actual Return									
Tahun	Bulan	ADRO	AKRA	ASII	ICBP	INDF	KLBF	TLKM	UNTR	BSDE	UNVR
2013	1	0.03077	-0.0342	-0.0268	-0.0124	0.03362	0.05662	0.08047	0.00762	0.24116	0.05094
	2	-0.0497	0.14396	0.07847	0.06063	0.18782	0.16846	0.10278	-0.023	0.13353	0.03564
	3	-0.181	0.11093	-0.0063	0.1217	0.02034	-0.0395	0.02299	-0.0587	0.08961	-0.0022
	4	-0.063	0.02956	-0.0722	0.17623	-0.0135	0.11419	0.06169	0.05349	-0.0115	0.14091
	5	-0.2796	0.0381	-0.0417	0.13462	0	0.10248	-0.0572	-0.1129	0.24033	0.15006
	6	-0.0783	-0.0094	0.01394	-0.0712	0	-0.0671	0.17908	-0.0022	-0.2007	0.00816
	7	-0.2059	-0.1986	-0.0741	-0.0855	-0.1229	0.00787	0.05617	0.00597	-0.1219	0.03358
	8	0.28411	-0.0844	-0.0717	-0.0789	0.02585	-0.0576	-0.0786	-0.0614	-0.1874	-0.0081
	9	-0.0328	0.00627	0.06402	0.02469	0.08123	-0.1346	-0.0465	0.03116	0.09462	-0.0342
	10	0.12516	0.20452	0.03054	0.08863	-0.0584	0.09685	0.11248	0.07104	0.08643	-0.005
	11	0.10242	-0.0367	-0.0526	-0.1133	0	-0.0635	-0.0774	0.05256	-0.151	-0.1203
	12	-0.036	-0.0663	0.08434	0.0198	-0.0075	0.02429	-0.0116	0.04027	-0.0455	-0.0228
2014	1	-0.1375	0.0057	-0.0567	0.07551	0.05526	0.1169	0.05651	0.01567	0.11	0.10583
	2	0.04629	0.03572	0.07855	0.01578	0.02827	0.03153	0.02174	-0.017	0.06389	0.00088
	3	-0.0152	0.05856	0.05936	-0.1011	0.01727	0.01029	-0.0485	0.08942	0.06311	0.02335
	4	0.18994	-0.0135	0.00676	-0.01	-0.0348	0.05317	0.02232	0.04477	-0.047	0
	5	0.0849	-0.1453	-0.0483	0.0198	-0.0324	-0.0032	0.19416	-0.0012	0.03155	-0.0043
	6	-0.0934	0.0485	0.04808	-0.0198	-0.0185	0.07503	-0.0437	0.07893	-0.0808	0.00514
	7	0.00848	0.01949	0.06002	0.04402	0.05446	0.05192	0.07237	-0.0087	0.07471	0.06168
	8	0.10789	0.17662	-0.0196	0.04218	-0.0083	-0.0413	0.00564	-0.0333	0.01254	0.0089
	9	-0.0114	0.03739	-0.0718	0.07784	0.01802	0.02381	0.08966	-0.1071	-0.0381	0.02467
	10	-0.1709	-0.0919	-0.0398	-0.0268	-0.0253	0.00294	-0.0583	-0.0797	0.0381	-0.045
	11	0	-0.0575	0.06042	0.01794	-0.0185	0.02605	0.02691	0.00742	0.09786	0.04502
	12	-0.0561	-0.121	0.04124	0.15224	0.00743	0.0447	0.01406	-0.0547	0.01958	0.0156
2015	1	-0.0392	0.13064	0.05566	0.10154	0.11201	0.01895	-0.0123	0.03121	0.11254	0.11438
	2	-0.0408	0.0366	0	-0.0139	-0.0201	-0.0327	0.03643	0.14775	0.09441	0.00487
	3	0	0.05104	0.08834	0.02589	0.00673	0.0327	-0.0154	0.04936	-0.039	0.09657
	4	-0.0317	0.01453	-0.2246	-0.1059	-0.0987	-0.0383	-0.1	-0.0185	-0.1352	0.07176
	5	-0.0783	0.05153	0.06363	0.06596	0.07833	-0.0225	0.1103	-0.0056	0.02122	0.0163
	6	-0.1022	0.08489	-0.0104	-0.0896	-0.0729	-0.0362	0.02944	0.00369	-0.1239	-0.0919
	7	-0.2532	-0.03	-0.062	-0.0141	-0.075	0.01187	0.00341	-0.1267	0.06939	0.02296
	8	0.00844	-0.0044	-0.1154	0.03593	-0.1742	-0.0239	-0.0241	0.06341	-0.1091	-0.0069
	9	-0.1063	0.03869	-0.1257	-0.0278	0.07062	-0.1853	-0.0816	-0.0902	-0.1331	-0.0444
	10	0.10628	0.00851	0.1331	0.06252	0.00453	0.03922	0.01314	0.0504	0.14239	-0.0267
	11	-0.0786	0.03334	0.00423	-0.0445	-0.1252	-0.0687	0.08919	-0.1047	0.03934	-0.0068
	12	-0.0658	0.16231	0.01258	0.06516	0.05972	-0.0113	0.05801	0.0391	0.06602	0.00678

2016	1	0.04967	0.0241	0.07232	0.06986	0.18071	0.0113	0.07296	0.0262	-0.0397	0.00105
	2	0.14184	0.10638	0.05284	0.08615	0.12848	-0.0266	-0.0273	-0.114	-0.0264	0.19327
	3	0.06402	-0.1623	0.06408	-0.0355	0.02452	0.10575	0.02281	-0.0146	0.08528	-0.0366
	4	0.15081	-0.0441	-0.0752	0.00492	-0.0139	-0.0497	0.06548	-0.0315	0.00814	-0.0082
	5	-0.0548	-0.0383	-0.0188	0.05879	-0.0285	0.03922	0.04139	-0.0431	-0.0109	0.01226
	6	0.17998	-0.0045	0.13155	0.06135	0.04586	0.06759	0.09541	0.07116	0.14513	0.0448
	7	0.20173	0.06109	0.04298	0.03041	0.16154	0.10387	0.06092	0.06221	-0.0095	0.00917
	8	0.10054	-0.0112	0.05356	0.14832	-0.0492	0.06919	-0.0047	0.17435	0.02831	0.01323
	9	0.04672	-0.0238	0.0122	-0.0514	0.0933	-0.0456	0.02347	-0.0576	0.02299	-0.0244
	10	0.12101	0.09601	0.00351	-0.0079	-0.0233	0.01447	-0.0211	0.18357	-0.0137	-0.0017
	11	0.11778	-0.0617	-0.0856	-0.0832	-0.1152	-0.1755	-0.1101	-0.0048	-0.2441	-0.093
	12	0.10241	-0.1066	0.09169	-0.0087	0.04517	0.03698	0.05156	0.01183	0.03184	-0.0435
2017	1	0.01528	0.10661	-0.0401	-0.0206	0	-0.0439	-0.0231	0.02784	0.04185	0.06894
	2	0	-0.0499	0.03096	-0.009	0.02492	0.0537	-0.0052	0.12058	0	0.02339
	3	0.03193	-0.0159	0.05053	-0.0212	-0.0155	0.00652	0.0702	0.07237	0.02961	0.0269
	4	0.01419	0.08066	0.03699	0.07389	0.04581	0.0288	0.05649	0.01498	-0.0517	0.02676
	5	-0.1551	-0.0224	-0.0226	-0.0086	0.0438	-0.0288	-0.0046	0.04689	0.01111	0.03695
	6	0.04916	-0.0078	0.03251	0.01143	-0.0173	0.05372	0.06531	-0.0118	0.01099	0.05529
	7	0.122	0.05588	-0.1125	-0.034	0.00152	0.07994	0.03692	0.09216	-0.0193	0.00307
	8	0.02216	-0.0183	-0.0126	0.04393	0	-0.0145	0	0.00662	0.02483	0.04169
	9	0	0.06135	0.00317	0	0.00595	-0.0267	-0.0021	0.05459	-0.0361	-0.0317
	10	0	0.04812	0.01258	0.00856	-0.0271	-0.0398	-0.1495	0.08028	-0.0287	0.01268
	11	-0.0709	-0.1598	0.00383	-0.0406	-0.1128	0	0.02934	-0.0257	-0.0415	-0.0061
	12	0.08995	0	0.03994	0.05188	0.04014	0.05472	0.06755	0.05517	0.02985	0.13384
<b>Average (R)</b>		<b>0.38%</b>	<b>0.91%</b>	<b>0.39%</b>	<b>1.57%</b>	<b>0.66%</b>	<b>0.93%</b>	<b>2.03%</b>	<b>1.29%</b>	<b>0.78%</b>	<b>1.81%</b>
<b>Std. Devciation</b>		<b>11.23%</b>	<b>8.25%</b>	<b>6.73%</b>	<b>6.63%</b>	<b>7.04%</b>	<b>6.66%</b>	<b>6.55%</b>	<b>6.76%</b>	<b>9.57%</b>	<b>5.65%</b>

Lampiran 6

Tabel *Return* Indeks Pasar dan Return Risk-free

Date		IHSG	BI rate	ISSI	SBIS	Date		IHSG	BI rate	ISSI	SBIS
Tahun	Bulan					Tahun	Bulan				
2013	1	0.03125	0.00479	0.0172	0.00538	2016	1	0.00481	0.00604	-0.0012	0.00739
	2	0.074	0.00479	0.06643	0.0054		2	0.0332	0.00583	0.04233	0.00728
	3	0.02983	0.00479	0.03122	0.00541		3	0.01548	0.00563	0.03104	0.00733
	4	0.01866	0.00479	0.02592	0.00543		4	-0.0014	0.00563	0.00988	0.00733
	5	0.00684	0.00479	0.01724	0.00558		5	-0.0087	0.00563	-0.0071	0.00733
	6	-0.0505	0.005	-0.0334	0.00587		6	0.0448	0.00542	0.05953	0.00711
	7	-0.0442	0.00542	-0.0631	0.00613		7	0.03897	0.00542	0.04596	0.00711
	8	-0.0944	0.00583	-0.069	0.00651		8	0.03209	0.00438	0.02792	0.00711
	9	0.02846	0.00604	0.00853	0.00773		9	-0.004	0.00417	-0.0098	0.00683
	10	0.04407	0.00604	0.04152	0.00774		10	0.0107	0.00396	0.01287	0.00656
	11	-0.058	0.00625	-0.0563	0.00802		11	-0.0518	0.00396	-0.0528	0.00656
	12	0.00416	0.00625	0.00472	0.00802		12	0.0283	0.00396	0.01216	0.00656
2014	1	0.03327	0.00625	0.0217	0.00803	2017	1	-0.0005	0.00396	0.00128	0.00656
	2	0.04458	0.00625	0.04017	0.00797		2	0.01734	0.00396	0.0141	0.00657
	3	0.03154	0.00625	0.02886	0.00792		3	0.03312	0.00396	0.03236	0.00661
	4	0.01496	0.00625	0.00934	0.00793		4	0.02083	0.00396	0.023	0.00663
	5	0.01105	0.00625	0.01407	0.00794		5	0.00925	0.00396	-0.0085	0.00663
	6	-0.0031	0.00625	-0.0083	0.00793		6	0.01583	0.00396	0.01138	0.00663
	7	0.04219	0.00625	0.04645	0.00788		7	0.00192	0.00396	-0.0036	0.0066
	8	0.0094	0.00625	0.00975	0.00774		8	0.00395	0.00375	0.00832	0.00611
	9	0.00014	0.00625	-0.0133	0.00764		9	0.00626	0.00354	-0.01	0.00578
	10	-0.0094	0.00625	-0.0203	0.00761		10	0.01763	0.00354	0.00877	0.0058
	11	0.01179	0.00646	0.01635	0.00763		11	-0.009	0.00354	-0.0311	0.0058
	12	0.01485	0.00646	0.01513	0.00767		12	0.06559	0.00354	0.05244	0.00579
2015	1	0.01188	0.00646	0.01681	0.0077	<b>Average (R)</b>		<b>0.64%</b>	<b>0.54%</b>	<b>0.45%</b>	<b>0.70%</b>
	2	0.02996	0.00625	0.01631	0.00741	<b>Std. Devciation</b>		<b>3.51%</b>	<b>0.10%</b>	<b>3.44%</b>	<b>0.08%</b>
	3	0.01247	0.00625	-0.0013	0.00739						
	4	-0.0816	0.00625	-0.0738	0.00739						
	5	0.02523	0.00625	0.03258	0.00739						
	6	-0.0604	0.00625	-0.0563	0.00739						
	7	-0.0223	0.00625	-0.0219	0.00739						
	8	-0.0629	0.00625	-0.0822	0.0075						
	9	-0.0654	0.00625	-0.0572	0.00789						
	10	0.05331	0.00625	0.04769	0.00789						
	11	-0.002	0.00625	-0.0082	0.00789						
	12	0.03243	0.00625	0.03695	0.00789						

Lampiran 7

Tabel *Excess Return* CAPM

Date		Excess Return										IHSG - Rf
Tahun	Bulan	TLKM	UNVR	ICBP	UNTR	KLBF	AKRA	BSDE	INDF	ASII	ADRO	
2013	1	0.07568	0.04615	-0.0172	0.00283	0.05183	-0.039	0.23637	0.02882	-0.0316	0.02598	0.02646
	2	0.09799	0.03085	0.05583	-0.0278	0.16367	0.13917	0.12874	0.18302	0.07368	-0.0545	0.06921
	3	0.0182	-0.007	0.11691	-0.0635	-0.0443	0.10614	0.08482	0.01555	-0.0111	-0.1858	0.02503
	4	0.0569	0.13611	0.17143	0.0487	0.1094	0.02477	-0.0163	-0.0183	-0.077	-0.0678	0.01387
	5	-0.062	0.14527	0.12983	-0.1177	0.09769	0.03331	0.23554	-0.0048	-0.0465	-0.2844	0.00205
	6	0.17408	0.00316	-0.0762	-0.0072	-0.0721	-0.0144	-0.2057	-0.005	0.00894	-0.0833	-0.0555
	7	0.05075	0.02816	-0.0909	0.00055	0.00246	-0.204	-0.1273	-0.1283	-0.0795	-0.2113	-0.0497
	8	-0.0845	-0.014	-0.0848	-0.0672	-0.0634	-0.0902	-0.1932	0.02001	-0.0776	0.27827	-0.1002
	9	-0.0526	-0.0403	0.01865	0.02511	-0.1406	0.00023	0.08858	0.07518	0.05798	-0.0388	0.02241
	10	0.10644	-0.011	0.08259	0.06499	0.09081	0.19848	0.08039	-0.0645	0.0245	0.11912	0.03803
	11	-0.0836	-0.1265	-0.1196	0.04631	-0.0698	-0.043	-0.1572	-0.0063	-0.0588	0.09617	-0.0643
	12	-0.0178	-0.0291	0.01355	0.03402	0.01804	-0.0726	-0.0517	-0.0138	0.07809	-0.0423	-0.0021
2014	1	0.05026	0.09958	0.06926	0.00942	0.11065	-0.0006	0.10375	0.04901	-0.063	-0.1437	0.02702
	2	0.01549	-0.0054	0.00953	-0.0232	0.02528	0.02947	0.05764	0.02202	0.0723	0.04004	0.03833
	3	-0.0547	0.0171	-0.1074	0.08317	0.00404	0.05231	0.05686	0.01102	0.05311	-0.0214	0.02529
	4	0.01607	-0.0063	-0.0162	0.03852	0.04692	-0.0198	-0.0532	-0.0411	0.00051	0.18369	0.00871
	5	0.18791	-0.0105	0.01355	-0.0074	-0.0095	-0.1515	0.0253	-0.0387	-0.0545	0.07865	0.0048
	6	-0.0499	-0.0011	-0.0261	0.07268	0.06878	0.04225	-0.0871	-0.0247	0.04183	-0.0996	-0.0094
	7	0.06612	0.05543	0.03777	-0.0149	0.04567	0.01324	0.06846	0.04821	0.05377	0.00223	0.03594
	8	-0.0006	0.00265	0.03593	-0.0395	-0.0476	0.17037	0.00629	-0.0146	-0.0259	0.10164	0.00315
	9	0.08341	0.01842	0.07159	-0.1134	0.01756	0.03114	-0.0444	0.01177	-0.0781	-0.0177	-0.0061
	10	-0.0645	-0.0513	-0.033	-0.086	-0.0033	-0.0981	0.03185	-0.0316	-0.046	-0.1771	-0.0156
	11	0.02045	0.03857	0.01148	0.00096	0.0196	-0.0639	0.0914	-0.0249	0.05396	-0.0065	0.00533
	12	0.0076	0.00914	0.14579	-0.0611	0.03824	-0.1275	0.01312	0.00098	0.03478	-0.0625	0.00839
2015	1	-0.0188	0.10792	0.09508	0.02475	0.01249	0.12419	0.10608	0.10555	0.0492	-0.0457	0.00542
	2	0.03018	-0.0014	-0.0201	0.1415	-0.0389	0.03035	0.08816	-0.0263	-0.0063	-0.0471	0.02371
	3	-0.0217	0.09032	0.01964	0.04311	0.02645	0.04479	-0.0453	0.00048	0.08209	-0.0063	0.00622
	4	-0.1062	0.06551	-0.1122	-0.0248	-0.0445	0.00828	-0.1415	-0.1049	-0.2309	-0.038	-0.0878
	5	0.10405	0.01005	0.05971	-0.0119	-0.0288	0.04528	0.01497	0.07208	0.05738	-0.0845	0.01898
	6	0.02319	-0.0981	-0.0959	-0.0026	-0.0425	0.07864	-0.1302	-0.0791	-0.0167	-0.1085	-0.0666
	7	-0.0028	0.01671	-0.0204	-0.133	0.00562	-0.0362	0.06314	-0.0812	-0.0682	-0.2594	-0.0285
	8	-0.0303	-0.0131	0.02968	0.05716	-0.0301	-0.0106	-0.1153	-0.1804	-0.1217	0.00219	-0.0692
	9	-0.0879	-0.0506	-0.0341	-0.0965	-0.1916	0.03244	-0.1393	0.06437	-0.132	-0.1125	-0.0717
	10	0.00689	-0.0329	0.05627	0.04415	0.03297	0.00226	0.13614	-0.0017	0.12685	0.10003	0.04706
	11	0.08294	-0.013	-0.0508	-0.111	-0.075	0.02709	0.03309	-0.1314	-0.002	-0.0849	-0.0082
	12	0.05176	0.00053	0.05891	0.03285	-0.0176	0.15606	0.05977	0.05347	0.00633	-0.072	0.02618

2016	1	0.06692	-0.005	0.06382	0.02016	0.00526	0.01806	-0.0457	0.17467	0.06628	0.04363	-0.0012
	2	-0.0332	0.18744	0.08031	-0.1199	-0.0324	0.10055	-0.0322	0.12265	0.04701	0.136	0.02737
	3	0.01719	-0.0422	-0.0412	-0.0202	0.10012	-0.168	0.07965	0.01889	0.05845	0.05839	0.00985
	4	0.05985	-0.0138	-0.0007	-0.0372	-0.0553	-0.0498	0.00252	-0.0196	-0.0808	0.14519	-0.007
	5	0.03576	0.00663	0.05317	-0.0487	0.03359	-0.0439	-0.0165	-0.0341	-0.0244	-0.0604	-0.0143
	6	0.09	0.03939	0.05593	0.06574	0.06218	-0.0099	0.13971	0.04045	0.12613	0.17456	0.03938
	7	0.05551	0.00376	0.025	0.0568	0.09846	0.05567	-0.0149	0.15613	0.03757	0.19632	0.03355
	8	-0.0091	0.00886	0.14395	0.16998	0.06482	-0.0155	0.02393	-0.0536	0.04918	0.09617	0.02771
	9	0.01931	-0.0286	-0.0556	-0.0618	-0.0498	-0.028	0.01882	0.08913	0.00803	0.04256	-0.0081
	10	-0.0251	-0.0056	-0.0119	0.17962	0.01051	0.09206	-0.0177	-0.0272	-0.0004	0.11705	0.00675
	11	-0.1141	-0.097	-0.0871	-0.0087	-0.1794	-0.0657	-0.2481	-0.1192	-0.0896	0.11382	-0.0557
	12	0.0476	-0.0475	-0.0127	0.00788	0.03303	-0.1106	0.02788	0.04121	0.08773	0.09845	0.02434
2017	1	-0.027	0.06498	-0.0246	0.02389	-0.0478	0.10265	0.03789	-0.004	-0.044	0.01132	-0.0045
	2	-0.0091	0.01943	-0.0129	0.11662	0.04974	-0.0539	-0.004	0.02096	0.027	-0.004	0.01338
	3	0.06624	0.02294	-0.0252	0.06841	0.00256	-0.0198	0.02565	-0.0195	0.04657	0.02797	0.02917
	4	0.05253	0.0228	0.06993	0.01102	0.02484	0.0767	-0.0557	0.04185	0.03303	0.01023	0.01687
	5	-0.0085	0.03299	-0.0125	0.04294	-0.0328	-0.0263	0.00715	0.03984	-0.0266	-0.159	0.0053
	6	0.06135	0.05133	0.00747	-0.0157	0.04977	-0.0118	0.00703	-0.0212	0.02855	0.0452	0.01187
	7	0.03296	-0.0009	-0.0379	0.0882	0.07598	0.05192	-0.0233	-0.0024	-0.1165	0.11804	-0.002
	8	-0.0038	0.03794	0.04018	0.00287	-0.0183	-0.022	0.02108	-0.0038	-0.0164	0.01841	0.0002
	9	-0.0057	-0.0352	-0.0035	0.05105	-0.0302	0.05781	-0.0396	0.00241	-0.0004	-0.0035	0.00271
	10	-0.1531	0.00914	0.00502	0.07674	-0.0434	0.04458	-0.0322	-0.0306	0.00904	-0.0035	0.01408
	11	0.0258	-0.0096	-0.0441	-0.0292	-0.0035	-0.1633	-0.0451	-0.1164	0.00029	-0.0745	-0.0125
	12	0.064	0.1303	0.04834	0.05162	0.05118	-0.0035	0.02631	0.0366	0.0364	0.0864	0.06205
<b>Avg. Return</b>		<b>1.49%</b>	<b>1.27%</b>	<b>1.04%</b>	<b>0.76%</b>	<b>-0.40%</b>	<b>0.38%</b>	<b>0.24%</b>	<b>0.12%</b>	<b>-0.15%</b>	<b>-0.15%</b>	<b>0.11%</b>
<b>Std. Deviation</b>		<b>6.54%</b>	<b>5.66%</b>	<b>6.62%</b>	<b>6.79%</b>	<b>6.66%</b>	<b>8.24%</b>	<b>9.57%</b>	<b>7.03%</b>	<b>6.73%</b>	<b>11.24%</b>	<b>3.53%</b>
<b>Sharpe Ratio</b>		<b>0.2279</b>	<b>0.22439</b>	<b>0.15632</b>	<b>0.11155</b>	<b>0.05948</b>	<b>0.04585</b>	<b>0.02536</b>	<b>0.01733</b>	<b>-0.0222</b>	<b>-0.0138</b>	<b>0.03107</b>



