OPTIMISASI PORTOFOLIO *ROBUST MEAN VARIANCE* DENGAN MENGGUNAKAN METODE *TRIMMED MEAN*

(Studi Kasus: Saham Syariah di *Jakarta Islamic Index* (JII)**)**

SKRIPSI

Untuk memenuhi sebagai syarat guna

Memperoleh Drajat Sarjana S-1 Program Studi Matematika

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Assalamu'alaikum wr. wb.

Setelah membaca, meneliti, memberikan petunjuk dan mengoreksi serta mengadakan perbaikan seperlunya, maka kami selaku pembimbing berpendapat bahwa skripsi Saudara:

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sudah dapat diajukan kembali kepada Program Studi Matematika Fakultas Sains dan Teknologi UIN Sunan Kalijaga Yogyakarta sebagai salah satu syarat untuk memperoleh gelar Sarjana Strata Satu dalam Matematika.

Dengan ini kami mengharap agar skripsi/tugas akhir Saudara tersebut di atas dapat segera dimunaqosyahkan. Atas perhatiannya kami ucapkan terima kasih.

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Dengan ini saya menyatakan bahwa skripsi ini tidak terdapat karya yang pernah diajukan untuk memperoleh gelar kesarjanaan di suatu Perguruan Tinggi, dan sepanjang pengetahuan saya juga tidak terdapat karya atau pendapat yang pernah ditulis atau diterbitkan orang lain, kecuali yang secara tertulis diacu dalam naskah ini dan disebutkan dalam daftar pustaka.

Yogyakarta, 16 Januari 2014

Yang menyatakan

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MOTTO

.....وَمَنْ يَتَوَكَّلْ عَلَى اللَّهِ فَهُوَ حَسْبُهُ إِنَّ اللَّهَ بَالِغُ أَمْرِهِ.....

''Dan barangsiapa yang bertawakkal kepada Allah niscaya Allah akan mencukupkan (keperluan)nya. Sesungguhnya Allah melaksanakan urusan yang (dikehendaki)Nya.''

(الطلاق:٣)

Orang yang HEBAT bukanlah orang yang sukses dalam segala hal, Tetapi mereka yang mampu mengoptimalkan hari ini dengan apa yang ada ditangannya..... dan..... selalu MENGUCAPKAN SYUKUR

(MOTIVATION**)**

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Skripsi ini saya persembahkan kepada:
Almamater tercinta Universitas Islam Negeri Sunan Kalijaga Yogyakarta

Kedua Orang Tuaku yang selalu memberikan doa, memberikan nasehat dan pelajaran hidup yang tak ternilai harganya

Abi, Adik, dan semua keluarga besarku yang selalu menyayangiku, Memberikan kenyamanan dalam persaudaraan dan inspirasi kehidupan

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9. Bang Imron dan kang Najib selaku sebagai korektor dalam penulisan skripsi, sehingga penulis mampu menuliskan skripsi sesuai prosedur yang ada.
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Penulis

Anita Rohmah

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OPTIMISASI PORTOFOLIO *ROBUST MEAN VARIANCE* DENGAN MENGGUNAKAN MODEL *TRIMMED MEAN*

ABSTRAK

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Optimisasi portofolio adalah metode yang baik dan paling sering digunakan untuk pemilihan portofolio. Optimisasi portofolio pertama kali dikemukakan oleh Markowitz. Pendekatan yang dikemukakan oleh Markowitz dikenal dengan Optimisasi Portofolio Markowitz atau Optimisasi portofolio *Mean Variance*. Dalam optimisasi *mean variance* membutuhkan parameter mean dan matriks kovarians yang di estimasi dari sampel data *return.* Estimasi parameter mean dan matriks kovarians menimbulkan resiko estimasi dan menghasilkan bobot portofolio yang berfluktuasi (naik turunnya) dari waktu ke waktu. Selain itu, model *mean variance* Markowitz juga memberikan hasil portofolio yang kurang baik untuk waktu jangka yang lama. Sehingga permasalahannya adalah bagaimana membuat portofolio yang tidak hanya optimal tetapi juga *robust* (kokoh).