## Lampiran 8

### Tabel *Excess Return* SCAPM

Date		Excess Return										ISSI - SBIS
Tahun	Bulan	TLKM	UNVR	ICBP	UNTR	KLBF	AKRA	BSDE	INDF	ASII	ADRO	
2013	1	0.07509	0.04556	-0.0178	0.00225	0.05124	-0.0396	0.23578	0.02824	-0.0322	0.02539	0.01182
	2	0.09738	0.03024	0.05523	-0.0284	0.16306	0.13856	0.12813	0.18242	0.07307	-0.0551	0.06103
	3	0.01758	-0.0076	0.11629	-0.0641	-0.0449	0.10552	0.0842	0.01493	-0.0117	-0.1865	0.02581
	4	0.05626	0.13547	0.17079	0.04806	0.10876	0.02412	-0.0169	-0.0189	-0.0776	-0.0684	0.02049
	5	-0.0627	0.14448	0.12904	-0.1185	0.0969	0.03252	0.23476	-0.0056	-0.0473	-0.2852	0.01166
	6	0.17321	0.0023	-0.077	-0.008	-0.073	-0.0153	-0.2065	-0.0059	0.00807	-0.0841	-0.0392
	7	0.05004	0.02744	-0.0917	-0.0002	0.00174	-0.2047	-0.128	-0.129	-0.0802	-0.212	-0.0692
	8	-0.0852	-0.0146	-0.0854	-0.0679	-0.0641	-0.0909	-0.1939	0.01934	-0.0783	0.2776	-0.0755
	9	-0.0543	-0.042	0.01696	0.02342	-0.1423	-0.0015	0.08689	0.07349	0.05629	-0.0405	0.0008
	10	0.10473	-0.0127	0.08089	0.06329	0.0891	0.19677	0.07869	-0.0662	0.02279	0.11742	0.03377
	11	-0.0854	-0.1283	-0.1214	0.04454	-0.0715	-0.0448	-0.159	-0.008	-0.0606	0.0944	-0.0643
	12	-0.0196	-0.0308	0.01178	0.03225	0.01627	-0.0743	-0.0535	-0.0156	0.07632	-0.0441	-0.0033
2014	1	0.04848	0.0978	0.06747	0.00763	0.10886	-0.0023	0.10197	0.04723	-0.0648	-0.1455	0.01366
	2	0.01378	-0.0071	0.00782	-0.0249	0.02356	0.02775	0.05592	0.0203	0.07058	0.03832	0.03221
	3	-0.0564	0.01543	-0.1091	0.0815	0.00237	0.05064	0.05519	0.00935	0.05143	-0.0231	0.02094
	4	0.01439	-0.0079	-0.0179	0.03683	0.04524	-0.0215	-0.0549	-0.0428	-0.0012	0.18201	0.00141
	5	0.18621	-0.0122	0.01186	-0.0091	-0.0112	-0.1532	0.0236	-0.0404	-0.0562	0.07695	0.00612
	6	-0.0516	-0.0028	-0.0277	0.071	0.0671	0.04057	-0.0888	-0.0264	0.04015	-0.1013	-0.0162
	7	0.06449	0.05381	0.03614	-0.0166	0.04404	0.01162	0.06684	0.04658	0.05214	0.0006	0.03857
	8	-0.0021	0.00116	0.03443	-0.041	-0.0491	0.16888	0.00479	-0.0161	-0.0274	0.10014	0.00201
	9	0.08202	0.01703	0.0702	-0.1148	0.01617	0.02974	-0.0457	0.01038	-0.0795	-0.0191	-0.0209
	10	-0.0659	-0.0526	-0.0344	-0.0873	-0.0047	-0.0995	0.03049	-0.0329	-0.0474	-0.1785	-0.0279
	11	0.01928	0.03739	0.0103	-0.0002	0.01842	-0.0651	0.09023	-0.0261	0.05279	-0.0076	0.00871
	12	0.00639	0.00793	0.14458	-0.0623	0.03703	-0.1287	0.01191	-0.0002	0.03358	-0.0638	0.00747
2015	1	-0.02	0.10668	0.09384	0.02351	0.01125	0.12294	0.10484	0.10431	0.04796	-0.0469	0.00911
	2	0.02902	-0.0025	-0.0213	0.14033	-0.0401	0.02919	0.087	-0.0275	-0.0074	-0.0482	0.0089
	3	-0.0228	0.08918	0.0185	0.04198	0.02531	0.04365	-0.0464	-0.0007	0.08095	-0.0074	-0.0086
	4	-0.1074	0.06437	-0.1133	-0.0259	-0.0456	0.00714	-0.1426	-0.1061	-0.232	-0.0391	-0.0812
	5	0.10291	0.00891	0.05857	-0.013	-0.0299	0.04414	0.01383	0.07094	0.05624	-0.0856	0.0252
	6	0.02205	-0.0992	-0.097	-0.0037	-0.0436	0.0775	-0.1313	-0.0803	-0.0178	-0.1096	-0.0637
	7	-0.004	0.01557	-0.0215	-0.1341	0.00449	-0.0374	0.062	-0.0824	-0.0693	-0.2606	-0.0293
	8	-0.0316	-0.0144	0.02843	0.05591	-0.0314	-0.0119	-0.1166	-0.1817	-0.1229	0.00094	-0.0897
	9	-0.0895	-0.0523	-0.0357	-0.0981	-0.1932	0.0308	-0.141	0.06273	-0.1336	-0.1142	-0.0651
	10	0.00525	-0.0346	0.05463	0.04251	0.03133	0.00062	0.1345	-0.0034	0.12521	0.0984	0.0398
	11	0.0813	-0.0147	-0.0524	-0.1126	-0.0766	0.02545	0.03145	-0.1331	-0.0037	-0.0865	-0.0161
	12	0.05012	-0.0011	0.05727	0.03121	-0.0192	0.15442	0.05814	0.05183	0.00469	-0.0736	0.02906

2016	1	0.06557	-0.0063	0.06247	0.01881	0.00391	0.01671	-0.0471	0.17332	0.06493	0.04228	-0.0086
	2	-0.0346	0.186	0.07887	-0.1213	-0.0338	0.0991	-0.0336	0.1212	0.04556	0.13456	0.03505
	3	0.01548	-0.0439	-0.0429	-0.0219	0.09841	-0.1697	0.07794	0.01719	0.05675	0.05668	0.02371
	4	0.05815	-0.0155	-0.0024	-0.0389	-0.057	-0.0515	0.00081	-0.0213	-0.0825	0.14348	0.00255
	5	0.03405	0.00492	0.05146	-0.0504	0.03188	-0.0457	-0.0182	-0.0358	-0.0261	-0.0621	-0.0144
	6	0.0883	0.03769	0.05424	0.06405	0.06048	-0.0116	0.13802	0.03875	0.12444	0.17287	0.05242
	7	0.05381	0.00206	0.0233	0.0551	0.09676	0.05398	-0.0166	0.15443	0.03587	0.19462	0.03885
	8	-0.0119	0.00612	0.14121	0.16724	0.06208	-0.0183	0.0212	-0.0564	0.04644	0.09343	0.02081
	9	0.01664	-0.0312	-0.0583	-0.0645	-0.0524	-0.0307	0.01616	0.08647	0.00536	0.03989	-0.0166
	10	-0.0277	-0.0082	-0.0145	0.17702	0.00792	0.08946	-0.0203	-0.0298	-0.003	0.11445	0.00632
	11	-0.1167	-0.0996	-0.0897	-0.0113	-0.182	-0.0683	-0.2507	-0.1218	-0.0922	0.11123	-0.0594
	12	0.045	-0.0501	-0.0153	0.00528	0.03043	-0.1132	0.02529	0.03861	0.08514	0.09586	0.00561
2017	1	-0.0296	0.06238	-0.0272	0.02129	-0.0504	0.10005	0.03529	-0.0066	-0.0466	0.00872	-0.0053
	2	-0.0117	0.01682	-0.0155	0.11401	0.04714	-0.0565	-0.0066	0.01836	0.0244	-0.0066	0.00754
	3	0.06359	0.02029	-0.0279	0.06576	-9E-05	-0.0225	0.023	-0.0221	0.04392	0.02532	0.02575
	4	0.04985	0.02013	0.06726	0.00835	0.02217	0.07402	-0.0583	0.03918	0.03036	0.00755	0.01636
	5	-0.0112	0.03032	-0.0152	0.04026	-0.0354	-0.029	0.00448	0.03717	-0.0292	-0.1617	-0.0152
	6	0.05868	0.04866	0.0048	-0.0184	0.04709	-0.0144	0.00436	-0.0239	0.02587	0.04253	0.00474
	7	0.03032	-0.0035	-0.0406	0.08556	0.07334	0.04928	-0.0259	-0.0051	-0.1191	0.1154	-0.0102
	8	-0.0061	0.03558	0.03782	0.00051	-0.0206	-0.0244	0.01872	-0.0061	-0.0187	0.01605	0.00221
	9	-0.0079	-0.0374	-0.0058	0.04881	-0.0324	0.05557	-0.0418	0.00017	-0.0026	-0.0058	-0.0158
	10	-0.1553	0.00688	0.00276	0.07448	-0.0456	0.04232	-0.0345	-0.0329	0.00678	-0.0058	0.00297
	11	0.02354	-0.0119	-0.0464	-0.0315	-0.0058	-0.1656	-0.0473	-0.1186	-0.002	-0.0767	-0.0369
	12	0.06176	0.12805	0.0461	0.04938	0.04894	-0.0058	0.02406	0.03435	0.03415	0.08416	0.04665
<b>Avg. Return</b>		<b>1.32%</b>	<b>1.10%</b>	<b>0.87%</b>	<b>0.59%</b>	<b>-0.23%</b>	<b>0.21%</b>	<b>0.07%</b>	<b>-0.05%</b>	<b>-0.32%</b>	<b>-0.32%</b>	<b>-0.25%</b>
<b>Std. Deviation</b>		<b>6.55%</b>	<b>5.68%</b>	<b>6.63%</b>	<b>6.76%</b>	<b>6.67%</b>	<b>8.24%</b>	<b>9.57%</b>	<b>7.04%</b>	<b>6.72%</b>	<b>11.22%</b>	<b>3.44%</b>
<b>Sharpe Ratio</b>		<b>0.20188</b>	<b>0.1942</b>	<b>0.13068</b>	<b>0.08701</b>	<b>0.03413</b>	<b>0.02537</b>	<b>0.00772</b>	<b>-0.0066</b>	<b>-0.0473</b>	<b>-0.0288</b>	<b>-0.0739</b>

**Lampiran 19**

**Tabel Variabel Y dan X Model Regresi  
Metode Konvensional**

Tahun	Bulan	ER_CAPM	ER_PortCAPM	IHSG_Rf	SMB	HML	RMW	CMA
2013	1	0.0380	0.0471	0.0265	0.03259	0.07079	-0.067	-0.0404
	2	0.0791	0.0418	0.0692	0.08369	-0.0054	-0.0183	0.03791
	3	0.0030	-0.0105	0.0250	-0.0097	-0.0405	0.02853	-0.0053
	4	0.0368	0.0885	0.0139	-0.0585	-0.1357	0.07282	0.03702
	5	0.0126	0.0131	0.0020	0.00463	-0.1233	0.03016	-0.0421
	6	-0.0278	0.0618	-0.0555	-0.0853	-0.0779	0.16003	0.14033
	7	-0.0759	0.0301	-0.0497	-0.1081	-0.1193	0.15543	0.12954
	8	-0.0377	-0.0509	-0.1002	0.04134	0.0804	-0.0937	-0.0262
	9	-0.0007	-0.0302	0.0224	-0.0117	0.09688	-0.0533	0.01407
	10	0.0692	0.0477	0.0380	0.03254	-0.0218	-0.0051	-0.122
	11	-0.0522	-0.0729	-0.0643	0.03261	0.06902	-0.0672	0.02223
	12	-0.0084	-0.0111	-0.0021	-0.0369	-0.0078	0.04634	0.05268
2014	1	0.0285	0.0620	0.0270	-0.0443	-0.0901	0.13419	0.03916
	2	0.0243	-0.0019	0.0383	-0.0042	0.03009	-0.0192	-0.049
	3	0.0094	0.0061	0.0253	0.05869	0.04423	-0.006	0.0167
	4	0.0149	0.0116	0.0087	0.01544	0.02164	-0.0524	-0.0081
	5	0.0033	0.0609	0.0048	-0.0487	0.02391	0.03598	0.01889
	6	-0.0063	-0.0022	-0.0094	-0.0132	-0.0843	0.0681	0.09406
	7	0.0376	0.0436	0.0359	-0.033	-0.0067	0.03052	-0.0167
	8	0.0189	-0.0079	0.0032	0.04487	0.03411	-0.0587	-0.0504
	9	-0.0020	0.0124	-0.0061	-0.0559	-0.0526	0.04275	-0.0145
	10	-0.0559	-0.0637	-0.0156	-0.0326	-0.0297	0.06465	-0.013
	11	0.0141	0.0238	0.0053	-0.0311	-0.0032	0.0419	-0.0048
	12	-0.0002	-0.0070	0.0084	-0.0962	-0.0805	0.04911	-0.0102
2015	1	0.0561	0.0443	0.0054	0.01576	-0.0297	0.04799	-0.0571
	2	0.0150	0.0415	0.0237	-0.0389	0.07725	-0.0011	0.02908
	3	0.0234	0.0399	0.0062	-0.043	-0.0206	-0.0256	0.02841
	4	-0.0729	-0.0157	-0.0878	0.00059	-0.0142	-0.0328	0.13667
	5	0.0238	0.0387	0.0190	-0.0313	-0.0121	0.04506	-0.0525
	6	-0.0472	-0.0337	-0.0666	-0.0317	0.02154	-0.0356	0.08448
	7	-0.0516	-0.0234	-0.0285	0.01275	-0.1535	0.18669	-0.1498
	8	-0.0413	-0.0037	-0.0692	-0.0667	-0.005	-0.0526	0.10715
	9	-0.0748	-0.0741	-0.0717	-0.001	0.0567	-0.044	0.04292
	10	0.0471	-0.0017	0.0471	0.02101	0.02433	0.01491	-0.0662
	11	-0.0325	-0.0005	-0.0082	-0.0049	-0.0561	0.1436	-0.0733
	12	0.0330	0.0260	0.0262	0.00509	0.00571	0.03117	-0.0088

2016	1	0.0408	0.0262	-0.0012	0.00281	0.04732	-0.0465	0.00216
	2	0.0456	0.0407	0.0274	0.053	-0.046	0.01764	0.03193
	3	0.0061	-0.0162	0.0099	0.03364	-0.02	0.03459	-0.091
	4	-0.0050	0.0073	-0.0070	0.00983	0.04409	-0.029	-0.0115
	5	-0.0099	0.0048	-0.0143	-0.0154	-0.0797	0.07537	-0.0726
	6	0.0784	0.0633	0.0394	0.00226	0.0317	-0.0232	-0.0214
	7	0.0670	0.0340	0.0336	0.06046	0.06009	-0.0525	0.04276
	8	0.0479	0.0381	0.0277	-0.061	0.02502	-0.0633	0.08751
	9	-0.0046	-0.0189	-0.0081	0.03914	0.04794	-0.0292	-0.0292
	10	0.0311	0.0285	0.0067	-0.0229	0.1114	-0.1147	0.15641
	11	-0.0895	-0.0835	-0.0557	-0.0408	0.13003	-0.1368	0.17158
	12	0.0173	-0.0013	0.0243	0.00367	0.03737	-0.0223	-0.0381
2017	1	0.0093	0.0231	-0.0045	0.01765	0.02889	-0.0198	0.07342
	2	0.0150	0.0308	0.0134	-0.0346	-0.0221	-0.0572	0.03073
	3	0.0196	0.0485	0.0292	-0.0359	0.01067	-0.0263	0.01284
	4	0.0287	0.0308	0.0169	-0.0123	-0.0368	0.05427	-0.0079
	5	-0.0143	0.0204	0.0053	-0.0441	-0.0261	0.02047	0.04649
	6	0.0202	0.0400	0.0119	-0.0042	-0.0293	0.03486	-0.0582
	7	0.0186	0.0309	-0.0020	0.05229	0.00249	-0.0697	0.01973
	8	0.0056	0.0153	0.0002	-0.0139	0.00151	0.01348	-0.005
	9	-0.0007	-0.0056	0.0027	-0.0092	0.01121	-0.0295	0.05799
	10	-0.0118	-0.0337	0.0141	-0.0161	-0.004	-0.0757	0.10056
	11	-0.0460	-0.0013	-0.0125	-0.0619	-0.0634	0.03519	-0.0782
	12	0.0528	0.0892	0.0621	-0.0247	-0.0205	0.02689	-0.0196

Lampiran 20

**Tabel Variabel Y dan X Model Regresi  
Metode Syariah**

Tahun	Bulan	ER_SCAPM	ER_PortSCAPM	ISSI_SBIS	SMB	HML	RMW	CMA
2013	1	0.0374	0.0474	0.0118	0.04148	0.11452	-0.067	-0.0404
	2	0.0785	0.0428	0.0610	0.06681	-0.0803	-0.0183	0.03791
	3	0.0024	-0.0101	0.0258	-0.0182	-0.0769	0.02853	-0.0053
	4	0.0362	0.0880	0.0205	-0.0603	-0.1451	0.07282	0.03702
	5	0.0118	0.0132	0.0117	0.00704	-0.1193	0.03016	-0.0421
	6	-0.0286	0.0632	-0.0392	-0.0845	-0.0986	0.16003	0.14033
	7	-0.0767	0.0300	-0.0692	-0.1023	-0.1088	0.15543	0.12954
	8	-0.0383	-0.0518	-0.0755	0.04927	0.10795	-0.0937	-0.0262
	9	-0.0023	-0.0329	0.0008	-0.0122	0.08702	-0.0533	0.01407
	10	0.0675	0.0465	0.0338	0.0308	0.00037	-0.0051	-0.122
	11	-0.0540	-0.0765	-0.0643	0.02772	0.05031	-0.0672	0.02223
	12	-0.0101	-0.0136	-0.0033	-0.0438	-0.0338	0.04634	0.05268
2014	1	0.0267	0.0608	0.0137	-0.0429	-0.0814	0.13419	0.03916
	2	0.0226	-0.0031	0.0322	-0.0029	0.03782	-0.0192	-0.049
	3	0.0077	0.0027	0.0209	0.06142	0.06063	-0.006	0.0167
	4	0.0132	0.0096	0.0014	0.01867	0.04102	-0.0524	-0.0081
	5	0.0016	0.0617	0.0061	-0.0493	0.02024	0.03598	0.01889
	6	-0.0080	-0.0055	-0.0162	-0.0086	-0.0569	0.0681	0.09406
	7	0.0360	0.0431	0.0386	-0.0331	-0.007	0.03052	-0.0167
	8	0.0174	-0.0088	0.0020	0.04115	0.01182	-0.0587	-0.0504
	9	-0.0034	0.0136	-0.0209	-0.0574	-0.0618	0.04275	-0.0145
	10	-0.0573	-0.0647	-0.0279	-0.0304	-0.0168	0.06465	-0.013
	11	0.0129	0.0229	0.0087	-0.0314	-0.005	0.0419	-0.0048
	12	-0.0014	-0.0073	0.0075	-0.0984	-0.0936	0.04911	-0.0102
2015	1	0.0548	0.0426	0.0091	0.01576	-0.0297	0.04799	-0.0571
	2	0.0138	0.0388	0.0089	-0.0389	0.07725	-0.0011	0.02908
	3	0.0222	0.0380	-0.0086	-0.043	-0.0206	-0.0256	0.02841
	4	-0.0741	-0.0178	-0.0812	0.00059	-0.0142	-0.0328	0.13667
	5	0.0227	0.0390	0.0252	-0.0313	-0.0121	0.04506	-0.0525
	6	-0.0483	-0.0346	-0.0637	-0.0317	0.02154	-0.0356	0.08448
	7	-0.0527	-0.0228	-0.0293	0.01275	-0.1535	0.18669	-0.1498
	8	-0.0425	-0.0061	-0.0897	-0.0667	-0.005	-0.0526	0.10715
	9	-0.0764	-0.0756	-0.0651	-0.001	0.0567	-0.044	0.04292
	10	0.0455	-0.0038	0.0398	0.02101	0.02433	0.01491	-0.0662
	11	-0.0341	0.0004	-0.0161	-0.0049	-0.0561	0.1436	-0.0733
	12	0.0314	0.0245	0.0291	0.00509	0.00571	0.03117	-0.0088

2016	1	0.0395	0.0254	-0.0086	0.00281	0.04732	-0.0465	0.00216
	2	0.0442	0.0406	0.0350	0.053	-0.046	0.01764	0.03193
	3	0.0044	-0.0174	0.0237	0.03364	-0.02	0.03459	-0.091
	4	-0.0067	0.0068	0.0025	0.00983	0.04409	-0.029	-0.0115
	5	-0.0116	0.0042	-0.0144	-0.0154	-0.0797	0.07537	-0.0726
	6	0.0767	0.0619	0.0524	0.00226	0.0317	-0.0232	-0.0214
	7	0.0653	0.0322	0.0388	0.06046	0.06009	-0.0525	0.04276
	8	0.0451	0.0330	0.0208	-0.061	0.02502	-0.0633	0.08751
	9	-0.0073	-0.0205	-0.0166	0.03914	0.04794	-0.0292	-0.0292
	10	0.0285	0.0231	0.0063	-0.0229	0.1114	-0.1147	0.15641
	11	-0.0921	-0.0875	-0.0594	-0.0408	0.13003	-0.1368	0.17158
	12	0.0147	-0.0034	0.0056	0.00367	0.03737	-0.0223	-0.0381
2017	1	0.0067	0.0199	-0.0053	0.02095	0.02889	-0.0198	0.07342
	2	0.0124	0.0265	0.0075	-0.0286	-0.0221	-0.0572	0.03073
	3	0.0169	0.0457	0.0257	-0.0352	0.01067	-0.0263	0.01284
	4	0.0261	0.0287	0.0164	-0.0141	-0.0368	0.05427	-0.0079
	5	-0.0170	0.0170	-0.0152	-0.0408	-0.0261	0.02047	0.04649
	6	0.0175	0.0384	0.0047	-0.0075	-0.0293	0.03486	-0.0582
	7	0.0160	0.0275	-0.0102	0.05951	0.00249	-0.0697	0.01973
	8	0.0033	0.0129	0.0022	-0.0132	0.00151	0.01348	-0.005
	9	-0.0029	-0.0086	-0.0158	-0.0062	0.01121	-0.0295	0.05799
	10	-0.0141	-0.0389	0.0030	-0.0078	-0.004	-0.0757	0.10056
	11	-0.0482	-0.0029	-0.0369	-0.0642	-0.0634	0.03519	-0.0782
	12	0.0505	0.0872	0.0466	-0.0246	-0.0205	0.02689	-0.0196

## Lampiran 21

### Output Deskripsi Statistik *Excess Return* per Emiten

#### Metode Konvensional

	TLKM	UNVR	ICBP	UNTR	KLBF	AKRA	BSDE	INDF	ASII	ADRO
Mean	0.014913	0.012710	0.010355	0.007571	0.003963	0.003778	0.002426	0.001219	-0.001495	-0.001549
Median	0.017695	0.003460	0.008502	0.005374	0.005441	0.001245	0.010134	-0.003092	0.003418	-0.003542
Maximum	0.187906	0.187441	0.171434	0.179616	0.163668	0.198475	0.236370	0.183025	0.126845	0.278274
Minimum	-0.153073	-0.126536	-0.119578	-0.132968	-0.191595	-0.204029	-0.248055	-0.180409	-0.230852	-0.284380
Std. Dev.	0.065437	0.056642	0.066243	0.067870	0.066628	0.082404	0.095670	0.070349	0.067336	0.112409
Skewness	-0.026966	0.635885	0.182192	0.097522	-0.476184	-0.149234	-0.211619	0.161898	-0.706438	-0.167369
Kurtosis	3.390565	4.381503	2.753645	3.128748	3.955250	3.219198	3.522599	3.804465	3.871674	3.084372
Jarque-Bera	0.388624	8.814876	0.483666	0.136545	4.548763	0.342828	1.130600	1.880021	6.890078	0.297919
Probability	0.823401	0.012186	0.785187	0.934006	0.102861	0.842473	0.568190	0.390624	0.031904	0.861604
Sum	0.894803	0.762612	0.621293	0.454266	0.237782	0.226701	0.145561	0.073166	-0.089717	-0.092912
Sum Sq. Dev.	0.252640	0.189292	0.258899	0.271774	0.261917	0.400634	0.540016	0.291987	0.267512	0.745509
Observations	60	60	60	60	60	60	60	60	60	60

### Output Deskripsi Statistik *Excess Return* per Emiten

#### Metode Syariah

	TLKM	UNVR	ICBP	UNTR	KLBF	AKRA	BSDE	INDF	ASII	ADRO
Mean	0.013226	0.011023	0.008668	0.005884	0.002276	0.002091	0.000739	-0.000468	-0.003182	-0.003236
Median	0.016061	0.002179	0.006307	0.003762	0.004198	-0.000421	0.008350	-0.005327	0.001756	-0.005789
Maximum	0.186212	0.185997	0.170793	0.177019	0.163060	0.196773	0.235784	0.182417	0.125206	0.277596
Minimum	-0.155332	-0.128308	-0.121350	-0.134107	-0.193234	-0.204746	-0.250652	-0.181659	-0.231991	-0.285166
Std. Dev.	0.065517	0.056761	0.066330	0.067623	0.066683	0.082438	0.095737	0.070376	0.067250	0.112199
Skewness	-0.022333	0.639540	0.193293	0.095046	-0.472699	-0.144109	-0.199479	0.171308	-0.702391	-0.160516
Kurtosis	3.399378	4.384434	2.753074	3.124743	3.978281	3.210615	3.532440	3.813435	3.868852	3.094998
Jarque-Bera	0.403746	8.881766	0.526054	0.129239	4.627025	0.318571	1.106651	1.947657	6.820798	0.280216
Probability	0.817199	0.011786	0.768721	0.937424	0.098913	0.852753	0.575034	0.377635	0.033028	0.869265
Sum	0.793578	0.661387	0.520068	0.353041	0.136557	0.125476	0.044336	-0.028059	-0.190942	-0.194137
Sum Sq. Dev.	0.253256	0.190090	0.259584	0.269800	0.262350	0.400961	0.540773	0.292218	0.266831	0.742729
Observations	60	60	60	60	60	60	60	60	60	60

## Lampiran 22

### Output Uji Model Regresi Kombinasi *Size* FF5FM Metode Konvensional

#### A. Portofolio Size / Book-to-market

##### 1. SL (Small / Low)

Dependent Variable: SL  
 Method: Least Squares  
 Date: 07/31/18 Time: 23:27  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000115	0.005342	-0.021512	0.9829
IHSG_RF	0.986986	0.157309	6.274187	0.0000
SMB	0.304079	0.161940	1.877731	0.0658
HML	-0.727310	0.151612	-4.797173	0.0000
RMW	-0.451915	0.141666	-3.189996	0.0024
CMA	-0.096045	0.097386	-0.986229	0.3284
R-squared	0.614130	Mean dependent var		-0.002183
Adjusted R-squared	0.578401	S.D. dependent var		0.061225
S.E. of regression	0.039754	Akaike info criterion		-3.517593
Sum squared resid	0.085339	Schwarz criterion		-3.308158
Log likelihood	111.5278	Hannan-Quinn criter.		-3.435672
F-statistic	17.18869	Durbin-Watson stat		2.558679
Prob(F-statistic)	0.000000			

##### 2. SM (Small / Medium)

Dependent Variable: SM  
 Method: Least Squares  
 Date: 07/31/18 Time: 23:35  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002616	0.006142	0.425989	0.6718
IHSG_RF	0.518443	0.180853	2.866662	0.0059
SMB	0.810234	0.186176	4.351978	0.0001
HML	0.131801	0.174303	0.756158	0.4528
RMW	0.389049	0.162869	2.388732	0.0204
CMA	0.286448	0.111962	2.558446	0.0134
R-squared	0.368534	Mean dependent var		-0.000607
Adjusted R-squared	0.310065	S.D. dependent var		0.055023
S.E. of regression	0.045703	Akaike info criterion		-3.238653
Sum squared resid	0.112795	Schwarz criterion		-3.029219
Log likelihood	103.1596	Hannan-Quinn criter.		-3.156732
F-statistic	6.303055	Durbin-Watson stat		2.032495
Prob(F-statistic)	0.000113			



### 3. SH (Small / High)

Dependent Variable: SH  
 Method: Least Squares  
 Date: 08/01/18 Time: 00:49  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.009065	0.004881	1.857256	0.0687
IHSG_RF	0.928194	0.143719	6.458385	0.0000
SMB	0.459289	0.147950	3.104356	0.0030
HML	0.251328	0.138515	1.814450	0.0752
RMW	-0.257603	0.129428	-1.990323	0.0516
CMA	-0.004574	0.088973	-0.051413	0.9592
R-squared	0.709431	Mean dependent var		0.002896
Adjusted R-squared	0.682527	S.D. dependent var		0.064459
S.E. of regression	0.036319	Akaike info criterion		-3.698294
Sum squared resid	0.071231	Schwarz criterion		-3.488860
Log likelihood	116.9488	Hannan-Quinn criter.		-3.616373
F-statistic	26.36848	Durbin-Watson stat		1.588315
Prob(F-statistic)	0.000000			

### 4. BL (Big / Low)

Dependent Variable: BL  
 Method: Least Squares  
 Date: 08/01/18 Time: 00:58  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008011	0.005085	1.575297	0.1210
IHSG_RF	0.735348	0.149736	4.910967	0.0000
SMB	-0.042886	0.154144	-0.278218	0.7819
HML	-0.655541	0.144313	-4.542477	0.0000
RMW	-0.233953	0.134846	-1.734963	0.0885
CMA	0.089229	0.092698	0.962579	0.3400
R-squared	0.506776	Mean dependent var		0.011920
Adjusted R-squared	0.461107	S.D. dependent var		0.051546
S.E. of regression	0.037840	Akaike info criterion		-3.616270
Sum squared resid	0.077320	Schwarz criterion		-3.406836
Log likelihood	114.4881	Hannan-Quinn criter.		-3.534349
F-statistic	11.09673	Durbin-Watson stat		1.896894
Prob(F-statistic)	0.000000			

## 5. BM (Big / Medium)

Dependent Variable: BM  
 Method: Least Squares  
 Date: 08/01/18 Time: 01:01  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007123	0.003975	1.791871	0.0788
IHSG_RF	1.010873	0.117048	8.636380	0.0000
SMB	-0.257339	0.120494	-2.135705	0.0373
HML	0.176946	0.112809	1.568541	0.1226
RMW	0.150222	0.105409	1.425135	0.1599
CMA	-0.155140	0.072462	-2.140990	0.0368
R-squared	0.664971	Mean dependent var		0.009215
Adjusted R-squared	0.633950	S.D. dependent var		0.048890
S.E. of regression	0.029579	Akaike info criterion		-4.108846
Sum squared resid	0.047246	Schwarz criterion		-3.899412
Log likelihood	129.2654	Hannan-Quinn criter.		-4.026925
F-statistic	21.43599	Durbin-Watson stat		2.241584
Prob(F-statistic)	0.000000			

## 6. BH (Big / High)

Dependent Variable: BH  
 Method: Least Squares  
 Date: 08/01/18 Time: 01:09  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.003045	0.005334	-0.570996	0.5704
IHSG_RF	0.608601	0.157051	3.875178	0.0003
SMB	-0.557945	0.161674	-3.451050	0.0011
HML	0.209323	0.151364	1.382917	0.1724
RMW	-0.230858	0.141434	-1.632269	0.1084
CMA	0.161773	0.097227	1.663878	0.1019
R-squared	0.468317	Mean dependent var		0.002793
Adjusted R-squared	0.419088	S.D. dependent var		0.052072
S.E. of regression	0.039688	Akaike info criterion		-3.520877
Sum squared resid	0.085059	Schwarz criterion		-3.311442
Log likelihood	111.6263	Hannan-Quinn criter.		-3.438955
F-statistic	9.512870	Durbin-Watson stat		2.432396
Prob(F-statistic)	0.000002			

## 7. Small

Dependent Variable: SMALL  
 Method: Least Squares  
 Date: 08/01/18 Time: 01:15  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005038	0.002909	1.731710	0.0890
IHSG_RF	0.922942	0.085667	10.77354	0.0000
SMB	0.645868	0.088189	7.323662	0.0000
HML	-0.182668	0.082565	-2.212407	0.0312
RMW	-0.195804	0.077149	-2.538010	0.0141
CMA	0.045746	0.053035	0.862558	0.3922
R-squared	0.825925	Mean dependent var		-0.000215
Adjusted R-squared	0.809807	S.D. dependent var		0.049641
S.E. of regression	0.021649	Akaike info criterion		-4.733071
Sum squared resid	0.025309	Schwarz criterion		-4.523636
Log likelihood	147.9921	Hannan-Quinn criter.		-4.651149
F-statistic	51.24212	Durbin-Watson stat		2.454447
Prob(F-statistic)	0.000000			

## 8. Big

Dependent Variable: BIG  
 Method: Least Squares  
 Date: 08/01/18 Time: 01:21  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005769	0.003180	1.814248	0.0752
IHSG_RF	0.925541	0.093636	9.884469	0.0000
SMB	-0.338262	0.096392	-3.509232	0.0009
HML	-0.169814	0.090245	-1.881702	0.0653
RMW	-0.135654	0.084325	-1.608713	0.1135
CMA	0.043787	0.057968	0.755375	0.4533
R-squared	0.675997	Mean dependent var		0.010722
Adjusted R-squared	0.645997	S.D. dependent var		0.039771
S.E. of regression	0.023663	Akaike info criterion		-4.555190
Sum squared resid	0.030236	Schwarz criterion		-4.345755
Log likelihood	142.6557	Hannan-Quinn criter.		-4.473268
F-statistic	22.53301	Durbin-Watson stat		2.018036
Prob(F-statistic)	0.000000			

## 9. Low

Dependent Variable: LOW  
 Method: Least Squares  
 Date: 08/01/18 Time: 01:25  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005070	0.003679	1.378137	0.1738
IHSG_RF	0.904653	0.108318	8.351791	0.0000
SMB	0.064005	0.111507	0.573997	0.5684
HML	-0.710483	0.104396	-6.805661	0.0000
RMW	-0.339869	0.097547	-3.484146	0.0010
CMA	-0.004932	0.067058	-0.073546	0.9416
R-squared	0.719282	Mean dependent var		0.006799
Adjusted R-squared	0.693289	S.D. dependent var		0.049427
S.E. of regression	0.027373	Akaike info criterion		-4.263866
Sum squared resid	0.040462	Schwarz criterion		-4.054432
Log likelihood	133.9160	Hannan-Quinn criter.		-4.181945
F-statistic	27.67271	Durbin-Watson stat		2.088567
Prob(F-statistic)	0.000000			

## 10. Medium

Dependent Variable: MEDIUM  
 Method: Least Squares  
 Date: 08/01/18 Time: 01:31  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.004868	0.003937	1.236692	0.2216
IHSG_RF	0.910805	0.115913	7.857658	0.0000
SMB	0.285512	0.119325	2.392729	0.0202
HML	0.121515	0.111715	1.087722	0.2815
RMW	0.276270	0.104387	2.646601	0.0106
CMA	0.097706	0.071759	1.361587	0.1790
R-squared	0.611928	Mean dependent var		0.004887
Adjusted R-squared	0.575995	S.D. dependent var		0.044985
S.E. of regression	0.029292	Akaike info criterion		-4.128337
Sum squared resid	0.046334	Schwarz criterion		-3.918903
Log likelihood	129.8501	Hannan-Quinn criter.		-4.046416
F-statistic	17.02985	Durbin-Watson stat		2.124046
Prob(F-statistic)	0.000000			

## 11. High

Dependent Variable: HIGH  
 Method: Least Squares  
 Date: 08/01/18 Time: 01:33  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005070	0.003679	1.378137	0.1738
IHSG_RF	0.904653	0.108318	8.351791	0.0000
SMB	0.064005	0.111507	0.573997	0.5684
HML	0.289517	0.104396	2.773266	0.0076
RMW	-0.339869	0.097547	-3.484146	0.0010
CMA	-0.004932	0.067058	-0.073546	0.9416
R-squared	0.784488	Mean dependent var		0.002270
Adjusted R-squared	0.764533	S.D. dependent var		0.056411
S.E. of regression	0.027373	Akaike info criterion		-4.263866
Sum squared resid	0.040462	Schwarz criterion		-4.054432
Log likelihood	133.9160	Hannan-Quinn criter.		-4.181945
F-statistic	39.31327	Durbin-Watson stat		2.088567
Prob(F-statistic)	0.000000			

## B. Portfolio Size / Profitability

### 1. SW (Small / Weak)

Dependent Variable: SW  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:06  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008369	0.005014	1.669116	0.1009
IHSG_RF	0.881292	0.147646	5.968946	0.0000
SMB	0.483283	0.151992	3.179659	0.0024
HML	0.176338	0.142299	1.239208	0.2206
RMW	-0.374163	0.132964	-2.814011	0.0068
CMA	-0.039457	0.091404	-0.431672	0.6677
R-squared	0.715025	Mean dependent var		0.001273
Adjusted R-squared	0.688639	S.D. dependent var		0.066867
S.E. of regression	0.037312	Akaike info criterion		-3.644381
Sum squared resid	0.075177	Schwarz criterion		-3.434946
Log likelihood	115.3314	Hannan-Quinn criter.		-3.562460
F-statistic	27.09812	Durbin-Watson stat		1.648095
Prob(F-statistic)	0.000000			

## 2. SN (Small / Neutral)

Dependent Variable: SN  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:07  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.003072	0.005080	0.604753	0.5479
IHSG_RF	0.907265	0.149594	6.064866	0.0000
SMB	0.607952	0.153997	3.947814	0.0002
HML	-0.401683	0.144176	-2.786058	0.0073
RMW	-0.084326	0.134718	-0.625946	0.5340
CMA	0.190547	0.092610	2.057517	0.0445
R-squared	0.547987	Mean dependent var		0.001264
Adjusted R-squared	0.506134	S.D. dependent var		0.053794
S.E. of regression	0.037804	Akaike info criterion		-3.618173
Sum squared resid	0.077173	Schwarz criterion		-3.408738
Log likelihood	114.5452	Hannan-Quinn criter.		-3.536252
F-statistic	13.09314	Durbin-Watson stat		2.117424
Prob(F-statistic)	0.000000			

## 3. SR (Small / Robust)

Dependent Variable: SR  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:08  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.001676	0.005684	0.294824	0.7693
IHSG_RF	0.725665	0.167381	4.335406	0.0001
SMB	0.114887	0.172308	0.666756	0.5078
HML	0.231962	0.161320	1.437904	0.1562
RMW	0.385519	0.150737	2.557566	0.0134
CMA	-0.186092	0.103622	-1.795879	0.0781
R-squared	0.483511	Mean dependent var		0.000348
Adjusted R-squared	0.435688	S.D. dependent var		0.056308
S.E. of regression	0.042299	Akaike info criterion		-3.393472
Sum squared resid	0.096617	Schwarz criterion		-3.184038
Log likelihood	107.8042	Hannan-Quinn criter.		-3.311551
F-statistic	10.11043	Durbin-Watson stat		2.112453
Prob(F-statistic)	0.000001			

#### 4. BW (Big / Weak)

Dependent Variable: BW  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:10  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.004312	0.005328	0.809351	0.4219
IHSG_RF	0.778439	0.156893	4.961602	0.0000
SMB	-0.566483	0.161511	-3.507400	0.0009
HML	-0.021950	0.151211	-0.145161	0.8851
RMW	-0.475823	0.141291	-3.367675	0.0014
CMA	0.233712	0.097129	2.406208	0.0196
R-squared	0.562751	Mean dependent var		0.010933
Adjusted R-squared	0.522265	S.D. dependent var		0.057363
S.E. of regression	0.039648	Akaike info criterion		-3.522894
Sum squared resid	0.084888	Schwarz criterion		-3.313460
Log likelihood	111.6868	Hannan-Quinn criter.		-3.440973
F-statistic	13.89990	Durbin-Watson stat		2.372182
Prob(F-statistic)	0.000000			

#### 5. BN (Big / Neutral)

Dependent Variable: BN  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:11  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.001317	0.004590	0.286869	0.7753
IHSG_RF	1.082022	0.135156	8.005742	0.0000
SMB	-0.471292	0.139134	-3.387324	0.0013
HML	-0.161615	0.130261	-1.240698	0.2201
RMW	-0.196782	0.121716	-1.616738	0.1118
CMA	-0.209395	0.083672	-2.502570	0.0154
R-squared	0.632495	Mean dependent var		0.004805
Adjusted R-squared	0.598467	S.D. dependent var		0.053901
S.E. of regression	0.034155	Akaike info criterion		-3.821163
Sum squared resid	0.062995	Schwarz criterion		-3.611728
Log likelihood	120.6349	Hannan-Quinn criter.		-3.739242
F-statistic	18.58736	Durbin-Watson stat		1.743618
Prob(F-statistic)	0.000000			

## 6. BR (Big / Robust)

Dependent Variable: BR  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:12  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008662	0.003484	2.486489	0.0160
IHSG_RF	0.678747	0.102581	6.616682	0.0000
SMB	0.040278	0.105601	0.381420	0.7044
HML	-0.048455	0.098866	-0.490104	0.6260
RMW	0.261713	0.092380	2.832990	0.0065
CMA	0.055627	0.063506	0.875934	0.3849
R-squared	0.596958	Mean dependent var		0.011167
Adjusted R-squared	0.559640	S.D. dependent var		0.039065
S.E. of regression	0.025923	Akaike info criterion		-4.372709
Sum squared resid	0.036289	Schwarz criterion		-4.163274
Log likelihood	137.1813	Hannan-Quinn criter.		-4.290787
F-statistic	15.99625	Durbin-Watson stat		2.184998
Prob(F-statistic)	0.000000			

## 7. Small

Dependent Variable: SMALL  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:13  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005773	0.003029	1.905817	0.0620
IHSG_RF	0.973232	0.089194	10.91144	0.0000
SMB	0.529696	0.091819	5.768903	0.0000
HML	-0.042668	0.085964	-0.496354	0.6217
RMW	-0.093402	0.080324	-1.162808	0.2500
CMA	-0.018924	0.055218	-0.342723	0.7331
R-squared	0.813849	Mean dependent var		0.000983
Adjusted R-squared	0.796613	S.D. dependent var		0.049980
S.E. of regression	0.022540	Akaike info criterion		-4.652396
Sum squared resid	0.027435	Schwarz criterion		-4.442962
Log likelihood	145.5719	Hannan-Quinn criter.		-4.570475
F-statistic	47.21748	Durbin-Watson stat		2.220953
Prob(F-statistic)	0.000000			



## 8. Big

Dependent Variable: BIG  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:14  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005506	0.002630	2.093390	0.0410
IHSG_RF	0.964815	0.077450	12.45723	0.0000
SMB	-0.373632	0.079730	-4.686211	0.0000
HML	-0.129372	0.074645	-1.733149	0.0888
RMW	-0.155259	0.069749	-2.225982	0.0302
CMA	0.036585	0.047948	0.763017	0.4488
R-squared	0.764512	Mean dependent var		0.010500
Adjusted R-squared	0.742708	S.D. dependent var		0.038586
S.E. of regression	0.019572	Akaike info criterion		-4.934746
Sum squared resid	0.020686	Schwarz criterion		-4.725311
Log likelihood	154.0424	Hannan-Quinn criter.		-4.852824
F-statistic	35.06230	Durbin-Watson stat		2.196284
Prob(F-statistic)	0.000000			

## 9. Weak

Dependent Variable: WEAK  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:15  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007752	0.003256	2.380582	0.0208
IHSG_RF	0.918677	0.095881	9.581475	0.0000
SMB	0.035052	0.098703	0.355131	0.7239
HML	0.087252	0.092408	0.944203	0.3493
RMW	-0.592451	0.086346	-6.861354	0.0000
CMA	-0.017351	0.059357	-0.292321	0.7712
R-squared	0.844254	Mean dependent var		0.004724
Adjusted R-squared	0.829834	S.D. dependent var		0.058738
S.E. of regression	0.024230	Akaike info criterion		-4.507812
Sum squared resid	0.031703	Schwarz criterion		-4.298377
Log likelihood	141.2344	Hannan-Quinn criter.		-4.425891
F-statistic	58.54386	Durbin-Watson stat		2.201576
Prob(F-statistic)	0.000000			

## 10. Neutral

Dependent Variable: NEUTRAL  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:18  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002195	0.003672	0.597650	0.5526
IHSG_RF	0.994643	0.108123	9.199191	0.0000
SMB	0.068330	0.111306	0.613892	0.5419
HML	-0.281649	0.104207	-2.702775	0.0092
RMW	-0.140554	0.097371	-1.443490	0.1547
CMA	-0.009424	0.066936	-0.140789	0.8886
R-squared	0.670102	Mean dependent var		0.003035
Adjusted R-squared	0.639556	S.D. dependent var		0.045512
S.E. of regression	0.027324	Akaike info criterion		-4.267480
Sum squared resid	0.040316	Schwarz criterion		-4.058046
Log likelihood	134.0244	Hannan-Quinn criter.		-4.185559
F-statistic	21.93737	Durbin-Watson stat		1.970912
Prob(F-statistic)	0.000000			

## 11. Robust

Dependent Variable: ROBUST  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:18  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007752	0.003256	2.380582	0.0208
IHSG_RF	0.918677	0.095881	9.581475	0.0000
SMB	0.035052	0.098703	0.355131	0.7239
HML	0.087252	0.092408	0.944203	0.3493
RMW	0.407549	0.086346	4.719942	0.0000
CMA	-0.017351	0.059357	-0.292321	0.7712
R-squared	0.760312	Mean dependent var		0.009965
Adjusted R-squared	0.738119	S.D. dependent var		0.047348
S.E. of regression	0.024230	Akaike info criterion		-4.507812
Sum squared resid	0.031703	Schwarz criterion		-4.298377
Log likelihood	141.2344	Hannan-Quinn criter.		-4.425891
F-statistic	34.25863	Durbin-Watson stat		2.201576
Prob(F-statistic)	0.000000			