Penelitian ini membahas tentang optimisasi portofolio Robust *Mean Variance* dengan model *Trimmed Mean* pada populasi saham syariah *Jakarta Islamic Indeks* (JII) yang tergabung dalam Bursa Efek Indonesia (BEI). Sampel yang diambil berdasarkan teknik *purposive random sampling,* yaitu teknik pengambilan sampel yang mendasarkan pada kriteria-kriteria tertentu, kriteria-kriteria tersebut adalah yang pertama sampel diambil berdasarkan saham-saham yang selalu masuk dalam JII dan diperoleh 17 saham, kedua berdasarkan kriteria pertama dipilih saham-saham yang memiliki nilai *mean return*. Saham-saham yang terpilih adalah ASRI, CPIN, KLBF, SMGR, LPKR, UNVR, INTP, ASII dan TLKM pada periode 3 Januari 2011 – 30 Juni 2013. Optimisasi portofolio Robust *Mean Variance* dengan model *trimmed mean* dilakukan terhadap 2 (dua) kelompok portofolio.

Portofolio optimal terdapat pada kelompok Portofolio Pertama, dengan proporsi terbesar terdapat pada saham KLBF, yaitu 86,70% dan saham SMGR sebesar 13,30%, dengan *mean return* portofolio sebesar 0,0654% dan resiko portofolio sebesar 0,3637% pada setiap harinya.

Kata Kunci : Portofolio Optimal, *Expected Return* dan *Risk, Efficient Frontier*, *Shape Ratio, Trimmed Mean*

BAB I

PENDAHULUAN

1.1. Latar Belakang

Portofolio adalah gabungan atau kombinasi dari berbagai sekuritas yang disusun untuk mencapai tujuan investor dalam melakukan investasi. Investor harus memilih dan mengalokasikan kekayaannya di tengah berbagai sekuritas. Saham adalah salah satu jenis sekuritas yang diperdagangkan di pasar finansial. Jika para investor membeli saham, berarti mereka membeli prospek perusahaan dari saham tersebut. Kalau prospek perusahaan membaik, harga saham tersebut akan meningkat. Dengan gambaran seperti itu, orang akan tertarik untuk melakukan investasi. Investasi di sektor finansial menjadi primadona dikalangan investor karena menjanjikan tingkat *return* yang lebih tinggi dibandingkan dengan investasi di sektor real aset. Namun perlu diketahui bahwa semakin besar *return* maka tingkat resikonya semakin meningkat pula.

Investor pada umumnya merupakan pihak yang sangat tidak menyukai resiko tetapi menginginkan *return* yang maksimal, sehingga jika dirumuskan dalam sebuah model optimisasi, akan terdapat dua fungsi objektif yang dipertimbangkan investor yaitu memaksimalkan nilai *expected return* dan meminimalkan nilai resiko.

Cara mengurangi resiko seorang investor dapat melakukan dengan diversifikasi investasi. Diversifikasi merupakan pembentukan portofolio yang merupakan kumpulan beberapa jenis sekuritas yang berbeda. Diversifikasi menyebabkan resiko salah satu sekuritas dalam portofolio ditutupi oleh keungtungan sekuritas lainnya dalam portofolio tersebut.

Harry M. Markowitz (1952) telah membuktikan bahwa resiko berinvestasi dapat dikurangi dengan menggabungkan beberapa aset ke dalam sebuah portofolio. Metode Markowitz menunjukkan bahwa apabila aset-aset keuangan dalam suatu portofolio memiliki korelasi *return* yang lebih kecil dari positif satu, resiko portofolio secara keseluruhan dapat diturunkan. Resiko minimum akan dicapai apabila korelasi *return* investasi adalah negatif sempurna.

Model resiko dan *return* tradisional cenderung mengukur resiko dalam bentuk *volatility* atau *standard deviation*, artinya resiko dilihat sebagai fluktuasi (naik turunnya) *return* dari *expected return* (return yang diharapkan). *Mean-variance* salah satu ukuran resiko adalah *variance*. Investor yang dihadapkan pada pilihan investasi dengan tingkat *return* diharapkan (*expected return*) sama, tetapi *variance* berbeda, selalu memilih investasi yang *variance*-nya lebih rendah.