## C. Portfolio Size / Investment

### 1. SC (Small / Conservative)

Dependent Variable: SC  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:41  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006737	0.004349	1.549206	0.1272
IHSG_RF	0.836660	0.128051	6.533805	0.0000
SMB	0.927362	0.131820	7.035044	0.0000
HML	0.198187	0.123414	1.605876	0.1141
RMW	0.099815	0.115318	0.865568	0.3906
CMA	0.638124	0.079274	8.049650	0.0000
R-squared	0.742480	Mean dependent var		0.004508
Adjusted R-squared	0.718635	S.D. dependent var		0.061006
S.E. of regression	0.032360	Akaike info criterion		-3.929160
Sum squared resid	0.056546	Schwarz criterion		-3.719725
Log likelihood	123.8748	Hannan-Quinn criter.		-3.847238
F-statistic	31.13844	Durbin-Watson stat		2.075398
Prob(F-statistic)	0.000000			

### 2. SI (Small / Intermediate)

Dependent Variable: SI  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:42  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008163	0.007362	1.108843	0.2724
IHSG_RF	0.898740	0.216770	4.146055	0.0001
SMB	1.138555	0.223151	5.102179	0.0000
HML	-0.663838	0.208920	-3.177478	0.0025
RMW	-0.298225	0.195214	-1.527680	0.1324
CMA	0.185819	0.134197	1.384670	0.1718
R-squared	0.531480	Mean dependent var		0.000989
Adjusted R-squared	0.488099	S.D. dependent var		0.076565
S.E. of regression	0.054780	Akaike info criterion		-2.876344
Sum squared resid	0.162046	Schwarz criterion		-2.666910
Log likelihood	92.29032	Hannan-Quinn criter.		-2.794423
F-statistic	12.25133	Durbin-Watson stat		1.960816
Prob(F-statistic)	0.000000			

### 3. SA (Small / Aggressive)

Dependent Variable: SA  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:49  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006291	0.004768	1.319536	0.1926
IHSG_RF	1.038210	0.140385	7.395449	0.0000
SMB	0.217124	0.144517	1.502409	0.1388
HML	0.128005	0.135301	0.946077	0.3483
RMW	0.005068	0.126425	0.040091	0.9682
CMA	-0.534059	0.086909	-6.145027	0.0000
R-squared	0.774126	Mean dependent var		-0.000862
Adjusted R-squared	0.753211	S.D. dependent var		0.071414
S.E. of regression	0.035477	Akaike info criterion		-3.745240
Sum squared resid	0.067964	Schwarz criterion		-3.535805
Log likelihood	118.3572	Hannan-Quinn criter.		-3.663318
F-statistic	37.01419	Durbin-Watson stat		2.534193
Prob(F-statistic)	0.000000			

### 4. BC (Big / Conservative)

Dependent Variable: BC  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:49  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006578	0.005980	1.099960	0.2762
IHSG_RF	1.052160	0.176095	5.974956	0.0000
SMB	-0.713960	0.181279	-3.938472	0.0002
HML	0.122110	0.169718	0.719485	0.4749
RMW	-0.249199	0.158584	-1.571400	0.1219
CMA	0.323083	0.109016	2.963612	0.0045
R-squared	0.564659	Mean dependent var		0.016455
Adjusted R-squared	0.524350	S.D. dependent var		0.064525
S.E. of regression	0.044501	Akaike info criterion		-3.291969
Sum squared resid	0.106938	Schwarz criterion		-3.082535
Log likelihood	104.7591	Hannan-Quinn criter.		-3.210048
F-statistic	14.00814	Durbin-Watson stat		2.642652
Prob(F-statistic)	0.000000			

## 5. BI (Big / Intermediate)

Dependent Variable: BI  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:50  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007854	0.003476	2.259358	0.0279
IHSG_RF	0.848064	0.102355	8.285484	0.0000
SMB	-0.107362	0.105368	-1.018921	0.3128
HML	-0.376864	0.098649	-3.820266	0.0003
RMW	-0.134587	0.092177	-1.460090	0.1501
CMA	-0.001916	0.063366	-0.030241	0.9760
R-squared	0.654668	Mean dependent var		0.010853
Adjusted R-squared	0.622693	S.D. dependent var		0.042110
S.E. of regression	0.025866	Akaike info criterion		-4.377115
Sum squared resid	0.036129	Schwarz criterion		-4.167681
Log likelihood	137.3135	Hannan-Quinn criter.		-4.295194
F-statistic	20.47425	Durbin-Watson stat		1.909802
Prob(F-statistic)	0.000000			

## 6. BA (Big / Aggressive)

Dependent Variable: BA  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:51  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.003027	0.004710	0.642624	0.5232
IHSG_RF	0.548108	0.138693	3.951946	0.0002
SMB	-0.117848	0.142776	-0.825406	0.4128
HML	0.228753	0.133670	1.711317	0.0928
RMW	0.175650	0.124901	1.406306	0.1654
CMA	-0.247020	0.085862	-2.876950	0.0057
R-squared	0.439838	Mean dependent var		0.002144
Adjusted R-squared	0.387971	S.D. dependent var		0.044801
S.E. of regression	0.035049	Akaike info criterion		-3.769490
Sum squared resid	0.066336	Schwarz criterion		-3.560056
Log likelihood	119.0847	Hannan-Quinn criter.		-3.687569
F-statistic	8.480135	Durbin-Watson stat		2.328872
Prob(F-statistic)	0.000006			

## 7. Small

Dependent Variable: SMALL  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:52  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007064	0.002961	2.385831	0.0206
IHSG_RF	0.924537	0.087179	10.60502	0.0000
SMB	0.761014	0.089745	8.479699	0.0000
HML	-0.112549	0.084022	-1.339512	0.1860
RMW	-0.064447	0.078510	-0.820876	0.4153
CMA	0.096628	0.053971	1.790378	0.0790
R-squared	0.826015	Mean dependent var		0.001545
Adjusted R-squared	0.809905	S.D. dependent var		0.050530
S.E. of regression	0.022031	Akaike info criterion		-4.698086
Sum squared resid	0.026210	Schwarz criterion		-4.488652
Log likelihood	146.9426	Hannan-Quinn criter.		-4.616165
F-statistic	51.27428	Durbin-Watson stat		2.068476
Prob(F-statistic)	0.000000			

## 8. Big

Dependent Variable: BIG  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:53  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006599	0.002904	2.272697	0.0270
IHSG_RF	0.930355	0.085502	10.88106	0.0000
SMB	-0.351528	0.088019	-3.993774	0.0002
HML	-0.038699	0.082406	-0.469612	0.6405
RMW	-0.062740	0.077000	-0.814801	0.4188
CMA	0.043077	0.052932	0.813805	0.4193
R-squared	0.708696	Mean dependent var		0.011473
Adjusted R-squared	0.681723	S.D. dependent var		0.038300
S.E. of regression	0.021607	Akaike info criterion		-4.736933
Sum squared resid	0.025211	Schwarz criterion		-4.527499
Log likelihood	148.1080	Hannan-Quinn criter.		-4.655012
F-statistic	26.27465	Durbin-Watson stat		2.458433
Prob(F-statistic)	0.000000			

## 9. Conservative

Dependent Variable: CONSERVATIVE  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:53  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006658	0.003416	1.948695	0.0565
IHSG_RF	0.944410	0.100599	9.387837	0.0000
SMB	0.106701	0.103561	1.030321	0.3075
HML	0.160148	0.096956	1.651759	0.1044
RMW	-0.074692	0.090596	-0.824453	0.4133
CMA	0.480603	0.062279	7.716965	0.0000
R-squared	0.753349	Mean dependent var		0.010482
Adjusted R-squared	0.730511	S.D. dependent var		0.048972
S.E. of regression	0.025422	Akaike info criterion		-4.411726
Sum squared resid	0.034900	Schwarz criterion		-4.202291
Log likelihood	138.3518	Hannan-Quinn criter.		-4.329804
F-statistic	32.98650	Durbin-Watson stat		2.597108
Prob(F-statistic)	0.000000			

## 10. Intermediate

Dependent Variable: INTERMEDIATE  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:54  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008008	0.004323	1.852569	0.0694
IHSG_RF	0.873402	0.127288	6.861598	0.0000
SMB	0.515596	0.131035	3.934791	0.0002
HML	-0.520351	0.122679	-4.241574	0.0001
RMW	-0.216406	0.114631	-1.887851	0.0644
CMA	0.091951	0.078801	1.166876	0.2484
R-squared	0.630235	Mean dependent var		0.005921
Adjusted R-squared	0.595997	S.D. dependent var		0.050608
S.E. of regression	0.032167	Akaike info criterion		-3.941106
Sum squared resid	0.055875	Schwarz criterion		-3.731671
Log likelihood	124.2332	Hannan-Quinn criter.		-3.859184
F-statistic	18.40774	Durbin-Watson stat		1.835523
Prob(F-statistic)	0.000000			

## 11. Aggressive

Dependent Variable: AGGRESSIVE

Method: Least Squares

Date: 08/02/18 Time: 03:55

Sample: 2013M01 2017M12

Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006658	0.003416	1.948695	0.0565
IHSG_RF	0.944410	0.100599	9.387837	0.0000
SMB	0.106701	0.103561	1.030321	0.3075
HML	0.160148	0.096956	1.651759	0.1044
RMW	-0.074692	0.090596	-0.824453	0.4133
CMA	-0.519397	0.062279	-8.339866	0.0000
R-squared	0.847470	Mean dependent var		0.000108
Adjusted R-squared	0.833346	S.D. dependent var		0.062275
S.E. of regression	0.025422	Akaike info criterion		-4.411726
Sum squared resid	0.034900	Schwarz criterion		-4.202291
Log likelihood	138.3518	Hannan-Quinn criter.		-4.329804
F-statistic	60.00554	Durbin-Watson stat		2.597108
Prob(F-statistic)	0.000000			



## Lampiran 23

### Output Uji Model Regresi Kombinasi *Size* FF5FM Metode Syariah

#### A. Portofolio Size / Book-to-market

##### 1. SL (Small / Low)

Dependent Variable: SL  
 Method: Least Squares  
 Date: 08/02/18 Time: 17:13  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.001052	0.005292	0.198703	0.8432
ISSI_SBIS	0.983637	0.164389	5.983591	0.0000
SMB	0.163483	0.163499	0.999901	0.3218
HML	-0.645017	0.136230	-4.734749	0.0000
RMW	-0.444915	0.137051	-3.246353	0.0020
CMA	-0.152554	0.096716	-1.577338	0.1206
R-squared	0.616477	Mean dependent var		-0.003562
Adjusted R-squared	0.580966	S.D. dependent var		0.061255
S.E. of regression	0.039652	Akaike info criterion		-3.522693
Sum squared resid	0.084905	Schwarz criterion		-3.313258
Log likelihood	111.6808	Hannan-Quinn criter.		-3.440772
F-statistic	17.35999	Durbin-Watson stat		2.612647
Prob(F-statistic)	0.000000			

##### 2. SM (Small / Medium)

Dependent Variable: SM  
 Method: Least Squares  
 Date: 08/02/18 Time: 17:14  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002808	0.005888	0.476830	0.6354
ISSI_SBIS	0.595793	0.182903	3.257427	0.0019
SMB	0.800914	0.181912	4.402748	0.0001
HML	0.183778	0.151573	1.212470	0.2306
RMW	0.438400	0.152486	2.875023	0.0058
CMA	0.306738	0.107609	2.850490	0.0062
R-squared	0.412036	Mean dependent var		-0.002087
Adjusted R-squared	0.357595	S.D. dependent var		0.055044
S.E. of regression	0.044118	Akaike info criterion		-3.309253
Sum squared resid	0.105106	Schwarz criterion		-3.099819
Log likelihood	105.2776	Hannan-Quinn criter.		-3.227332
F-statistic	7.568470	Durbin-Watson stat		1.979269
Prob(F-statistic)	0.000019			

### 3. SH (Small / High)

Dependent Variable: SH  
 Method: Least Squares  
 Date: 08/02/18 Time: 17:15  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.009804	0.004603	2.129958	0.0377
ISSI_SBIS	1.064328	0.142979	7.443964	0.0000
SMB	0.309326	0.142204	2.175225	0.0340
HML	0.319129	0.118488	2.693357	0.0094
RMW	-0.307150	0.119201	-2.576745	0.0127
CMA	-0.092235	0.084120	-1.096475	0.2777
R-squared	0.765003	Mean dependent var		-0.000205
Adjusted R-squared	0.743244	S.D. dependent var		0.068062
S.E. of regression	0.034488	Akaike info criterion		-3.801773
Sum squared resid	0.064229	Schwarz criterion		-3.592339
Log likelihood	120.0532	Hannan-Quinn criter.		-3.719852
F-statistic	35.15810	Durbin-Watson stat		1.836833
Prob(F-statistic)	0.000000			

### 4. BL (Big / Low)

Dependent Variable: BL  
 Method: Least Squares  
 Date: 08/02/18 Time: 17:22  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.009146	0.004626	1.976873	0.0532
ISSI_SBIS	0.926350	0.143705	6.446199	0.0000
SMB	-0.133615	0.142927	-0.934850	0.3540
HML	-0.592229	0.119089	-4.972985	0.0000
RMW	-0.299023	0.119806	-2.495888	0.0157
CMA	-0.003185	0.084547	-0.037667	0.9701
R-squared	0.607009	Mean dependent var		0.009638
Adjusted R-squared	0.570621	S.D. dependent var		0.052899
S.E. of regression	0.034663	Akaike info criterion		-3.791642
Sum squared resid	0.064883	Schwarz criterion		-3.582207
Log likelihood	119.7493	Hannan-Quinn criter.		-3.709720
F-statistic	16.68157	Durbin-Watson stat		2.112742
Prob(F-statistic)	0.000000			

## 5. BM (Big / Medium)

Dependent Variable: BM  
 Method: Least Squares  
 Date: 08/02/18 Time: 17:24  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006002	0.003847	1.560062	0.1246
ISSI_SBIS	1.080072	0.119509	9.037555	0.0000
SMB	-0.408374	0.118862	-3.435698	0.0011
HML	0.208550	0.099038	2.105755	0.0399
RMW	0.172960	0.099635	1.735940	0.0883
CMA	-0.198708	0.070312	-2.826091	0.0066
R-squared	0.702563	Mean dependent var		0.005016
Adjusted R-squared	0.675023	S.D. dependent var		0.050567
S.E. of regression	0.028827	Akaike info criterion		-4.160377
Sum squared resid	0.044873	Schwarz criterion		-3.950942
Log likelihood	130.8113	Hannan-Quinn criter.		-4.078455
F-statistic	25.51025	Durbin-Watson stat		2.551817
Prob(F-statistic)	0.000000			

## 6. BH (Big / High)

Dependent Variable: BH  
 Method: Least Squares  
 Date: 08/02/18 Time: 17:26  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.001711	0.005227	-0.327268	0.7447
ISSI_SBIS	0.658625	0.162356	4.056672	0.0002
SMB	-0.624898	0.161477	-3.869895	0.0003
HML	0.215001	0.134546	1.597975	0.1159
RMW	-0.239924	0.135356	-1.772543	0.0819
CMA	0.168604	0.095520	1.765109	0.0832
R-squared	0.479634	Mean dependent var		0.002120
Adjusted R-squared	0.431452	S.D. dependent var		0.051938
S.E. of regression	0.039162	Akaike info criterion		-3.547581
Sum squared resid	0.082818	Schwarz criterion		-3.338146
Log likelihood	112.4274	Hannan-Quinn criter.		-3.465659
F-statistic	9.954635	Durbin-Watson stat		2.459689
Prob(F-statistic)	0.000001			

## 7. Small

Dependent Variable: SMALL  
 Method: Least Squares  
 Date: 08/02/18 Time: 17:30  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005760	0.002948	1.953815	0.0559
ISSI_SBIS	0.980454	0.091581	10.70593	0.0000
SMB	0.518407	0.091085	5.691489	0.0000
HML	-0.102173	0.075893	-1.346271	0.1838
RMW	-0.205799	0.076350	-2.695454	0.0094
CMA	-0.022431	0.053880	-0.416307	0.6788
R-squared	0.829074	Mean dependent var		-0.002609
Adjusted R-squared	0.813247	S.D. dependent var		0.051117
S.E. of regression	0.022090	Akaike info criterion		-4.692727
Sum squared resid	0.026351	Schwarz criterion		-4.483293
Log likelihood	146.7818	Hannan-Quinn criter.		-4.610806
F-statistic	52.38514	Durbin-Watson stat		2.592557
Prob(F-statistic)	0.000000			

## 8. Big

Dependent Variable: BIG  
 Method: Least Squares  
 Date: 08/02/18 Time: 17:31  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005970	0.002965	2.013446	0.0491
ISSI_SBIS	1.057052	0.092098	11.47749	0.0000
SMB	-0.469504	0.091599	-5.125644	0.0000
HML	-0.127546	0.076322	-1.671149	0.1005
RMW	-0.163053	0.076782	-2.123590	0.0383
CMA	-0.023184	0.054185	-0.427874	0.6704
R-squared	0.746151	Mean dependent var		0.007482
Adjusted R-squared	0.722646	S.D. dependent var		0.042182
S.E. of regression	0.022215	Akaike info criterion		-4.681461
Sum squared resid	0.026649	Schwarz criterion		-4.472027
Log likelihood	146.4438	Hannan-Quinn criter.		-4.599540
F-statistic	31.74493	Durbin-Watson stat		2.254347
Prob(F-statistic)	0.000000			

## 9. Low

Dependent Variable: LOW  
 Method: Least Squares  
 Date: 08/02/18 Time: 17:32  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005824	0.003645	1.598060	0.1159
ISSI_SBIS	0.995892	0.113209	8.796950	0.0000
SMB	-0.084323	0.112596	-0.748903	0.4572
HML	-0.650159	0.093817	-6.930078	0.0000
RMW	-0.396997	0.094382	-4.206285	0.0001
CMA	-0.098232	0.066605	-1.474840	0.1461
R-squared	0.752302	Mean dependent var		0.004461
Adjusted R-squared	0.729367	S.D. dependent var		0.052491
S.E. of regression	0.027307	Akaike info criterion		-4.268698
Sum squared resid	0.040267	Schwarz criterion		-4.059264
Log likelihood	134.0609	Hannan-Quinn criter.		-4.186777
F-statistic	32.80145	Durbin-Watson stat		2.231292
Prob(F-statistic)	0.000000			

## 10. Medium

Dependent Variable: MEDIUM  
 Method: Least Squares  
 Date: 08/02/18 Time: 17:35  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.004670	0.003704	1.260656	0.2129
ISSI_SBIS	0.979609	0.115066	8.513442	0.0000
SMB	0.181152	0.114443	1.582902	0.1193
HML	0.149856	0.095356	1.571541	0.1219
RMW	0.293729	0.095930	3.061905	0.0034
CMA	0.077517	0.067698	1.145050	0.2572
R-squared	0.649381	Mean dependent var		0.001944
Adjusted R-squared	0.616916	S.D. dependent var		0.044843
S.E. of regression	0.027755	Akaike info criterion		-4.236151
Sum squared resid	0.041599	Schwarz criterion		-4.026717
Log likelihood	133.0845	Hannan-Quinn criter.		-4.154230
F-statistic	20.00262	Durbin-Watson stat		2.206695
Prob(F-statistic)	0.000000			

## 11. High

Dependent Variable: HIGH  
 Method: Least Squares  
 Date: 08/02/18 Time: 17:36  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005824	0.003645	1.598060	0.1159
ISSI_SBIS	0.995892	0.113209	8.796950	0.0000
SMB	-0.084323	0.112596	-0.748903	0.4572
HML	0.349841	0.093817	3.728979	0.0005
RMW	-0.396997	0.094382	-4.206285	0.0001
CMA	-0.098232	0.066605	-1.474840	0.1461
R-squared	0.813501	Mean dependent var		-0.000831
Adjusted R-squared	0.796233	S.D. dependent var		0.060494
S.E. of regression	0.027307	Akaike info criterion		-4.268698
Sum squared resid	0.040267	Schwarz criterion		-4.059264
Log likelihood	134.0609	Hannan-Quinn criter.		-4.186777
F-statistic	47.10927	Durbin-Watson stat		2.231292
Prob(F-statistic)	0.000000			

## B. Portofolio Size / Profitability

### 1. SW (Small / Weak)

Dependent Variable: SW  
 Method: Least Squares  
 Date: 08/03/18 Time: 01:31  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.009237	0.004590	2.012559	0.0492
ISSI_SBIS	1.049051	0.142566	7.358365	0.0000
SMB	0.383393	0.141794	2.703882	0.0091
HML	0.166147	0.118145	1.406297	0.1654
RMW	-0.397502	0.118857	-3.344379	0.0015
CMA	-0.023598	0.083877	-0.281344	0.7795
R-squared	0.757054	Mean dependent var		-0.000414
Adjusted R-squared	0.734559	S.D. dependent var		0.066746
S.E. of regression	0.034388	Akaike info criterion		-3.807557
Sum squared resid	0.063858	Schwarz criterion		-3.598122
Log likelihood	120.2267	Hannan-Quinn criter.		-3.725636
F-statistic	33.65432	Durbin-Watson stat		1.830656
Prob(F-statistic)	0.000000			

## 2. SN (Small / Neutral)

Dependent Variable: SN  
 Method: Least Squares  
 Date: 08/03/18 Time: 01:32  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.003764	0.004959	0.758989	0.4512
ISSI_SBIS	0.976014	0.154041	6.336068	0.0000
SMB	0.484792	0.153207	3.164301	0.0026
HML	-0.331548	0.127655	-2.597218	0.0121
RMW	-0.070703	0.128424	-0.550549	0.5842
CMA	0.162511	0.090628	1.793162	0.0785
R-squared	0.564621	Mean dependent var		-0.000423
Adjusted R-squared	0.524309	S.D. dependent var		0.053873
S.E. of regression	0.037156	Akaike info criterion		-3.652727
Sum squared resid	0.074552	Schwarz criterion		-3.443293
Log likelihood	115.5818	Hannan-Quinn criter.		-3.570806
F-statistic	14.00600	Durbin-Watson stat		2.011600
Prob(F-statistic)	0.000000			

## 3. SR (Small / Robust)

Dependent Variable: SR  
 Method: Least Squares  
 Date: 08/03/18 Time: 01:33  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.003408	0.005567	0.612140	0.5430
ISSI_SBIS	0.799117	0.172925	4.621183	0.0000
SMB	0.076564	0.171988	0.445172	0.6580
HML	0.220033	0.143304	1.535426	0.1305
RMW	0.376310	0.144167	2.610239	0.0117
CMA	-0.169061	0.101738	-1.661729	0.1024
R-squared	0.497841	Mean dependent var		-0.000325
Adjusted R-squared	0.451345	S.D. dependent var		0.056312
S.E. of regression	0.041711	Akaike info criterion		-3.421451
Sum squared resid	0.093951	Schwarz criterion		-3.212016
Log likelihood	108.6435	Hannan-Quinn criter.		-3.339529
F-statistic	10.70713	Durbin-Watson stat		2.199671
Prob(F-statistic)	0.000000			