Mean variance merupakan metode yang dikenalkan oleh Markowitz, dimana karakteristik aset utama yang dipertimbangkan adalah *return* dan resiko (*mean variance*). Data yang di input dalam proses Markowitz adalah struktur *mean* dan kovarians sekuritas yang disusun dalam suatu *matriks-kovarians*.

Mean variance dihitung setelah mengestimasi model (estimasi μ dan ∑), dan dihasilkan portofolio optimal maka mungkin sangat biasa jika kesalahan statistik terjadi selama proses estimasi. Jenis kesalahan ini disebut kesalahan estimasi resiko.[1] *Mean variance* portofolio yang dibangun dengan menggunakan sampel *mean* dan *matriks-kovarians* aset *return* yang berkinerja buruk karena kesalahan estimasi sampel, mengakibatkan estimator tidak stabil dan menghasilkan bobot portofolio yang berfluktuasi (naik turunnya) dari waktu ke waktu. Ketidakstabilan dari *mean variance* portofolio dapat mengakibatkan kesulitan yang berhubungan dengan estimasi aset *return*. Selain itu, model *mean variance* Markowitz juga memberikan hasil portofolio yang kurang baik untuk waktu jangka yang lama. Sehingga permasalahannya adalah bagaimana membuat portofolio yang tidak hanya optimal tetapi juga robust (kokoh).

[1] Cedric Perret-Gentil,. *Robust Mean Variance Portofolio Selection*. (Geneva: 2004, International Center for Financial Asset Management and Engineering). P. 140

Para peniliti baru-baru ini memfokuskan pada portofolio *minimum variance* yang mengandalkan estimasi *matriks kovarians.*[2] Namun, portofolio ini juga cukup sensitif terhadap kesalahan estimasi dan memiliki bobot yang tidak stabil yang berfluktuasi (naik turunnya) dari waktu ke waktu.

Tukey,[3] menyatakan untuk menyelesaikan ketidakstabilan *mean variance* tersebut diusulkannya estimasi robust dalam mengestimasi aset *return* dengan menggunakan metode *Trimmed Mean*. *Trimmed Mean* merupakan salah satu estimasi robust yang dapat mengestimasi aset *return* agar tidak terjadi adanya fluktuasi dari waktu ke waktu.

Di sisi lain, sejak berdirinya PT. Bursa Efek Jakarta (BEJ) yang telah menerbitkan daftar reksadana, saham, dan obligasi syariah dalam *Jakarta Islamic Index* (JII) pada 3 Juli 2000 lalu. Kemudian, pada tanggal 14 dan 15 Maret 2003 dengan ditandatanganinya nota kesepahaman antara BAPEPAM dengan Dewan Syariah Nasional - Majelis Ulama Indonesia (DSN-MUI) tentang prinsip pasar modal syariah. Sejak itu, pasar modal syariah mengalami perkembangan cukup signifikan.[4]

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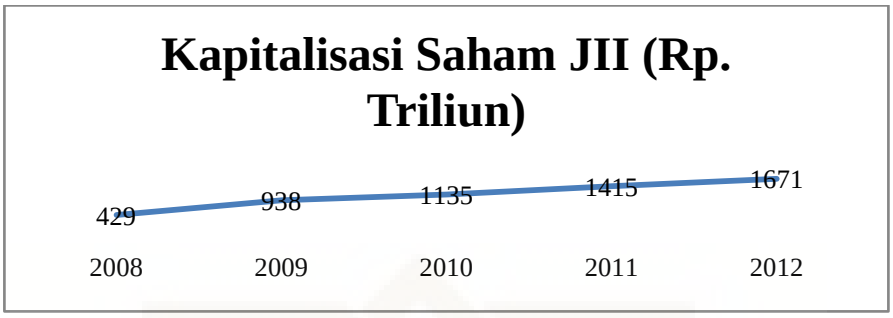
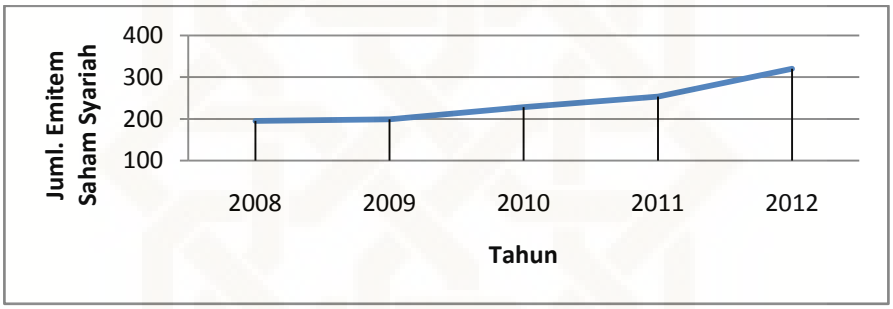
[2] Victor DeMiguel. *Portofolio Selection with Robust Estimation*. (London: 2007). Operations Research manuscript OPRE-2007-02-106