#### 4. BW (Big / Weak)

Dependent Variable: BW  
 Method: Least Squares  
 Date: 08/03/18 Time: 01:34  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005838	0.005409	1.079258	0.2853
ISSI_SBIS	0.776805	0.168019	4.623303	0.0000
SMB	-0.611402	0.167109	-3.658688	0.0006
HML	0.045560	0.139239	0.327204	0.7448
RMW	-0.437362	0.140077	-3.122290	0.0029
CMA	0.232750	0.098852	2.354528	0.0222
R-squared	0.538494	Mean dependent var		0.009762
Adjusted R-squared	0.495763	S.D. dependent var		0.057074
S.E. of regression	0.040528	Akaike info criterion		-3.479005
Sum squared resid	0.088696	Schwarz criterion		-3.269571
Log likelihood	110.3702	Hannan-Quinn criter.		-3.397084
F-statistic	12.60167	Durbin-Watson stat		2.367080
Prob(F-statistic)	0.000000			

#### 5. BN (Big / Neutral)

Dependent Variable: BN  
 Method: Least Squares  
 Date: 08/03/18 Time: 01:35  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002845	0.004180	0.680694	0.4990
ISSI_SBIS	1.174846	0.129836	9.048729	0.0000
SMB	-0.612203	0.129132	-4.740898	0.0000
HML	-0.130186	0.107596	-1.209957	0.2316
RMW	-0.216691	0.108243	-2.001882	0.0503
CMA	-0.223495	0.076387	-2.925816	0.0050
R-squared	0.691098	Mean dependent var		0.003118
Adjusted R-squared	0.662496	S.D. dependent var		0.053908
S.E. of regression	0.031318	Akaike info criterion		-3.994628
Sum squared resid	0.052963	Schwarz criterion		-3.785194
Log likelihood	125.8388	Hannan-Quinn criter.		-3.912707
F-statistic	24.16253	Durbin-Watson stat		1.942859
Prob(F-statistic)	0.000000			



## 6. BR (Big / Robust)

Dependent Variable: BR  
 Method: Least Squares  
 Date: 08/03/18 Time: 01:36  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008987	0.003331	2.697559	0.0093
ISSI_SBIS	0.740489	0.103480	7.155829	0.0000
SMB	-0.035789	0.102920	-0.347733	0.7294
HML	-0.022793	0.085755	-0.265796	0.7914
RMW	0.261729	0.086271	3.033785	0.0037
CMA	0.051361	0.060882	0.843614	0.4026
R-squared	0.628200	Mean dependent var		0.009480
Adjusted R-squared	0.593774	S.D. dependent var		0.039163
S.E. of regression	0.024961	Akaike info criterion		-4.448399
Sum squared resid	0.033644	Schwarz criterion		-4.238964
Log likelihood	139.4520	Hannan-Quinn criter.		-4.366477
F-statistic	18.24786	Durbin-Watson stat		2.129453
Prob(F-statistic)	0.000000			

## 7. Small

Dependent Variable: SMALL  
 Method: Least Squares  
 Date: 08/03/18 Time: 01:36  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006864	0.002586	2.654185	0.0104
ISSI_SBIS	1.086546	0.080328	13.52631	0.0000
SMB	0.422059	0.079893	5.282781	0.0000
HML	-0.026245	0.066569	-0.394260	0.6949
RMW	-0.105888	0.066970	-1.581143	0.1197
CMA	-0.022300	0.047260	-0.471854	0.6389
R-squared	0.862296	Mean dependent var		-0.000704
Adjusted R-squared	0.849546	S.D. dependent var		0.049953
S.E. of regression	0.019376	Akaike info criterion		-4.954919
Sum squared resid	0.020273	Schwarz criterion		-4.745485
Log likelihood	154.6476	Hannan-Quinn criter.		-4.872998
F-statistic	67.62914	Durbin-Watson stat		2.256092
Prob(F-statistic)	0.000000			

## 8. Big

Dependent Variable: BIG  
 Method: Least Squares  
 Date: 08/03/18 Time: 01:37  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006785	0.002396	2.831174	0.0065
ISSI_SBIS	1.020403	0.074439	13.70783	0.0000
SMB	-0.479605	0.074036	-6.477974	0.0000
HML	-0.086014	0.061688	-1.394330	0.1689
RMW	-0.155305	0.062060	-2.502499	0.0154
CMA	0.025216	0.043796	0.575763	0.5672
R-squared	0.801354	Mean dependent var		0.008813
Adjusted R-squared	0.782961	S.D. dependent var		0.038542
S.E. of regression	0.017956	Akaike info criterion		-5.107194
Sum squared resid	0.017410	Schwarz criterion		-4.897759
Log likelihood	159.2158	Hannan-Quinn criter.		-5.025273
F-statistic	43.56815	Durbin-Watson stat		2.368109
Prob(F-statistic)	0.000000			

## 9. Weak

Dependent Variable: WEAK  
 Method: Least Squares  
 Date: 08/03/18 Time: 01:38  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008908	0.003040	2.930416	0.0050
ISSI_SBIS	0.999208	0.094428	10.58170	0.0000
SMB	-0.050501	0.093917	-0.537717	0.5930
HML	0.097247	0.078253	1.242725	0.2193
RMW	-0.603336	0.078724	-7.663908	0.0000
CMA	-0.014383	0.055556	-0.258901	0.7967
R-squared	0.861520	Mean dependent var		0.003037
Adjusted R-squared	0.848698	S.D. dependent var		0.058556
S.E. of regression	0.022777	Akaike info criterion		-4.631490
Sum squared resid	0.028015	Schwarz criterion		-4.422056
Log likelihood	144.9447	Hannan-Quinn criter.		-4.549569
F-statistic	67.18950	Durbin-Watson stat		2.191495
Prob(F-statistic)	0.000000			

## 10. Neutral

Dependent Variable: NEUTRAL  
 Method: Least Squares  
 Date: 08/03/18 Time: 01:38  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.003305	0.003348	0.987108	0.3280
ISSI_SBIS	1.075430	0.103987	10.34192	0.0000
SMB	-0.063706	0.103424	-0.615963	0.5405
HML	-0.230867	0.086175	-2.679042	0.0098
RMW	-0.143697	0.086694	-1.657520	0.1032
CMA	-0.030492	0.061180	-0.498399	0.6202
R-squared	0.722613	Mean dependent var		0.001348
Adjusted R-squared	0.696929	S.D. dependent var		0.045562
S.E. of regression	0.025083	Akaike info criterion		-4.438624
Sum squared resid	0.033974	Schwarz criterion		-4.229190
Log likelihood	139.1587	Hannan-Quinn criter.		-4.356703
F-statistic	28.13482	Durbin-Watson stat		2.021570
Prob(F-statistic)	0.000000			

## 11. Robust

Dependent Variable: ROBUST  
 Method: Least Squares  
 Date: 08/03/18 Time: 01:40  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008908	0.003040	2.930416	0.0050
ISSI_SBIS	0.999208	0.094428	10.58170	0.0000
SMB	-0.050501	0.093917	-0.537717	0.5930
HML	0.097247	0.078253	1.242725	0.2193
RMW	0.396664	0.078724	5.038647	0.0000
CMA	-0.014383	0.055556	-0.258901	0.7967
R-squared	0.788646	Mean dependent var		0.008278
Adjusted R-squared	0.769076	S.D. dependent var		0.047398
S.E. of regression	0.022777	Akaike info criterion		-4.631490
Sum squared resid	0.028015	Schwarz criterion		-4.422056
Log likelihood	144.9447	Hannan-Quinn criter.		-4.549569
F-statistic	40.29908	Durbin-Watson stat		2.191495
Prob(F-statistic)	0.000000			

## C. Portfolio Size / Investment

### 1. SC (Small / Conservative)

Dependent Variable: SC  
 Method: Least Squares  
 Date: 08/03/18 Time: 02:31  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007296	0.004199	1.737407	0.0880
ISSI_SBIS	0.973409	0.130436	7.462733	0.0000
SMB	0.827472	0.129730	6.378439	0.0000
HML	0.141809	0.108093	1.311916	0.1951
RMW	0.043220	0.108744	0.397444	0.6926
CMA	0.643285	0.076740	8.382602	0.0000
R-squared	0.756117	Mean dependent var		0.002821
Adjusted R-squared	0.733536	S.D. dependent var		0.060950
S.E. of regression	0.031463	Akaike info criterion		-3.985399
Sum squared resid	0.053454	Schwarz criterion		-3.775965
Log likelihood	125.5620	Hannan-Quinn criter.		-3.903478
F-statistic	33.48359	Durbin-Watson stat		2.209165
Prob(F-statistic)	0.000000			

### 2. SI (Small / Intermediate)

Dependent Variable: SI  
 Method: Least Squares  
 Date: 08/03/18 Time: 02:32  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008708	0.007439	1.170525	0.2469
ISSI_SBIS	0.899163	0.231076	3.891197	0.0003
SMB	1.029376	0.229825	4.478964	0.0000
HML	-0.555403	0.191494	-2.900360	0.0054
RMW	-0.257314	0.192647	-1.335673	0.1873
CMA	0.137480	0.135951	1.011245	0.3164
R-squared	0.515591	Mean dependent var		-0.000698
Adjusted R-squared	0.470738	S.D. dependent var		0.076615
S.E. of regression	0.055738	Akaike info criterion		-2.841671
Sum squared resid	0.167763	Schwarz criterion		-2.632236
Log likelihood	91.25012	Hannan-Quinn criter.		-2.759749
F-statistic	11.49520	Durbin-Watson stat		2.069329
Prob(F-statistic)	0.000000			

### 3. SA (Small / Aggressive)

Dependent Variable: SA  
 Method: Least Squares  
 Date: 08/03/18 Time: 02:33  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007831	0.004663	1.679447	0.0988
ISSI_SBIS	1.111804	0.144831	7.676582	0.0000
SMB	0.132624	0.144046	0.920706	0.3613
HML	0.124420	0.120022	1.036645	0.3045
RMW	-0.014146	0.120745	-0.117152	0.9072
CMA	-0.531405	0.085209	-6.236464	0.0000
R-squared	0.780719	Mean dependent var		-0.002549
Adjusted R-squared	0.760415	S.D. dependent var		0.071372
S.E. of regression	0.034935	Akaike info criterion		-3.776035
Sum squared resid	0.065903	Schwarz criterion		-3.566601
Log likelihood	119.2811	Hannan-Quinn criter.		-3.694114
F-statistic	38.45186	Durbin-Watson stat		2.434140
Prob(F-statistic)	0.000000			

### 4. BC (Big / Conservative)

Dependent Variable: BC  
 Method: Least Squares  
 Date: 08/03/18 Time: 02:34  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008433	0.006058	1.392189	0.1696
ISSI_SBIS	1.068691	0.188160	5.679696	0.0000
SMB	-0.793452	0.187141	-4.239869	0.0001
HML	0.148866	0.155929	0.954701	0.3440
RMW	-0.250434	0.156868	-1.596458	0.1162
CMA	0.322248	0.110702	2.910965	0.0052
R-squared	0.544942	Mean dependent var		0.014768
Adjusted R-squared	0.502807	S.D. dependent var		0.064367
S.E. of regression	0.045386	Akaike info criterion		-3.252581
Sum squared resid	0.111235	Schwarz criterion		-3.043147
Log likelihood	103.5774	Hannan-Quinn criter.		-3.170660
F-statistic	12.93326	Durbin-Watson stat		2.515442
Prob(F-statistic)	0.000000			

## 5. BI (Big / Intermediate)

Dependent Variable: BI  
 Method: Least Squares  
 Date: 08/03/18 Time: 02:34  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008595	0.003273	2.625737	0.0112
ISSI_SBIS	0.905657	0.101679	8.907045	0.0000
SMB	-0.217475	0.101128	-2.150489	0.0360
HML	-0.295296	0.084262	-3.504505	0.0009
RMW	-0.111646	0.084769	-1.317061	0.1934
CMA	-0.023495	0.059821	-0.392750	0.6961
R-squared	0.690480	Mean dependent var		0.009166
Adjusted R-squared	0.661821	S.D. dependent var		0.042175
S.E. of regression	0.024526	Akaike info criterion		-4.483528
Sum squared resid	0.032482	Schwarz criterion		-4.274093
Log likelihood	140.5058	Hannan-Quinn criter.		-4.401607
F-statistic	24.09274	Durbin-Watson stat		1.925119
Prob(F-statistic)	0.000000			

## 6. BA (Big / Aggressive)

Dependent Variable: BA  
 Method: Least Squares  
 Date: 08/03/18 Time: 02:35  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.003625	0.004599	0.788172	0.4340
ISSI_SBIS	0.620957	0.142864	4.346483	0.0001
SMB	-0.164799	0.142090	-1.159815	0.2512
HML	0.205190	0.118393	1.733130	0.0888
RMW	0.155257	0.119105	1.303523	0.1979
CMA	-0.233575	0.084052	-2.778921	0.0075
R-squared	0.457655	Mean dependent var		0.000972
Adjusted R-squared	0.407438	S.D. dependent var		0.044766
S.E. of regression	0.034460	Akaike info criterion		-3.803376
Sum squared resid	0.064126	Schwarz criterion		-3.593941
Log likelihood	120.1013	Hannan-Quinn criter.		-3.721455
F-statistic	9.113539	Durbin-Watson stat		2.508809
Prob(F-statistic)	0.000002			

## 7. Small

Dependent Variable: SMALL  
 Method: Least Squares  
 Date: 08/03/18 Time: 02:36  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007945	0.002821	2.816461	0.0068
ISSI_SBIS	0.994792	0.087620	11.35347	0.0000
SMB	0.663158	0.087146	7.609767	0.0000
HML	-0.096391	0.072611	-1.327491	0.1899
RMW	-0.076080	0.073049	-1.041498	0.3023
CMA	0.083120	0.051550	1.612403	0.1127
R-squared	0.839777	Mean dependent var		-0.000142
Adjusted R-squared	0.824941	S.D. dependent var		0.050514
S.E. of regression	0.021135	Akaike info criterion		-4.781144
Sum squared resid	0.024121	Schwarz criterion		-4.571709
Log likelihood	149.4343	Hannan-Quinn criter.		-4.699222
F-statistic	56.60604	Durbin-Watson stat		2.259751
Prob(F-statistic)	0.000000			

## 8. Big

Dependent Variable: BIG  
 Method: Least Squares  
 Date: 08/03/18 Time: 02:37  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007814	0.002739	2.852713	0.0061
ISSI_SBIS	0.984338	0.085088	11.56848	0.0000
SMB	-0.447268	0.084627	-5.285160	0.0000
HML	-0.011250	0.070513	-0.159540	0.8738
RMW	-0.069410	0.070938	-0.978460	0.3322
CMA	0.036358	0.050060	0.726272	0.4708
R-squared	0.736402	Mean dependent var		0.009786
Adjusted R-squared	0.711995	S.D. dependent var		0.038244
S.E. of regression	0.020524	Akaike info criterion		-4.839795
Sum squared resid	0.022747	Schwarz criterion		-4.630361
Log likelihood	151.1939	Hannan-Quinn criter.		-4.757874
F-statistic	30.17154	Durbin-Watson stat		2.542732
Prob(F-statistic)	0.000000			

## 9. Conservative

Dependent Variable: CONSERVATIVE  
 Method: Least Squares  
 Date: 08/03/18 Time: 02:38  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007865	0.003296	2.386445	0.0205
ISSI_SBIS	1.021050	0.102364	9.974652	0.0000
SMB	0.017010	0.101810	0.167075	0.8679
HML	0.145338	0.084830	1.713277	0.0924
RMW	-0.103607	0.085341	-1.214035	0.2300
CMA	0.482767	0.060225	8.016062	0.0000
R-squared	0.766005	Mean dependent var		0.008795
Adjusted R-squared	0.744339	S.D. dependent var		0.048833
S.E. of regression	0.024691	Akaike info criterion		-4.470085
Sum squared resid	0.032922	Schwarz criterion		-4.260651
Log likelihood	140.1026	Hannan-Quinn criter.		-4.388164
F-statistic	35.35492	Durbin-Watson stat		2.551268
Prob(F-statistic)	0.000000			

## 10. Intermediate

Dependent Variable: INTERMEDIATE  
 Method: Least Squares  
 Date: 08/03/18 Time: 02:39  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008651	0.004330	1.998209	0.0507
ISSI_SBIS	0.902410	0.134486	6.710071	0.0000
SMB	0.405951	0.133758	3.034974	0.0037
HML	-0.425350	0.111449	-3.816525	0.0004
RMW	-0.184480	0.112121	-1.645374	0.1057
CMA	0.056992	0.079123	0.720299	0.4744
R-squared	0.624915	Mean dependent var		0.004234
Adjusted R-squared	0.590185	S.D. dependent var		0.050673
S.E. of regression	0.032439	Akaike info criterion		-3.924246
Sum squared resid	0.056825	Schwarz criterion		-3.714812
Log likelihood	123.7274	Hannan-Quinn criter.		-3.842325
F-statistic	17.99348	Durbin-Watson stat		1.988014
Prob(F-statistic)	0.000000			



## 11. Aggressive

Dependent Variable: AGGRESSIVE

Method: Least Squares

Date: 08/03/18 Time: 02:40

Sample: 2013M01 2017M12

Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007865	0.003296	2.386445	0.0205
ISSI_SBIS	1.021050	0.102364	9.974652	0.0000
SMB	0.017010	0.101810	0.167075	0.8679
HML	0.145338	0.084830	1.713277	0.0924
RMW	-0.103607	0.085341	-1.214035	0.2300
CMA	-0.517233	0.060225	-8.588360	0.0000
R-squared	0.855891	Mean dependent var		-0.001579
Adjusted R-squared	0.842547	S.D. dependent var		0.062226
S.E. of regression	0.024691	Akaike info criterion		-4.470085
Sum squared resid	0.032922	Schwarz criterion		-4.260651
Log likelihood	140.1026	Hannan-Quinn criter.		-4.388164
F-statistic	64.14319	Durbin-Watson stat		2.551268
Prob(F-statistic)	0.000000			

## Lampiran 24

### Output Uji Model Regresi Metode Konvensional

#### 1. Portofolio CAPM

Dependent Variable: ER\_CAPM  
Method: Least Squares  
Date: 07/04/18 Time: 03:43  
Sample: 2013M01 2017M12  
Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.004361	0.002697	1.617012	0.1113
IHSG_RF	0.937296	0.076993	12.17379	0.0000
R-squared	0.718721	Mean dependent var		0.005389
Adjusted R-squared	0.713872	S.D. dependent var		0.039036
S.E. of regression	0.020881	Akaike info criterion		-4.867205
Sum squared resid	0.025289	Schwarz criterion		-4.797393
Log likelihood	148.0161	Hannan-Quinn criter.		-4.839897
F-statistic	148.2011	Durbin-Watson stat		2.312521
Prob(F-statistic)	0.000000			

#### 2. Portofolio CAPM dengan Solver

Dependent Variable: ER\_PORTCAPM  
Method: Least Squares  
Date: 07/04/18 Time: 03:44  
Sample: 2013M01 2017M12  
Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.011671	0.003943	2.959819	0.0045
IHSG_RF	0.625500	0.112566	5.556751	0.0000
R-squared	0.347416	Mean dependent var		0.012357
Adjusted R-squared	0.336165	S.D. dependent var		0.037469
S.E. of regression	0.030528	Akaike info criterion		-4.107558
Sum squared resid	0.054055	Schwarz criterion		-4.037746
Log likelihood	125.2267	Hannan-Quinn criter.		-4.080251
F-statistic	30.87749	Durbin-Watson stat		1.885087
Prob(F-statistic)	0.000001			

### 3. Portofolio IHSG-Rf , SMB(B/M), HML (FF3FM)

Dependent Variable: ER\_AVERAGECAPM  
 Method: Least Squares  
 Date: 07/31/18 Time: 23:08  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006072	0.002707	2.243128	0.0289
IHSG_RF	0.904883	0.076182	11.87787	0.0000
SMB_BM	0.149043	0.069511	2.144176	0.0364
HML	0.010069	0.048071	0.209457	0.8349
R-squared	0.745683	Mean dependent var		0.005389
Adjusted R-squared	0.732059	S.D. dependent var		0.039036
S.E. of regression	0.020206	Akaike info criterion		-4.901304
Sum squared resid	0.022864	Schwarz criterion		-4.761681
Log likelihood	151.0391	Hannan-Quinn criter.		-4.846690
F-statistic	54.73262	Durbin-Watson stat		2.260610
Prob(F-statistic)	0.000000			

### 4. Portofolio IHSG-Rf , SMB(OP), RMW

Dependent Variable: ER\_AVERAGECAPM  
 Method: Least Squares  
 Date: 08/02/18 Time: 03:04  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006127	0.002635	2.325527	0.0237
IHSG_RF	0.902294	0.075452	11.95857	0.0000
SMB_OP	0.153242	0.071231	2.151329	0.0358
RMW	-0.051372	0.040777	-1.259805	0.2130
R-squared	0.757154	Mean dependent var		0.005389
Adjusted R-squared	0.744144	S.D. dependent var		0.039036
S.E. of regression	0.019745	Akaike info criterion		-4.947456
Sum squared resid	0.021833	Schwarz criterion		-4.807833
Log likelihood	152.4237	Hannan-Quinn criter.		-4.892842
F-statistic	58.19955	Durbin-Watson stat		2.252400
Prob(F-statistic)	0.000000			

## 5. Portofolio IHSG-Rf , SMB(INV), CMA

Dependent Variable: ER\_AVERAGECAPM

Method: Least Squares

Date: 08/02/18 Time: 03:40

Sample: 2013M01 2017M12

Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005655	0.002704	2.091301	0.0410
IHSG_RF	0.920271	0.079899	11.51788	0.0000
SMB_INV	0.154734	0.063842	2.423713	0.0186
CMA	0.025184	0.043450	0.579611	0.5645
R-squared	0.745434	Mean dependent var		0.005389
Adjusted R-squared	0.731797	S.D. dependent var		0.039036
S.E. of regression	0.020216	Akaike info criterion		-4.900326
Sum squared resid	0.022887	Schwarz criterion		-4.760703
Log likelihood	151.0098	Hannan-Quinn criter.		-4.845711
F-statistic	54.66084	Durbin-Watson stat		2.399646
Prob(F-statistic)	0.000000			

## 6. Portofolio IHSG-Rf , SMB, HML, RMW, CMA (FF5FM)

Dependent Variable: ER\_AVERAGECAPM

Method: Least Squares

Date: 07/31/18 Time: 23:17

Sample: 2013M01 2017M12

Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006012	0.002685	2.238794	0.0293
IHSG_RF	0.916864	0.079076	11.59467	0.0000
SMB	0.163152	0.081404	2.004222	0.0501
HML	-0.082624	0.076213	-1.084127	0.2831
RMW	-0.099963	0.071213	-1.403722	0.1661
CMA	0.016708	0.048954	0.341300	0.7342
R-squared	0.760147	Mean dependent var		0.005389
Adjusted R-squared	0.737938	S.D. dependent var		0.039036
S.E. of regression	0.019983	Akaike info criterion		-4.893191
Sum squared resid	0.021564	Schwarz criterion		-4.683756
Log likelihood	152.7957	Hannan-Quinn criter.		-4.811269
F-statistic	34.22754	Durbin-Watson stat		2.260913
Prob(F-statistic)	0.000000			