[3] Subhra Sankar Dhar and Probal Chaudhuri. *On The Derivates Of Trimmed Mean*. Theoretical Statistics and Mathematics Unit, Indian Statistical Institute, Calcutta

[4] www.bi.co.id



Gambar 1.1



Gambar 1.2

Dapat dilihat dari gambar di atas, selama 5 (lima) tahun terakhir, kapitalisasi saham yang tergabung dalam JII mencapai Rp. 429 triliun dan meningkat hampir 4 kali lipat menjadi Rp. 1671 triliun pada tahun 2012 (Gambar 1.1). Jumlah emitem saham syariah meningkat lebih dari 64%, yaitu 195 emitem saham pada tahun 2008 menjadi 320 emitem pada tahun 2012 (Gambar 1.2). Hal tersebut menunjukkan bahwa investasi saham syariah menunjukkan potensi pengembangan dari tahun ke tahun.

Sehubungan dengan hal tersebut di atas, maka peneliti akan membuat optimisasi portofolio robust *mean variance* dengan menggunakan metode

trimmed mean yang diaplikasikan pada saham syariah *Jakarta Islamic Index* (JII) dengan dibantu oleh *software* Microsoft Office Excel dan MATLAB untuk mempermudah analisis.

1.2. Rumusan Masalah

Rumusan masalah yang akan dikaji dalam penelitian ini adalah sebagai berikut:

1. Bagaimana proses pembentukkan optimisasi portofolio robust *mean variance* dengan menggunakan metode *trimmed mean*?
2. Berapa besar proporsi dari masing-masing saham pembentuk portofolio optimal robust pada saham syariah *JII*?
3. Berapa besar *expected return* dan resiko portofolio yang diberikan dalam optimisasi portofolio robust yang terbentuk pada saham syariah *JII*?

1.3. Batasan Masalah

Ruang lingkup penelitian ini dibatasi agar tidak melebarnya masalah yang ada, maka peneliti memberikan batasan masalah agar dapat mempermudah dalam penelitian. Penelitian ini dibatasi dengan mencari bentuk portofolio optimal menggunakan metode *trimmed mean* yang digunakan untuk mengestimasi parameter robust-nya. Obyek yang digunakan adalah harga penutupan (*closing price*) saham syariah harian yang terdaftar di

Jakarta Islamic Index (JII) di *Bursa Efek Indonesia* (BEI) yaitu PT. Alam Sutera Realty Tbk (ASRI), PT. Charoen Pokphand Indonesia Tbk (CPIN), PT. Kalbe Farma Tbk (KLBF), PT. Semen Gresik Tbk (SMGR), PT. Lippo Karawaci Tbk (LPKR), PT. Unilever Indonesia Tbk (UNVR), PT. Indocement Tuggal Prakas Tbk (INTP), PT. Astra Internasional Tbk (ASII) dan PT. Telekomunikasi Indonesia Tbk (TLKM) pada periode 3 januari 2011- 30 Juni 2013.

1.4. Tujuan Penelitian

Berdasarkan permasalahan di atas, dapat dirumuskan tujuan dari penelitian ini adalah:

1. Mengetahui proses pembentukkan optimisasi portofolio robust *mean variance* dengan menggunakan metode *trimmed mean*
2. Mengetahui besarnya proporsi dari masing-masing saham pembentuk portofolio optimal robust pada saham syariah *JII*
3. Mengetahui besarnya *expected return* dan resiko portofolio dalam portofolio optimal robust yang terbentuk pada saham syariah *JII*

1.5. Manfaat Penelitian

Hasil dari penelitian ini diharapkan dapat memberikan manfaat bagi beberapa aspek, yaitu:

1. Aspek Teoritis, sebagai referensi untuk menambah ilmu pengetahuan yang berkaitan dengan pembentukan portofolio yang robust dengan metode *trimmed mean*
2. Aspek Praktis, penelitian ini diharapkan dapat dijadikan masukan dalam pembentukan portofolio optimal untuk mengambil keputusan investasi dalam saham-saham *Jakarta Islamic Index* (JII) di pasar modal.

1.6. Tinjauan Pustaka

Penelitian tentang portofolio optimal yang robust, peneliti menggunakan beberapa penelitian-penelitian sebelumnya yang berkaitan dengan pembentukan portofolio optimal yang robust dengan menggunakan estimator robust, diantaranya adalah:

1. Fitriasyari Lilianjani dengan judul "Optimisasi Portofolio Robust", dalam skripsi saudari Fitri adalah membahas tentang portofolio yang lebih robust dengan memperkecil error estimasi untuk menghasilkan bobot portofolio yang optimal dan bobot portofolio yang lebih stabil terhadap waktu yaitu dengan cara membandingkan portofolio yang robust dengan portofolio *mean-variance multi-objective* dengan cara menghitung jarak mahanalobis kuadrat terhadap kuarti distribusi chi-kuadrat dengan software R versi 2.6.1, Microsoft Office Excel 2007 dan SPSS.
2. Febtiana Tia Pika, dengan judul "Optimisasi Portofolio Robust Menggunakan Metode *Minimum Vektor Variance*". Dalam penelitian

saudari pika juga membahas tentang pembentukan portofolio dengan tujuan mengurangi resiko investasi dengan vektor *mean* dan *matriks-kovarains* yang diestimasi menggunakan metode klasik ternyata menghasilkan performa portofolio yang kurang baik dan sering kali tidak sesuai dengan harapan yang diinginkan investor. Hal tersebut disebabkan data yang digunakan untuk mengestimasi vektor *mean* dan *matriks-kovarians* pada kenyataannya tidak berdistribusi normal dan sering kali estimasi parameter tersebut terganggu karena adanya *outlier* pada data. Dalam mengatasi hal tersebut digunakan metode *minimum vector variance* (MVV) untuk mengatasi vektor *mean* dan *matriks-kovarians* yang Robust (kokoh) yaitu dengan meminimumkan trace dari kuadrat *matriks-kovarians* yang setelah estimasi ke dua parameter pembentukan portofolio menjadi Robust, kemudian di cari proporsi portofolio yang optimal dengan metode *Resampled Efficient Frontier* (REF) berdasarkan model *mean-variance* dari Markowitz.

Pada penelitian yang sekarang metode yang digunakan adalah estimator *center* robust yaitu *trimmed mean*. Peneliti menggunakan data harga penutupan (*closing price*) saham harian yang terdaftar di *Jakarta Islamic Index* (JII) pada periode 3 januari 2011 – 30 juni 2013.

Tabel 1.1 Perbedaan penelitian yang menjadi tinjauan pustaka:

No	Nama Peneliti	Judul	Metode	Obyek
1	Fitriasyari Lilianjani	Optimisasi Portofolio Robust	Menghitung jarak mahanalobis kuadrat terhadap kuarti distribusi chi-kuadrat	Data harga saham PT. Medco Energi Internasional Tbk, PT. Matahari Putra Prima Tbk, dan PT. Telekomunikasi Indonesia Tbk
2	Febtiana Tia Pika	Optimisasi Portofolio Robust Menggunakan Metode *Minimum Vector Variance*	*Minimum Vector Variance*	Data harga saham Indonesia, London dan Amerika
3	Anita Rohmah	Optimisasi Portofolio Robust *Mean Variance* dengan Menggunakan Metode *Trimmed Mean*	*Trimmed Mean (TM)*	PT.ASRI Tbk, PT. ASII Tbk, PT. KLBF Tbk, PT. SMGR Tbk, PT. TLKM Tbk, PT. CPIN Tbk, PT. INTP Tbk, PT. LPKR Tbk, PT. UNVR Tbk

1.7. Sistematika Penulisan

Penyusunan skripsi ini disajikan dalam sistematika pembahasan yang terdiri atas enam bab, yaitu:

Bab I: Pendahuluan

Bab ini berisi tentang penjelasan yang bersifat umum, yaitu latar belakang masalah, rumusan masalah, batasan masalah, tujuan, manfaat penelitian, dan terakhir sistematika penulisan.