## Lampiran 25

### Output Uji Model Regresi Metode Syariah

#### 1. Portofolio SCAPM

Dependent Variable: ER\_SCAPM  
Method: Least Squares  
Date: 07/04/18 Time: 03:54  
Sample: 2013M01 2017M12  
Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006255	0.002363	2.646370	0.0105
ISSI_SBIS	1.003062	0.069011	14.53475	0.0000
R-squared	0.784594	Mean dependent var		0.003702
Adjusted R-squared	0.780880	S.D. dependent var		0.039002
S.E. of regression	0.018257	Akaike info criterion		-5.135798
Sum squared resid	0.019332	Schwarz criterion		-5.065986
Log likelihood	156.0739	Hannan-Quinn criter.		-5.108490
F-statistic	211.2589	Durbin-Watson stat		2.404275
Prob(F-statistic)	0.000000			

#### 2. Portofolio SCAPM dengan Solver

Dependent Variable: ER\_PORTSCAPM  
Method: Least Squares  
Date: 07/04/18 Time: 03:55  
Sample: 2013M01 2017M12  
Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.012435	0.003961	3.139095	0.0027
ISSI_SBIS	0.655499	0.115668	5.667091	0.0000
R-squared	0.356385	Mean dependent var		0.010767
Adjusted R-squared	0.345288	S.D. dependent var		0.037817
S.E. of regression	0.030600	Akaike info criterion		-4.102897
Sum squared resid	0.054307	Schwarz criterion		-4.033086
Log likelihood	125.0869	Hannan-Quinn criter.		-4.075590
F-statistic	32.11592	Durbin-Watson stat		1.928109
Prob(F-statistic)	0.000000			

### 3. Portofolio ISSI-SBIS , SMB(B/M), HML (FF3FM)

Dependent Variable: ER\_AVERAGESCAPM

Method: Least Squares

Date: 08/02/18 Time: 17:05

Sample: 2013M01 2017M12

Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007176	0.002394	2.997259	0.0041
ISSI_SBIS	0.988486	0.070004	14.12038	0.0000
SMB_BM	0.080396	0.062798	1.280233	0.2057
HML	0.027821	0.041730	0.666679	0.5077
R-squared	0.797361	Mean dependent var		0.003702
Adjusted R-squared	0.786505	S.D. dependent var		0.039002
S.E. of regression	0.018021	Akaike info criterion		-5.130228
Sum squared resid	0.018186	Schwarz criterion		-4.990605
Log likelihood	157.9068	Hannan-Quinn criter.		-5.075613
F-statistic	73.45095	Durbin-Watson stat		2.423287
Prob(F-statistic)	0.000000			

### 4. Portofolio ISSI-SBIS , SMB(OP), RMW

Dependent Variable: ER\_AVERAGESCAPM

Method: Least Squares

Date: 08/03/18 Time: 01:30

Sample: 2013M01 2017M12

Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007021	0.002348	2.989903	0.0041
ISSI_SBIS	0.994748	0.071794	13.85565	0.0000
SMB_OP	0.042369	0.066091	0.641066	0.5241
RMW	-0.073348	0.036729	-1.996979	0.0507
R-squared	0.805253	Mean dependent var		0.003702
Adjusted R-squared	0.794821	S.D. dependent var		0.039002
S.E. of regression	0.017666	Akaike info criterion		-5.169957
Sum squared resid	0.017478	Schwarz criterion		-5.030334
Log likelihood	159.0987	Hannan-Quinn criter.		-5.115342
F-statistic	77.18436	Durbin-Watson stat		2.399676
Prob(F-statistic)	0.000000			

## 5. Portofolio ISSI-SBIS, SMB(INV), CMA

Dependent Variable: ER\_AVERAGESCAPM

Method: Least Squares

Date: 08/03/18 Time: 01:53

Sample: 2013M01 2017M12

Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006765	0.002415	2.801679	0.0070
ISSI_SBIS	1.000101	0.075111	13.31494	0.0000
SMB_INV	0.088958	0.057906	1.536253	0.1301
CMA	0.035215	0.039126	0.900053	0.3719
R-squared	0.794439	Mean dependent var		0.003702
Adjusted R-squared	0.783427	S.D. dependent var		0.039002
S.E. of regression	0.018150	Akaike info criterion		-5.115913
Sum squared resid	0.018448	Schwarz criterion		-4.976290
Log likelihood	157.4774	Hannan-Quinn criter.		-5.061299
F-statistic	72.14173	Durbin-Watson stat		2.456320
Prob(F-statistic)	0.000000			

## 6. Portofolio ISSI-SBIS , SMB, HML, RMW, CMA (FF5FM)

Dependent Variable: ER\_AVERAGESCAPM

Method: Least Squares

Date: 08/02/18 Time: 17:06

Sample: 2013M01 2017M12

Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007022	0.002381	2.948822	0.0047
ISSI_SBIS	0.996044	0.073970	13.46545	0.0000
SMB	0.062303	0.073570	0.846852	0.4008
HML	-0.051280	0.061300	-0.836545	0.4065
RMW	-0.102938	0.061669	-1.669209	0.1009
CMA	0.009255	0.043520	0.212654	0.8324
R-squared	0.808449	Mean dependent var		0.003702
Adjusted R-squared	0.790713	S.D. dependent var		0.039002
S.E. of regression	0.017842	Akaike info criterion		-5.119835
Sum squared resid	0.017191	Schwarz criterion		-4.910401
Log likelihood	159.5951	Hannan-Quinn criter.		-5.037914
F-statistic	45.58185	Durbin-Watson stat		2.366696
Prob(F-statistic)	0.000000			

## Lampiran 26

### Output Uji Diagnostik Model Metode Konvensional

#### 1. Portofolio CAPM

##### a. Multikolinearitas

Variance Inflation Factors  
 Date: 07/04/18 Time: 16:12  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	7.27E-06	1.000982	NA
IHSG_RF	0.005928	1.000982	1.000000

##### b. Heteroskedastisitas

Heteroskedasticity Test: Glejser

F-statistic	2.884664	Prob. F(1,58)	0.0948
Obs*R-squared	2.842750	Prob. Chi-Square(1)	0.0918
Scaled explained SS	3.199701	Prob. Chi-Square(1)	0.0737

Test Equation:  
 Dependent Variable: ARESID  
 Method: Least Squares  
 Date: 07/10/18 Time: 08:32  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.015684	0.001712	9.159841	0.0000
IHSG_RF	-0.083021	0.048881	-1.698430	0.0948

R-squared	0.047379	Mean dependent var	0.015593
Adjusted R-squared	0.030955	S.D. dependent var	0.013467
S.E. of regression	0.013257	Akaike info criterion	-5.775861
Sum squared resid	0.010193	Schwarz criterion	-5.706050
Log likelihood	175.2758	Hannan-Quinn criter.	-5.748554
F-statistic	2.884664	Durbin-Watson stat	1.804155
Prob(F-statistic)	0.094786		



### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.427147	Prob. F(2,56)	0.2486
Obs*R-squared	2.909858	Prob. Chi-Square(2)	0.2334

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 07/04/18 Time: 16:12

Sample: 2013M01 2017M12

Included observations: 60

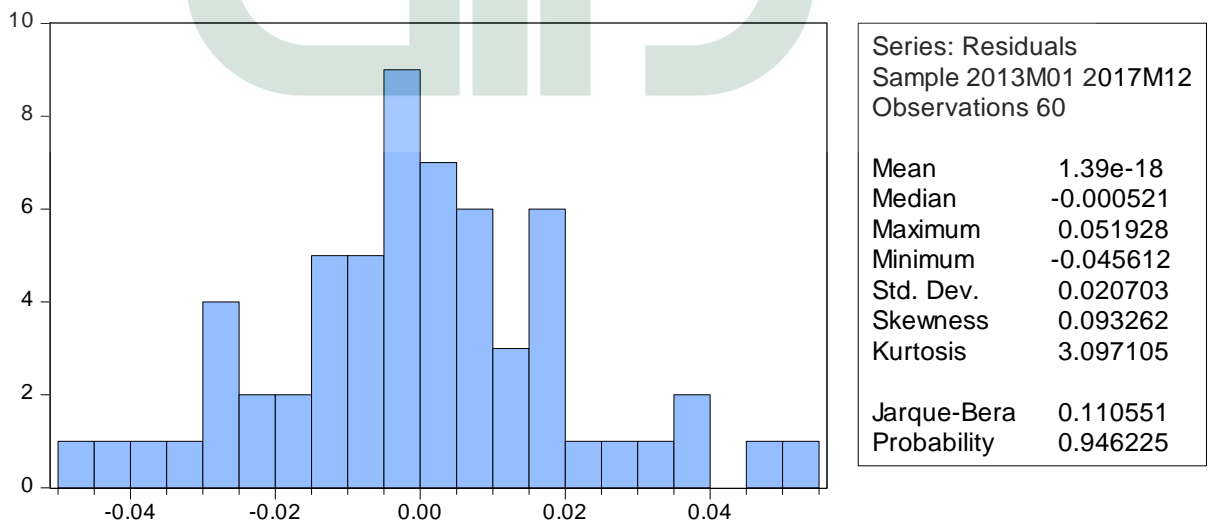
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-9.55E-05	0.002680	-0.035640	0.9717
IHSG_RF	-0.009787	0.076664	-0.127661	0.8989
RESID(-1)	-0.133551	0.133034	-1.003885	0.3198
RESID(-2)	0.158779	0.137117	1.157985	0.2518

R-squared	0.048498	Mean dependent var	1.39E-18
Adjusted R-squared	-0.002476	S.D. dependent var	0.020703
S.E. of regression	0.020729	Akaike info criterion	-4.850251
Sum squared resid	0.024062	Schwarz criterion	-4.710628
Log likelihood	149.5075	Hannan-Quinn criter.	-4.795637
F-statistic	0.951431	Durbin-Watson stat	1.935779
Prob(F-statistic)	0.422102		

### d. Normalitas



## 2. Portofolio CAPM dengan Solver

### a. Multikolinearitas

Variance Inflation Factors  
 Date: 07/04/18 Time: 16:13  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	1.55E-05	1.000982	NA
IHSG_RF	0.012671	1.000982	1.000000

### b. Heteroskedastisitas

Heteroskedasticity Test: Glejser

F-statistic	1.171642	Prob. F(1,58)	0.2835
Obs*R-squared	1.188044	Prob. Chi-Square(1)	0.2757
Scaled explained SS	1.271804	Prob. Chi-Square(1)	0.2594

Test Equation:  
 Dependent Variable: ARESID  
 Method: Least Squares  
 Date: 07/10/18 Time: 08:38  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.023287	0.002476	9.403221	0.0000
IHSG_RF	-0.076524	0.070697	-1.082424	0.2835

R-squared	0.019801	Mean dependent var	0.023203
Adjusted R-squared	0.002901	S.D. dependent var	0.019201
S.E. of regression	0.019173	Akaike info criterion	-5.037834
Sum squared resid	0.021322	Schwarz criterion	-4.968022
Log likelihood	153.1350	Hannan-Quinn criter.	-5.010527
F-statistic	1.171642	Durbin-Watson stat	2.375963
Prob(F-statistic)	0.283544		

### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.200179	Prob. F(2,56)	0.8192
Obs*R-squared	0.425911	Prob. Chi-Square(2)	0.8082

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 07/04/18 Time: 16:13

Sample: 2013M01 2017M12

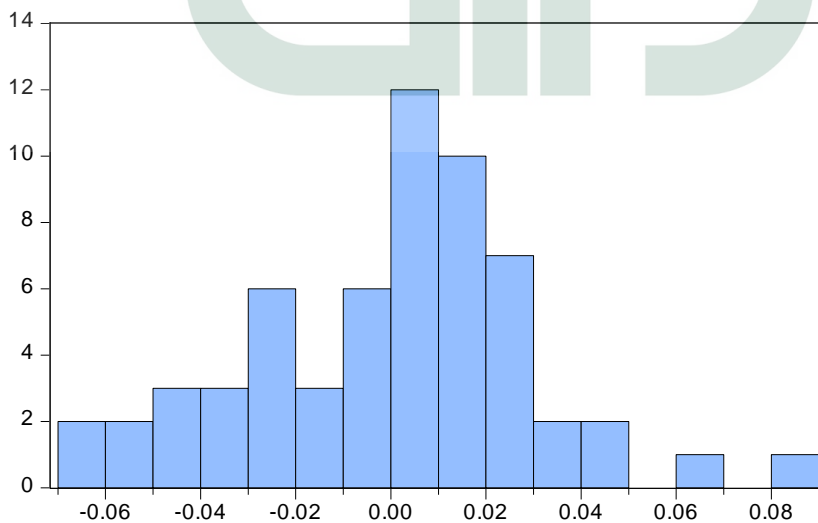
Included observations: 60

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.00E-05	0.003999	0.012503	0.9901
IHSG_RF	0.018280	0.119425	0.153070	0.8789
RESID(-1)	0.043905	0.140215	0.313128	0.7553
RESID(-2)	0.074523	0.136308	0.546725	0.5867

R-squared	0.007099	Mean dependent var	2.31E-18
Adjusted R-squared	-0.046093	S.D. dependent var	0.030269
S.E. of regression	0.030958	Akaike info criterion	-4.048015
Sum squared resid	0.053671	Schwarz criterion	-3.908392
Log likelihood	125.4405	Hannan-Quinn criter.	-3.993401
F-statistic	0.133453	Durbin-Watson stat	1.942800
Prob(F-statistic)	0.939732		

### d. Normalitas



Series: Residuals	
Sample 2013M01 2017M12	
Observations 60	
Mean	2.31e-18
Median	0.002767
Maximum	0.084864
Minimum	-0.065570
Std. Dev.	0.030269
Skewness	0.053239
Kurtosis	3.264983
Jarque-Bera	0.203884
Probability	0.903082

### 3. Portofolio IHSG-Rf , SMB(B/M), HML (FF3FM)

#### a. Multikolinearitas

Variance Inflation Factors  
 Date: 08/24/18 Time: 04:58  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	7.33E-06	1.076944	NA
IHSG_RF	0.005804	1.046536	1.045510
SMB_BM	0.004832	1.314643	1.229703
HML	0.002311	1.195105	1.188142

#### b. Heteroskedastisitas

Heteroskedasticity Test: Glejser

F-statistic	1.307995	Prob. F(3,56)	0.2809
Obs*R-squared	3.928962	Prob. Chi-Square(3)	0.2692
Scaled explained SS	4.239974	Prob. Chi-Square(3)	0.2367

Test Equation:  
 Dependent Variable: ARESID  
 Method: Least Squares  
 Date: 08/24/18 Time: 05:01  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.014759	0.001696	8.700609	0.0000
IHSG_RF	-0.080827	0.047737	-1.693175	0.0960
SMB_BM	-0.024897	0.043556	-0.571617	0.5699
HML	0.017170	0.030122	0.570036	0.5709

R-squared	0.065483	Mean dependent var	0.014865
Adjusted R-squared	0.015419	S.D. dependent var	0.012760
S.E. of regression	0.012662	Akaike info criterion	-5.836160
Sum squared resid	0.008978	Schwarz criterion	-5.696537
Log likelihood	179.0848	Hannan-Quinn criter.	-5.781546
F-statistic	1.307995	Durbin-Watson stat	1.959846
Prob(F-statistic)	0.280873		

### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.558202	Prob. F(2,54)	0.2198
Obs*R-squared	3.273741	Prob. Chi-Square(2)	0.1946

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 08/24/18 Time: 05:02

Sample: 2013M01 2017M12

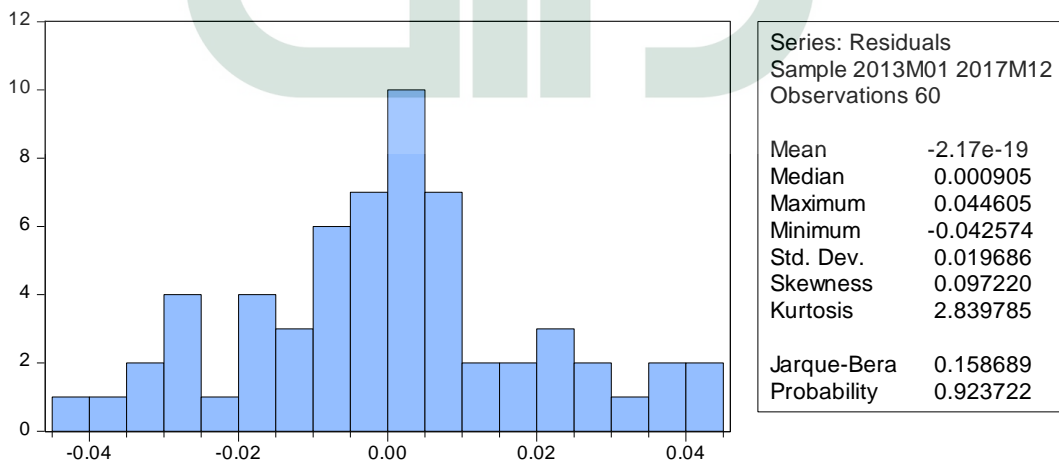
Included observations: 60

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000145	0.002684	-0.054165	0.9570
IHSG_RF	-0.011072	0.076226	-0.145248	0.8851
SMB_BM	-0.006423	0.068944	-0.093157	0.9261
HML	0.003823	0.047814	0.079956	0.9366
RESID(-1)	-0.108124	0.135826	-0.796048	0.4295
RESID(-2)	0.198385	0.136730	1.450923	0.1526

R-squared	0.054562	Mean dependent var	-2.17E-19
Adjusted R-squared	-0.032978	S.D. dependent var	0.019686
S.E. of regression	0.020008	Akaike info criterion	-4.890745
Sum squared resid	0.021617	Schwarz criterion	-4.681310
Log likelihood	152.7223	Hannan-Quinn criter.	-4.808823
F-statistic	0.623281	Durbin-Watson stat	1.893620
Prob(F-statistic)	0.682619		

### d. Normalitas



#### 4. Portofolio IHSG-Rf , SMB(OP), RMW

##### a. Multikolinearitas

Variance Inflation Factors  
 Date: 08/24/18 Time: 05:10  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	6.94E-06	1.068296	NA
IHSG_RF	0.005693	1.075047	1.073993
SMB_OP	0.005074	1.248798	1.178079
RMW	0.001663	1.123893	1.116864

##### b. Heteroskedastisitas

Heteroskedasticity Test: Glejser

F-statistic	1.131878	Prob. F(3,56)	0.3441
Obs*R-squared	3.430186	Prob. Chi-Square(3)	0.3299
Scaled explained SS	3.563953	Prob. Chi-Square(3)	0.3126

Test Equation:  
 Dependent Variable: ARESID  
 Method: Least Squares  
 Date: 08/24/18 Time: 05:11  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.014526	0.001627	8.927094	0.0000
IHSG_RF	-0.068257	0.046597	-1.464855	0.1486
SMB_OP	-0.030823	0.043990	-0.700685	0.4864
RMW	-0.004513	0.025183	-0.179192	0.8584

R-squared	0.057170	Mean dependent var	0.014720
Adjusted R-squared	0.006661	S.D. dependent var	0.012235
S.E. of regression	0.012194	Akaike info criterion	-5.911382
Sum squared resid	0.008327	Schwarz criterion	-5.771759
Log likelihood	181.3415	Hannan-Quinn criter.	-5.856768
F-statistic	1.131878	Durbin-Watson stat	2.034710
Prob(F-statistic)	0.344076		

### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.116179	Prob. F(2,54)	0.1304
Obs*R-squared	4.360831	Prob. Chi-Square(2)	0.1130

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 08/24/18 Time: 05:12

Sample: 2013M01 2017M12

Included observations: 60

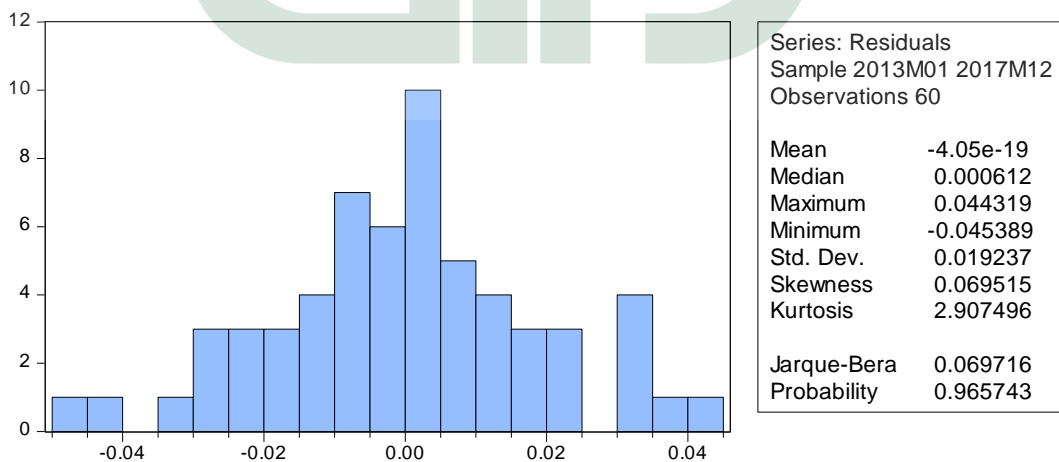
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000126	0.002585	-0.048676	0.9614
IHSG_RF	-0.009804	0.075049	-0.130628	0.8966
SMB_OP	-0.000721	0.069854	-0.010325	0.9918
RMW	-0.000569	0.040002	-0.014231	0.9887
RESID(-1)	-0.097481	0.134520	-0.724655	0.4718
RESID(-2)	0.244087	0.135161	1.805893	0.0765

R-squared	0.072681	Mean dependent var	-4.05E-19
Adjusted R-squared	-0.013182	S.D. dependent var	0.019237
S.E. of regression	0.019363	Akaike info criterion	-4.956247
Sum squared resid	0.020246	Schwarz criterion	-4.746812
Log likelihood	154.6874	Hannan-Quinn criter.	-4.874325
F-statistic	0.846472	Durbin-Watson stat	1.859587
Prob(F-statistic)	0.522964		

### d. Normalitas



## 5. Portofolio IHSG-Rf , SMB(INV), CMA

### a. Multikolinearitas

Variance Inflation Factors  
 Date: 08/24/18 Time: 05:44  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	7.31E-06	1.073374	NA
IHSG_RF	0.006384	1.150025	1.148897
SMB_INV	0.004076	1.164877	1.105897
CMA	0.001888	1.251958	1.222132

### b. Heteroskedastisitas

Heteroskedasticity Test: Glejser

F-statistic	1.161933	Prob. F(3,56)	0.3324
Obs*R-squared	3.515929	Prob. Chi-Square(3)	0.3187
Scaled explained SS	3.743002	Prob. Chi-Square(3)	0.2906

Test Equation:  
 Dependent Variable: ARESID  
 Method: Least Squares  
 Date: 08/24/18 Time: 05:45  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.014927	0.001689	8.837485	0.0000
IHSG_RF	-0.084548	0.049909	-1.694023	0.0958
SMB_INV	-0.020132	0.039879	-0.504820	0.6157
CMA	-0.008601	0.027141	-0.316893	0.7525

R-squared	0.058599	Mean dependent var	0.014945
Adjusted R-squared	0.008167	S.D. dependent var	0.012680
S.E. of regression	0.012628	Akaike info criterion	-5.841440
Sum squared resid	0.008930	Schwarz criterion	-5.701817
Log likelihood	179.2432	Hannan-Quinn criter.	-5.786826
F-statistic	1.161933	Durbin-Watson stat	2.017559
Prob(F-statistic)	0.332433		



### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.538928	Prob. F(2,54)	0.0883
Obs*R-squared	5.157116	Prob. Chi-Square(2)	0.0759

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 08/24/18 Time: 05:46

Sample: 2013M01 2017M12

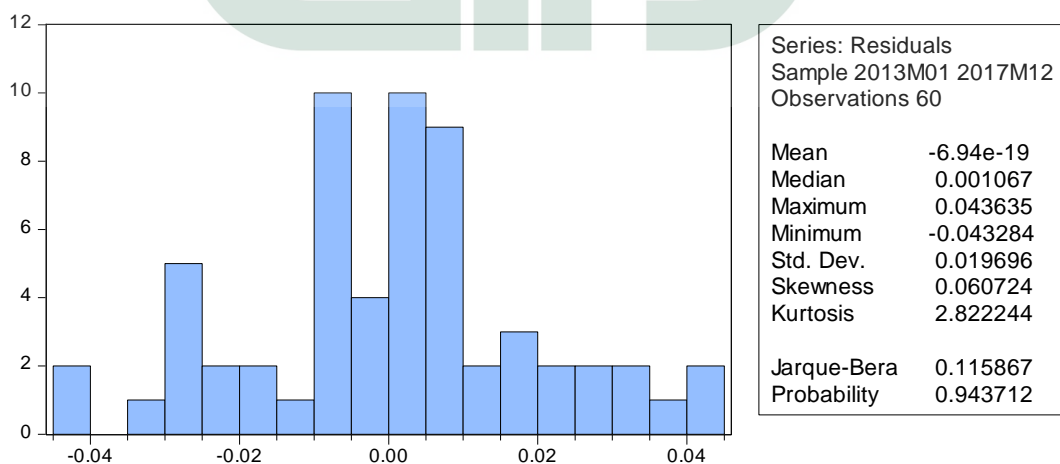
Included observations: 60

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.46E-05	0.002634	-0.028308	0.9775
IHSG_RF	-0.015391	0.078153	-0.196936	0.8446
SMB_INV	0.019843	0.063660	0.311706	0.7565
CMA	0.017391	0.043765	0.397367	0.6927
RESID(-1)	-0.180925	0.140791	-1.285061	0.2043
RESID(-2)	0.210954	0.136156	1.549360	0.1271

R-squared	0.085952	Mean dependent var	-6.94E-19
Adjusted R-squared	0.001318	S.D. dependent var	0.019696
S.E. of regression	0.019683	Akaike info criterion	-4.923531
Sum squared resid	0.020920	Schwarz criterion	-4.714097
Log likelihood	153.7059	Hannan-Quinn criter.	-4.841610
F-statistic	1.015571	Durbin-Watson stat	1.857493
Prob(F-statistic)	0.417655		

### d. Normalitas



## 6. Portofolio IHSG-Rf , SMB, HML, RMW, CMA (FF5FM)

### a. Multikolinearitas

Variance Inflation Factors  
 Date: 08/24/18 Time: 05:05  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	7.21E-06	1.083584	NA
IHSG_RF	0.006253	1.152854	1.151723
SMB	0.006627	1.665159	1.563041
HML	0.005808	3.071376	3.053480
RMW	0.005071	3.346532	3.325602
CMA	0.002397	1.626470	1.587722

### b. Heteroskedastisitas

Heteroskedasticity Test: Glejser

F-statistic	0.814752	Prob. F(5,54)	0.5444
Obs*R-squared	4.208880	Prob. Chi-Square(5)	0.5198
Scaled explained SS	4.391745	Prob. Chi-Square(5)	0.4945

Test Equation:  
 Dependent Variable: ARESID  
 Method: Least Squares  
 Date: 08/24/18 Time: 05:06  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.014287	0.001681	8.499793	0.0000
IHSG_RF	-0.075962	0.049493	-1.534784	0.1307
SMB	-0.031777	0.050950	-0.623683	0.5355
HML	0.037980	0.047701	0.796197	0.4294
RMW	0.018220	0.044572	0.408779	0.6843
CMA	-0.002607	0.030640	-0.085090	0.9325

R-squared	0.070148	Mean dependent var	0.014422
Adjusted R-squared	-0.015949	S.D. dependent var	0.012409
S.E. of regression	0.012508	Akaike info criterion	-5.830336
Sum squared resid	0.008448	Schwarz criterion	-5.620901
Log likelihood	180.9101	Hannan-Quinn criter.	-5.748414
F-statistic	0.814752	Durbin-Watson stat	2.097958
Prob(F-statistic)	0.544431		

### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.364828	Prob. F(2,52)	0.1040
Obs*R-squared	5.002311	Prob. Chi-Square(2)	0.0820

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 08/24/18 Time: 05:07

Sample: 2013M01 2017M12

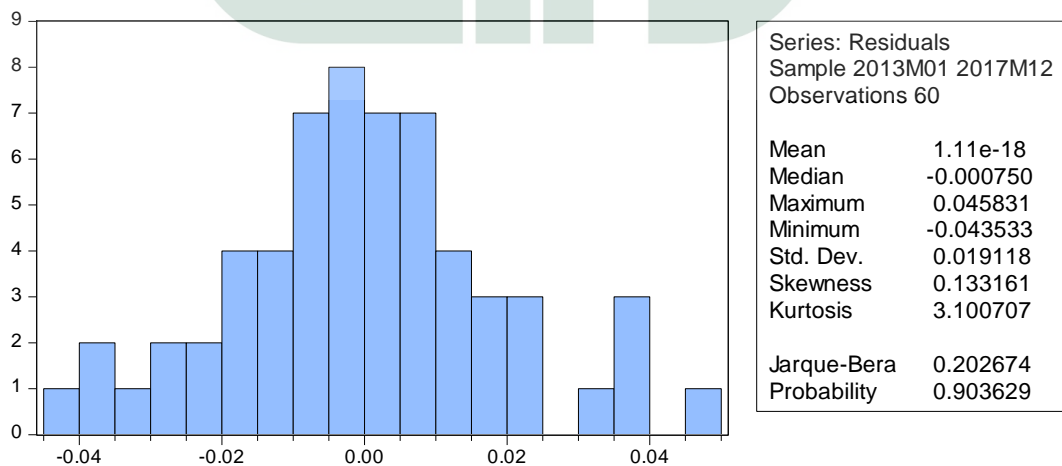
Included observations: 60

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000294	0.002625	-0.111927	0.9113
IHSG_RF	-0.000869	0.077476	-0.011215	0.9911
SMB	0.007154	0.080787	0.088558	0.9298
HML	-0.005151	0.075015	-0.068660	0.9455
RMW	0.003013	0.070308	0.042850	0.9660
CMA	0.017360	0.049716	0.349176	0.7284
RESID(-1)	-0.109112	0.142521	-0.765586	0.4474
RESID(-2)	0.263920	0.138540	1.905014	0.0623

R-squared	0.083372	Mean dependent var	1.11E-18
Adjusted R-squared	-0.040020	S.D. dependent var	0.019118
S.E. of regression	0.019497	Akaike info criterion	-4.913577
Sum squared resid	0.019766	Schwarz criterion	-4.634332
Log likelihood	155.4073	Hannan-Quinn criter.	-4.804349
F-statistic	0.675665	Durbin-Watson stat	1.854029
Prob(F-statistic)	0.691677		

### d. Normalitas



## Lampiran 27

### Output Uji Diagnostik Model Metode Syariah

#### 1. Portofolio SCAPM

##### a. Multikolinearitas

Variance Inflation Factors  
Date: 07/04/18 Time: 16:37  
Sample: 2013M01 2017M12  
Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	5.59E-06	1.005551	NA
ISSI_SBIS	0.004763	1.005551	1.000000

##### b. Heteroskedastisitas

Heteroskedasticity Test: Glejser

F-statistic	2.827933	Prob. F(1,58)	0.0980
Obs*R-squared	2.789442	Prob. Chi-Square(1)	0.0949
Scaled explained SS	2.857528	Prob. Chi-Square(1)	0.0909

Test Equation:  
Dependent Variable: ARESID  
Method: Least Squares  
Date: 07/10/18 Time: 09:19  
Sample: 2013M01 2017M12  
Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.013897	0.001432	9.703336	0.0000
ISSI_SBIS	-0.070323	0.041818	-1.681646	0.0980

R-squared	0.046491	Mean dependent var	0.014076
Adjusted R-squared	0.030051	S.D. dependent var	0.011233
S.E. of regression	0.011063	Akaike info criterion	-6.137692
Sum squared resid	0.007098	Schwarz criterion	-6.067881
Log likelihood	186.1308	Hannan-Quinn criter.	-6.110385
F-statistic	2.827933	Durbin-Watson stat	2.450073
Prob(F-statistic)	0.098015		

### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.341703	Prob. F(2,56)	0.2697
Obs*R-squared	2.743609	Prob. Chi-Square(2)	0.2536

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 07/04/18 Time: 16:38

Sample: 2013M01 2017M12

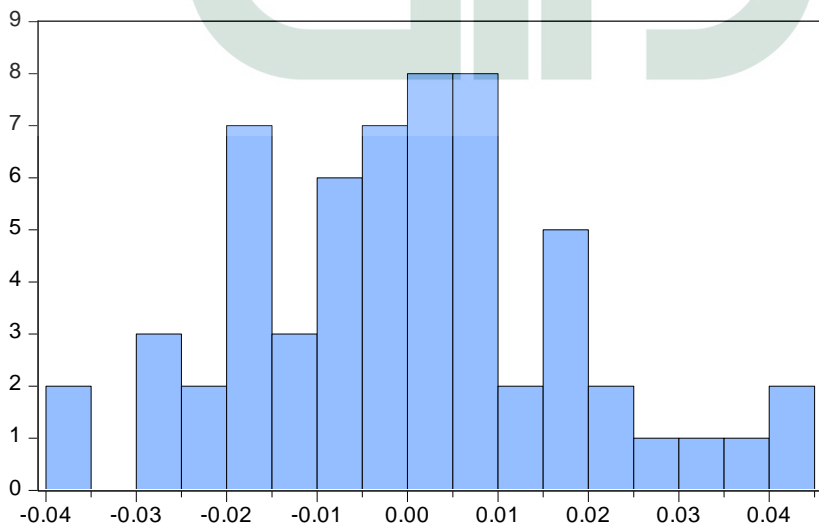
Included observations: 60

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.42E-05	0.002350	-0.010298	0.9918
ISSI_SBIS	-0.009871	0.069064	-0.142919	0.8869
RESID(-1)	-0.208410	0.133958	-1.555789	0.1254
RESID(-2)	0.023629	0.135283	0.174666	0.8620

R-squared	0.045727	Mean dependent var	-8.02E-19
Adjusted R-squared	-0.005395	S.D. dependent var	0.018101
S.E. of regression	0.018150	Akaike info criterion	-5.115936
Sum squared resid	0.018448	Schwarz criterion	-4.976313
Log likelihood	157.4781	Hannan-Quinn criter.	-5.061322
F-statistic	0.894468	Durbin-Watson stat	1.962874
Prob(F-statistic)	0.449787		

### d. Normalitas



Series: Residuals  
Sample 2013M01 2017M12  
Observations 60

Mean	-8.02e-19
Median	0.000212
Maximum	0.041849
Minimum	-0.038769
Std. Dev.	0.018101
Skewness	0.215116
Kurtosis	2.918356
Jarque-Bera	0.479413
Probability	0.786859

## 2. Portofolio SCAPM dengan Solver

### a. Multikolinearitas

Variance Inflation Factors  
 Date: 07/04/18 Time: 16:38  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	1.57E-05	1.005551	NA
ISSI_SBIS	0.013379	1.005551	1.000000

### b. Heteroskedastisitas

Heteroskedasticity Test: Harvey

F-statistic	2.055596	Prob. F(1,58)	0.1570
Obs*R-squared	2.053693	Prob. Chi-Square(1)	0.1518
Scaled explained SS	1.645214	Prob. Chi-Square(1)	0.1996

Test Equation:  
 Dependent Variable: LRESID2  
 Method: Least Squares  
 Date: 07/10/18 Time: 09:19  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-8.307861	0.257279	-32.29130	0.0000
ISSI_SBIS	-10.77067	7.512315	-1.433735	0.1570

R-squared	0.034228	Mean dependent var	-8.280453
Adjusted R-squared	0.017577	S.D. dependent var	2.005062
S.E. of regression	1.987363	Akaike info criterion	4.244259
Sum squared resid	229.0774	Schwarz criterion	4.314071
Log likelihood	-125.3278	Hannan-Quinn criter.	4.271566
F-statistic	2.055596	Durbin-Watson stat	2.167432
Prob(F-statistic)	0.157017		

### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.014180	Prob. F(2,56)	0.9859
Obs*R-squared	0.030369	Prob. Chi-Square(2)	0.9849

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 07/04/18 Time: 16:38

Sample: 2013M01 2017M12

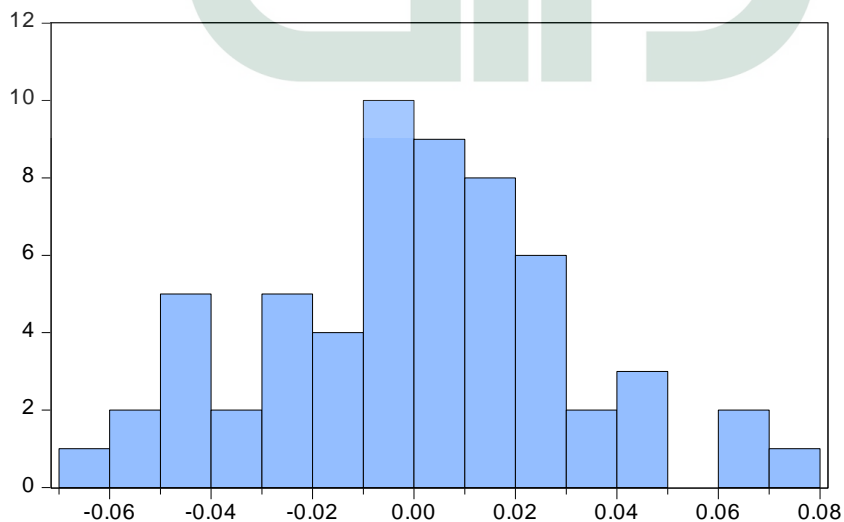
Included observations: 60

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.81E-06	0.004037	-0.001440	0.9989
ISSI_SBIS	0.001113	0.121195	0.009188	0.9927
RESID(-1)	0.011904	0.139799	0.085148	0.9324
RESID(-2)	-0.019686	0.136601	-0.144117	0.8859

R-squared	0.000506	Mean dependent var	2.43E-18
Adjusted R-squared	-0.053038	S.D. dependent var	0.030339
S.E. of regression	0.031133	Akaike info criterion	-4.036737
Sum squared resid	0.054280	Schwarz criterion	-3.897114
Log likelihood	125.1021	Hannan-Quinn criter.	-3.982122
F-statistic	0.009453	Durbin-Watson stat	1.954599
Prob(F-statistic)	0.998724		

### d. Normalitas



Series: Residuals Sample 2013M01 2017M12 Observations 60	
Mean	2.43e-18
Median	0.002948
Maximum	0.076536
Minimum	-0.061012
Std. Dev.	0.030339
Skewness	0.086707
Kurtosis	2.890798
Jarque-Bera	0.104994
Probability	0.948857

### 3. Portofolio ISSI-SBIS , SMB(B/M), HML (FF3FM)

#### a. Multikolinearitas

Variance Inflation Factors  
 Date: 08/24/18 Time: 06:03  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	5.73E-06	1.059058	NA
ISSI_SBIS	0.004901	1.061954	1.056091
SMB_BM	0.003944	1.357607	1.283410
HML	0.001741	1.256260	1.247250

#### b. Heteroskedastisitas

Heteroskedasticity Test: Glejser

F-statistic	0.838222	Prob. F(3,56)	0.4786
Obs*R-squared	2.578499	Prob. Chi-Square(3)	0.4613
Scaled explained SS	2.938526	Prob. Chi-Square(3)	0.4012

Test Equation:  
 Dependent Variable: ARESID  
 Method: Least Squares  
 Date: 08/24/18 Time: 06:03  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.012936	0.001560	8.291479	0.0000
ISSI_SBIS	-0.062509	0.045617	-1.370300	0.1761
SMB_BM	0.002629	0.040921	0.064245	0.9490
HML	0.015727	0.027193	0.578342	0.5654

R-squared	0.042975	Mean dependent var	0.012985
Adjusted R-squared	-0.008294	S.D. dependent var	0.011695
S.E. of regression	0.011743	Akaike info criterion	-5.986765
Sum squared resid	0.007722	Schwarz criterion	-5.847142
Log likelihood	183.6030	Hannan-Quinn criter.	-5.932151
F-statistic	0.838222	Durbin-Watson stat	2.359337
Prob(F-statistic)	0.478632		



### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.397752	Prob. F(2,54)	0.2559
Obs*R-squared	2.953231	Prob. Chi-Square(2)	0.2284

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 08/24/18 Time: 06:04

Sample: 2013M01 2017M12

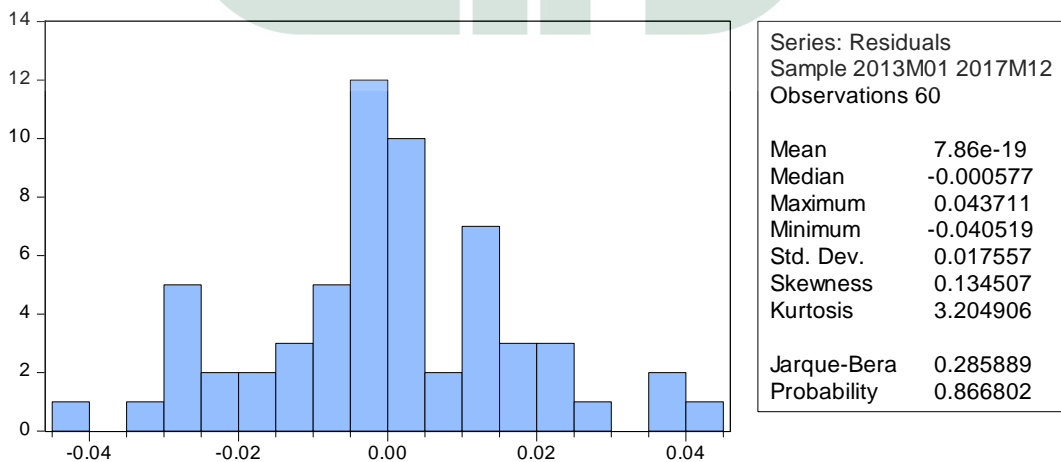
Included observations: 60

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.90E-05	0.002378	0.007992	0.9937
ISSI_SBIS	-0.017475	0.070311	-0.248541	0.8047
SMB_BM	0.005647	0.062492	0.090361	0.9283
HML	0.003053	0.041618	0.073348	0.9418
RESID(-1)	-0.213348	0.138079	-1.545119	0.1282
RESID(-2)	0.039629	0.137203	0.288832	0.7738

R-squared	0.049221	Mean dependent var	7.86E-19
Adjusted R-squared	-0.038815	S.D. dependent var	0.017557
S.E. of regression	0.017894	Akaike info criterion	-5.114034
Sum squared resid	0.017291	Schwarz criterion	-4.904600
Log likelihood	159.4210	Hannan-Quinn criter.	-5.032113
F-statistic	0.559101	Durbin-Watson stat	1.959628
Prob(F-statistic)	0.730764		

### d. Normalitas



#### 4. Portofolio ISSI-SBIS , SMB(OP), RMW

##### a. Multikolinearitas

Variance Inflation Factors  
 Date: 08/24/18 Time: 06:25  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	5.51E-06	1.060099	NA
ISSI_SBIS	0.005154	1.162209	1.155792
SMB_OP	0.004368	1.342958	1.266906
RMW	0.001349	1.139052	1.131928

##### b. Heteroskedastisitas

Heteroskedasticity Test: Glejser

F-statistic	1.169330	Prob. F(3,56)	0.3296
Obs*R-squared	3.536994	Prob. Chi-Square(3)	0.3160
Scaled explained SS	3.946347	Prob. Chi-Square(3)	0.2673

Test Equation:  
 Dependent Variable: ARESID  
 Method: Least Squares  
 Date: 08/24/18 Time: 06:27  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.012620	0.001501	8.405268	0.0000
ISSI_SBIS	-0.054409	0.045902	-1.185324	0.2409
SMB_OP	-0.021989	0.042256	-0.520374	0.6049
RMW	-0.025099	0.023483	-1.068783	0.2898

R-squared	0.058950	Mean dependent var	0.012836
Adjusted R-squared	0.008537	S.D. dependent var	0.011344
S.E. of regression	0.011295	Akaike info criterion	-6.064515
Sum squared resid	0.007145	Schwarz criterion	-5.924892
Log likelihood	185.9354	Hannan-Quinn criter.	-6.009901
F-statistic	1.169330	Durbin-Watson stat	2.459859
Prob(F-statistic)	0.329623		

### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.282334	Prob. F(2,54)	0.2857
Obs*R-squared	2.720427	Prob. Chi-Square(2)	0.2566

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 08/24/18 Time: 06:28

Sample: 2013M01 2017M12

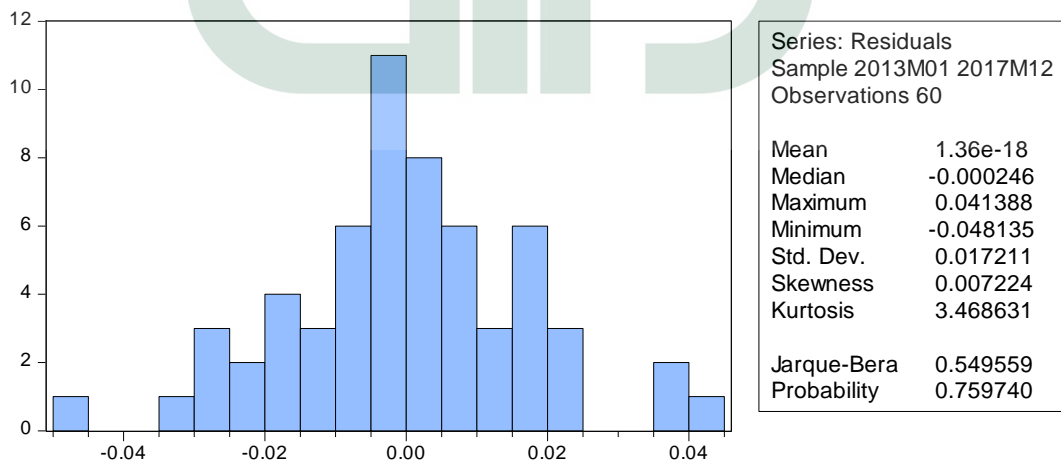
Included observations: 60

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.70E-05	0.002337	0.024389	0.9806
ISSI_SBIS	-0.019945	0.072512	-0.275059	0.7843
SMB_OP	0.010086	0.066062	0.152677	0.8792
RMW	-0.003867	0.036907	-0.104769	0.9169
RESID(-1)	-0.204891	0.139285	-1.471018	0.1471
RESID(-2)	0.042650	0.137445	0.310307	0.7575

R-squared	0.045340	Mean dependent var	1.36E-18
Adjusted R-squared	-0.043054	S.D. dependent var	0.017211
S.E. of regression	0.017578	Akaike info criterion	-5.149690
Sum squared resid	0.016685	Schwarz criterion	-4.940256
Log likelihood	160.4907	Hannan-Quinn criter.	-5.067769
F-statistic	0.512933	Durbin-Watson stat	1.953212
Prob(F-statistic)	0.765277		

### d. Normalitas



## 5. Portofolio IHSG-Rf , SMB(INV), CMA

### a. Multikolinearitas

Variance Inflation Factors  
 Date: 08/24/18 Time: 06:46  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	5.83E-06	1.061880	NA
ISSI_SBIS	0.005642	1.205175	1.198521
SMB_INV	0.003353	1.188886	1.128691
CMA	0.001531	1.259382	1.229379

### b. Heteroskedastisitas

Heteroskedasticity Test: Glejser

F-statistic	1.336318	Prob. F(3,56)	0.2718
Obs*R-squared	4.008356	Prob. Chi-Square(3)	0.2606
Scaled explained SS	4.517996	Prob. Chi-Square(3)	0.2107

Test Equation:

Dependent Variable: ARESID  
 Method: Least Squares  
 Date: 08/24/18 Time: 06:47  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.013178	0.001545	8.528369	0.0000
ISSI_SBIS	-0.096135	0.048067	-2.000039	0.0504
SMB_INV	0.009764	0.037056	0.263499	0.7931
CMA	-0.018336	0.025038	-0.732333	0.4670

R-squared	0.066806	Mean dependent var	0.013136
Adjusted R-squared	0.016813	S.D. dependent var	0.011714
S.E. of regression	0.011615	Akaike info criterion	-6.008680
Sum squared resid	0.007555	Schwarz criterion	-5.869057
Log likelihood	184.2604	Hannan-Quinn criter.	-5.954066
F-statistic	1.336318	Durbin-Watson stat	2.456008
Prob(F-statistic)	0.271787		

### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.882412	Prob. F(2,54)	0.1621
Obs*R-squared	3.910502	Prob. Chi-Square(2)	0.1415

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 08/24/18 Time: 06:47

Sample: 2013M01 2017M12

Included observations: 60

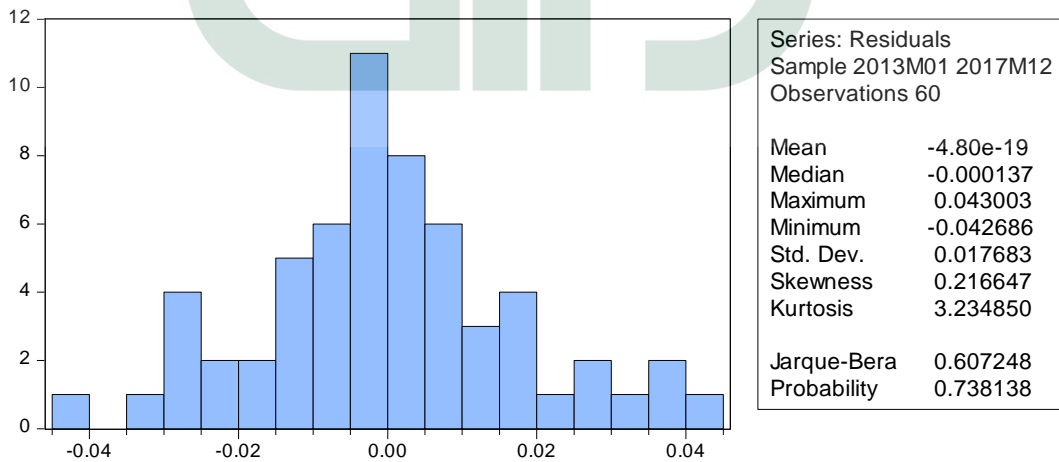
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.07E-05	0.002378	0.029733	0.9764
ISSI_SBIS	-0.014923	0.074542	-0.200199	0.8421
SMB_INV	0.031975	0.059641	0.536122	0.5941
CMA	0.019712	0.040055	0.492131	0.6246
RESID(-1)	-0.264936	0.145626	-1.819291	0.0744
RESID(-2)	0.029209	0.136843	0.213449	0.8318

R-squared	0.065175	Mean dependent var	-4.80E-19
Adjusted R-squared	-0.021383	S.D. dependent var	0.017683
S.E. of regression	0.017871	Akaike info criterion	-5.116642
Sum squared resid	0.017246	Schwarz criterion	-4.907208
Log likelihood	159.4993	Hannan-Quinn criter.	-5.034721
F-statistic	0.752965	Durbin-Watson stat	1.910537
Prob(F-statistic)	0.587594		

### d. Normalitas



## 6. Portofolio ISSI-SBIS , SMB, HML, RMW, CMA (FF5FM)

### a. Multikolinearitas

Variance Inflation Factors  
 Date: 08/24/18 Time: 06:07  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	5.67E-06	1.068817	NA
ISSI_SBIS	0.005472	1.209536	1.202858
SMB	0.005413	1.687046	1.588165
HML	0.003758	2.765296	2.745464
RMW	0.003803	3.148038	3.128349
CMA	0.001894	1.612365	1.573954

### b. Heteroskedastisitas

Heteroskedasticity Test: Glejser

F-statistic	0.917478	Prob. F(5,54)	0.4768
Obs*R-squared	4.697996	Prob. Chi-Square(5)	0.4538
Scaled explained SS	5.195269	Prob. Chi-Square(5)	0.3925

Test Equation:  
 Dependent Variable: ARESID  
 Method: Least Squares  
 Date: 08/24/18 Time: 06:07  
 Sample: 2013M01 2017M12  
 Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.012449	0.001528	8.149027	0.0000
ISSI_SBIS	-0.069093	0.047453	-1.456047	0.1512
SMB	-0.038473	0.047196	-0.815172	0.4186
HML	-0.000268	0.039324	-0.006808	0.9946
RMW	-0.038276	0.039561	-0.967525	0.3376
CMA	-0.020366	0.027918	-0.729491	0.4689

R-squared	0.078300	Mean dependent var	0.012593
Adjusted R-squared	-0.007043	S.D. dependent var	0.011406
S.E. of regression	0.011446	Akaike info criterion	-6.007703
Sum squared resid	0.007075	Schwarz criterion	-5.798269
Log likelihood	186.2311	Hannan-Quinn criter.	-5.925782
F-statistic	0.917478	Durbin-Watson stat	2.407092
Prob(F-statistic)	0.476799		

### c. Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.180445	Prob. F(2,52)	0.3152
Obs*R-squared	2.605796	Prob. Chi-Square(2)	0.2717

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 08/24/18 Time: 06:08

Sample: 2013M01 2017M12

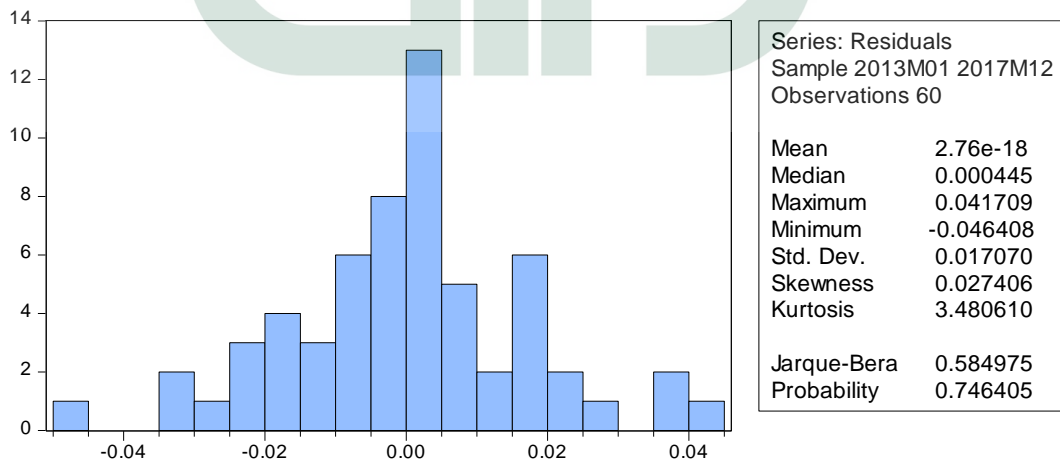
Included observations: 60

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.55E-06	0.002376	0.000653	0.9995
ISSI_SBIS	-0.011268	0.074089	-0.152091	0.8797
SMB	0.024600	0.075457	0.326017	0.7457
HML	0.002076	0.061354	0.033830	0.9731
RMW	0.005029	0.061553	0.081710	0.9352
CMA	0.017838	0.044996	0.396444	0.6934
RESID(-1)	-0.207875	0.148445	-1.400345	0.1673
RESID(-2)	0.046159	0.141188	0.326934	0.7450

R-squared	0.043430	Mean dependent var	2.76E-18
Adjusted R-squared	-0.085339	S.D. dependent var	0.017070
S.E. of regression	0.017783	Akaike info criterion	-5.097570
Sum squared resid	0.016444	Schwarz criterion	-4.818324
Log likelihood	160.9271	Hannan-Quinn criter.	-4.988341
F-statistic	0.337270	Durbin-Watson stat	1.916173
Prob(F-statistic)	0.933149		

### d. Normalitas



## Lampiran 9

### Data Laporan Keuangan Perusahaan

#### Kapitalisasi Pasar

Emiten	2012	2013	2014	2015	2016	2017
<b>ICBP</b>	Rp 45,481,441,200,000	Rp 59,475,730,800,000	Rp 76,385,497,400,000	Rp 78,572,105,150,000	Rp 100,000,861,100,000	Rp 96,210,741,000,000
<b>UNTR</b>	Rp 73,483,662,179,200	Rp 70,872,567,584,000	Rp 64,717,844,609,600	Rp 63,225,790,555,200	Rp 79,265,371,640,000	Rp 137,828,493,275,200
<b>KLBF</b>	Rp 53,826,876,436,600	Rp 58,593,902,637,500	Rp 85,781,473,461,300	Rp 61,875,161,185,200	Rp 71,015,809,996,650	Rp 61,875,161,185,200
<b>AKRA</b>	Rp 15,983,490,525,000	Rp 16,978,182,812,500	Rp 16,124,187,216,880	Rp 28,334,291,936,125	Rp 23,950,687,020,000	Rp 18,347,155,784,400
<b>BSDE</b>	Rp 19,421,666,217,120	Rp 22,571,125,603,680	Rp 33,161,182,737,560	Rp 34,644,053,145,600	Rp 33,777,951,816,960	Rp 31,949,515,678,720
<b>INDF</b>	Rp 51,365,495,025,000	Rp 57,950,814,900,000	Rp 59,267,878,875,000	Rp 45,438,707,137,500	Rp 69,584,880,012,500	Rp 61,243,474,837,500
<b>ADRO</b>	Rp 50,857,679,580,000	Rp 34,864,698,580,000	Rp 33,265,400,480,000	Rp 16,472,770,430,000	Rp 54,216,205,590,000	Rp 58,694,240,270,000
<b>TLKM</b>	Rp 182,447,993,484,000	Rp 216,719,992,260,000	Rp 288,791,989,686,000	Rp 312,983,988,822,000	Rp 401,183,985,672,000	Rp 358,847,987,184,000
<b>UNVR</b>	Rp 159,085,500,000,000	Rp 198,380,000,000,000	Rp 246,449,000,000,000	Rp 282,310,000,000,000	Rp 296,044,000,000,000	Rp 367,003,000,000,000
<b>ASII</b>	Rp 307,675,003,864,000	Rp 275,288,161,352,000	Rp 300,590,382,064,500	Rp 242,901,318,840,000	Rp 335,001,402,233,500	Rp 292,493,671,436,500

#### Book Value (Rp)

Emiten	2012	2013	2014	2015	2016
<b>ICBP</b>	2,055.72	2,275.05	2,579.33	2,810.33	1,586.43
<b>UNTR</b>	8,659.35	9,557.00	10,341.91	10,522.49	11,426.38
<b>KLBF</b>	120.97	167.39	209.44	233.35	265.89
<b>AKRA</b>	1,093.03	1,382.00	1,523.18	1,849.42	2,022.74
<b>BSDE</b>	601.91	766.72	837.25	979.36	1,069.31
<b>INDF</b>	3,888.50	4,370.30	4,695.49	4,911.10	5,004.47
<b>ADRO</b>	905.47	1,225.62	1,267.27	1,446.01	1,590.29
<b>TLKM</b>	3,322.32	768.1	854.41	926.87	1,047.06
<b>UNVR</b>	520.1	557.62	602.72	632.68	616.55
<b>ASII</b>	2,218.53	2,622.99	2,972.17	3,125.82	3,455.87



**Jumlah Saham Beredar (lembar)**

Emiten	2012	2013	2014	2015	2016
<b>ICBP</b>	5,830,954,000	5,830,954,000	5,830,954,000	5,830,954,000	11,661,908,000
<b>UNTR</b>	3,730,135,136	3,730,135,136	3,730,135,136	3,730,135,136	3,730,135,136
<b>KLBF</b>	50,780,072,110	46,875,122,110	46,875,122,110	46,875,122,110	46,875,122,110
<b>AKRA</b>	3,851,443,500	3,880,727,500	3,913,637,674	3,949,030,235	3,991,781,170
<b>BSDE</b>	17,496,996,592	17,496,996,592	18,371,846,392	19,246,696,192	19,246,696,192
<b>INDF</b>	8,780,426,500	8,780,426,500	8,780,426,500	8,780,426,500	8,780,426,500
<b>ADRO</b>	31,985,962,000	31,985,962,000	31,985,962,000	31,985,962,000	31,985,962,000
<b>TLKM</b>	20,159,999,280	100,799,996,400	100,799,996,400	100,799,996,400	100,799,996,400
<b>UNVR</b>	7,630,000,000	7,630,000,000	7,630,000,000	7,630,000,000	7,630,000,000
<b>ASII</b>	40,483,553,140	40,483,553,140	40,483,553,140	40,483,553,140	40,483,553,140

**Book Equity**

Emiten	2012	2013	2014	2015	2016
<b>ICBP</b>	Rp 11,986,808,756,880	Rp 13,265,711,897,700	Rp 15,039,954,580,820	Rp 16,386,904,954,820	Rp 18,500,800,708,440
<b>UNTR</b>	Rp 32,300,545,689,922	Rp 35,648,901,494,752	Rp 38,576,721,864,350	Rp 39,250,309,667,209	Rp 42,621,941,515,288
<b>KLBF</b>	Rp 6,142,865,323,147	Rp 7,846,426,689,993	Rp 9,817,525,574,718	Rp 10,938,309,744,369	Rp 12,463,626,217,828
<b>AKRA</b>	Rp 4,209,743,288,805	Rp 5,363,165,405,000	Rp 5,961,174,632,283	Rp 7,303,415,497,214	Rp 8,074,335,443,806
<b>BSDE</b>	Rp 10,531,617,218,691	Rp 13,415,297,227,018	Rp 15,381,828,391,702	Rp 18,849,444,382,597	Rp 20,580,684,705,068
<b>INDF</b>	Rp 34,142,688,445,250	Rp 38,373,097,932,950	Rp 41,228,404,826,485	Rp 43,121,552,584,150	Rp 43,941,381,006,455
<b>ADRO</b>	Rp 28,962,329,012,140	Rp 39,202,634,746,440	Rp 40,534,850,063,740	Rp 46,252,020,911,620	Rp 50,866,955,508,980
<b>TLKM</b>	Rp 66,977,968,807,930	Rp 77,424,477,234,840	Rp 86,124,524,924,124	Rp 93,428,492,663,268	Rp 105,543,644,230,584
<b>UNVR</b>	Rp 3,968,363,000,000	Rp 4,254,640,600,000	Rp 4,598,753,600,000	Rp 4,827,348,400,000	Rp 4,704,276,500,000
<b>ASII</b>	Rp 89,813,977,147,684	Rp 106,187,955,050,689	Rp 120,324,002,136,114	Rp 126,544,300,076,075	Rp 139,905,896,789,932

**BE/ME**

Emiten	2012	2013	2014	2015	2016
<b>ICBP</b>	0.2636	0.2230	0.1969	0.2086	0.1850
<b>UNTR</b>	0.4396	0.5030	0.5961	0.6208	0.5377
<b>KLBF</b>	0.1141	0.1339	0.1144	0.1768	0.1755
<b>AKRA</b>	0.2634	0.3159	0.3697	0.2578	0.3371
<b>BSDE</b>	0.5423	0.5944	0.4639	0.5441	0.6093
<b>INDF</b>	0.6647	0.6622	0.6956	0.9490	0.6315
<b>ADRO</b>	0.5695	1.1244	1.2185	2.8078	0.9382
<b>TLKM</b>	0.3671	0.3573	0.2982	0.2985	0.2631
<b>UNVR</b>	0.0249	0.0214	0.0187	0.0171	0.0159
<b>ASII</b>	0.2919	0.3857	0.4003	0.5210	0.4176

**ROE (%)**

Emiten	2012	2013	2014	2015	2016
<b>ICBP</b>	19.04	16.85	16.83	17.84	19.63
<b>UNTR</b>	17.81	13.46	12.55	7.11	11.98
<b>KLBF</b>	24.08	23.18	21.61	18.81	18.86
<b>AKRA</b>	14.7	11.48	13.26	14.53	12.97
<b>BSDE</b>	14.04	21.66	24.84	15.35	8.73
<b>INDF</b>	14	8.9	12.48	8.6	11.99
<b>ADRO</b>	12.8	7.18	5.62	4.5	9
<b>TLKM</b>	27.41	26.21	24.9	24.96	27.64
<b>UNVR</b>	121.94	125.81	124.78	121.22	135.85
<b>ASII</b>	25.32	21	18.39	12.34	13.08

**Assets Growth**

Emiten	2012	2013	2014	2015	2016
<b>ICBP</b>	16.62%	19.79%	17.13%	6.63%	8.82%
<b>UNTR</b>	8.31%	14.04%	5.11%	2.36%	3.69%
<b>KLBF</b>	13.82%	20.14%	9.81%	10.23%	11.17%
<b>AKRA</b>	41.88%	24.14%	1.09%	2.78%	4.13%
<b>BSDE</b>	31.04%	34.71%	24.64%	28.03%	6.30%
<b>INDF</b>	10.71%	31.64%	10.05%	6.86%	-10.52%
<b>ADRO</b>	26.11%	27.67%	-3.46%	3.05%	6.62%
<b>TLKM</b>	8.07%	14.89%	10.12%	17.94%	8.09%
<b>UNVR</b>	14.34%	11.37%	6.99%	10.15%	6.46%
<b>ASII</b>	18.73%	17.40%	10.30%	3.99%	6.69%

Lampiran 10

**Tabel Pembentukan Portofolio Berdasarkan Kombinasi *Size***

**Tabel Portofolio berdasarkan *Size***

	2013	2014	2015	2016	2017
Small	AKRA	AKRA	ADRO	AKRA	AKRA
	BSDE	BSDE	AKRA	BSDE	BSDE
	ADRO	ADRO	BSDE	ADRO	ADRO
	INDF	INDF	INDF	INDF	INDF
	KLBF	UNTR	KLBF	KLBF	KLBF
Big	ICBP	ICBP	UNTR	UNTR	ICBP
	UNTR	KLBF	ICBP	ICBP	UNTR
	UNVR	UNVR	ASII	UNVR	ASII
	TLKM	TLKM	UNVR	ASII	TLKM
	ASII	ASII	TLKM	TLKM	UNVR

**Tabel Portofolio berdasarkan Kombinasi Size-BE/ME**

Size	2013			2014			2015			2016			2017		
	B/M			B/M			B/M			B/M			B/M		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Small	KLBF AKRA	-	BSDE ADRO INDF	-	AKRA UNTR	BSDE INDF ADRO	KLBF	AKRA BSDE	INDF ADRO	KLBF	AKRA BSDE	INDF ADRO	KLBF	AKRA	BSDE INDF ADRO
Big	UNVR	ICBP ASII TLKM UNTR	-	UNVR KLBF ICBP	TLKM ASII	-	UNVR ICBP	TLKM ASII	UNTR	UNVR ICBP	TLKM ASII	UNTR	UNVR ICBP	TLKM ASII UNTR	-

**Tabel Portofolio berdasarkan Kombinasi Size-OP**

Size	2013			2014			2015			2016			2017		
	OP			OP			OP			OP			OP		
	Weak	Neutral	Robust	Weak	Neutral	Robust	Weak	Neutral	Robust	Weak	Neutral	Robust	Weak	Neutral	Robust
Small	ADRO INDF BSDE	AKRA KLBF	-	ADRO INDF AKRA	UNTR BSDE	-	ADRO INDF	AKRA KLBF	BSDE	ADRO INDF	AKRA BSDE	KLBF	BSDE ADRO	INDF AKRA KLBF	-
Big	-	UNTR ICBP	ASII TLKM UNVR	-	ICBP ASII	KLBF TLKM UNVR	UNTR	ICBP ASII	TLKM UNVR	UNTR	ASII ICBP	TLKM UNVR	UNTR	ASII	ICBP TLKM UNVR

**Tabel Portofolio berdasarkan Kombinasi Size-Investment**

Size	2013			2014			2015			2016			2017		
	Inv			Inv			Inv			Inv			Inv		
	Conservative	Intermediate	Aggressive	Conservative	Intermediate	Aggressive	Conservative	Intermediate	Aggressive	Conservative	Intermediate	Aggressive	Conservative	Intermediate	Aggressive
Small	INDF	KLBF	ADRO BSDE AKRA	UNTR	AKRA	ADRO INDF BSDE	ADRO AKRA	KLBF INDF	BSDE	AKRA ADRO	INDF	KLBF BSDE	INDF AKRA	BSDE ADRO	KLBF
Big	TLKM UNTR	UNVR ICBP ASII	-	UNVR TLKM	ASII ICBP KLBF	-	UNTR	UNVR TLKM	ASII ICBP	UNTR	ASII ICBP UNVR	TLKM	UNTR	UNVR ASII	TLKM ICBP

## DAFTAR RIWAYAT HIDUP

Nama : Zahra Laradiva Farizka Putri Hassany  
Tempat , tanggal lahir : Yogyakarta, 18 Juli 1993  
Orang Tua  
Ayah : Drs. Hasanuddin Noor  
Ibu : Dra. Rahmi Tri Mei Maharani M.M.  
Alamat : Rejosari, Rejowinangun, Kotagede, Yogyakarta.  
Email : zahra.laradiva@gmail.com

### Pendidikan Formal

- |   |  |           |
|---|--|-----------|
| 1 | TK Roudhotul Athfal  | 1997-1999 |
| 2 | SDIT Luqman AL-Hakim   | 1999-2005 |
| 3 | MTs Mu'allimaat Muhammadiyah Yogyakarta  | 2005-2008 |
| 4 | MA Mu'allimaat Muhammadiyah Yogyakarta   | 2008-2011 |
| 5 | UIN Sunan Kalijaga Yogyakarta  | 2011-2015 |
| 6 | Pascasarjana Konsentrasi Keuangan dan Perbankan Syariah<br>UIN Sunan Kalijaga Yogyakarta | 2015-2018 |

### Pendidikan Non-Formal

- |   |   |      |
|---|---|------|
| 1 | <i>Short Course</i> Brevet Pajak AB, P2EB Universitas Gadjah Mada | 2016 |
|---|---|------|