Bab II: Landasan Teori

Bab ini membahas tentang landasan teori yang digunakan sebagai dasar dalam penelitian.

Bab III: Metode Penelitian

Bab ini membahas tentang metode penelitian yang akan digunakan dalam penelitian ini.

Bab IV: Optimisasi Portofolio Robust *Mean Variance* dengan menggunakan metode *Trimmed Mean*

Pada bab ini inti dari penelitian. Bab ini membahas tentang pengertian Robust *Mean variance* dengan menggunakan metode *trimmed mean* dan bagaimana cara pembentukan portofolio optimalnya.

Bab V: Hasil dan Pembahasan

Bab ini akan membahas tentang analisis data dan pembahasan hasil penelitian

Bab VI: Penutup

Bab ini memuat kesimpulan dari pembahasan pada bab sebelumnya dan saran-saran untuk disampaikan terkait dengan penelitian ini dan penelitian yang akan datang.

BAB VI

KESIMPULAN DAN SARAN

6.1. Kesimpulan

Analisis portofolio optimal robust *mean variance* menggunakan metode *Trimmed Mean* dilakukan terhadap saham-saham syariah yang memiliki nilai *mean return* positif. Berdasarkan análisis portofolio *robust* dengan metode *trimmed mean* didapatkan hasil sebagai berikut:

1. Terdapat sebelas langkah dalam menentukan análisis portofolio optimal robust menggunakan model *trimmed mean*, yaitu menentukan *return* masing-masing saham, mengurutkan nilai *return* dari nilai yang terkecil hingga yang terbesar, menentukan prosentase pemangkasnya ($p-$ trimmed), menghitung nilai $k = np$, nilai k menunjukkan nilai-nilai k terkecil dan nilai-nilai k tebesar yang akan dibuang, uji normalitas data, menetukan *mean return* ($\hat{\mu}$), menentukan *Variansi* saham, menentukan *Kovarians* saham ($\hat{\Sigma}$), menentukan proporsi masing-masing saham, menentukan *mean return* portofolio, menentukan resiko portofolio
2. Berdasarkan besarnya *mean return* dan resiko portofolio, portofolio optimal *robust* terdapat pada kelompok portofolio pertama, dengan komponen saham portofolio saham SMGR, ASRI, TLKM, KLBF, dan CPIN, dengan pembentuk portofolio optimal *robust* nya adalah saham

SMGR dengan proporsi sebesar 13,30% dan KLBF dengan porporsi sebesar 86,70%. Hal ini juga dapat terlihat dari nilai *shape ratio* yang diperoleh pada portofolio pertama.

3. *Mean return* portofolio yang dihasilkan pada portofolio optimal adalah sebesar 0,0654% dengan besar tingkat resiko portofolio sebesar 0,1797% pada setiap harinya.

6.2. Saran-Saran

Berdasarkan pertimbangan dan analisis hasil dari optimisasi portofolio robust *mean variance* dengan menggunakan metode *trimmed mean* yang dilakukan terhadap 2 kelompok portofolio, peneliti hanya mampu memberikan beberapa saran-saran:

1. Bagi peneliti selanjutnya, diharapkan hasil pembahasan tentang optimisasi portofolio robust *mean variance* dengan menggunakan metode *trimmed mean* mampu memberikan informasi bagi peniliti selanjutnya, sehingga dalam penelitian selanjutnya peniliti mampu menyempurnakan hasil penelitian dengan suatu pengembangan baru dan objek yang berbeda.
2. Untuk membuat portofolio yang robust, dapat dilakukan dengan menggunakan metode estimator robust yang lainnya sebagai input parameter model *mean variance* Markowitz.

DAFTAR PUSTAKA

Agus Sartono & Andika Setiawan. (2006). *Var Portofolio Optimal: Perbandingan Antara Metode Markowitz dan Mean Absolute Deviation*. Jurnal Fakultas Ekonomi Universitas Gajah Mada.

Anton, H. 2004. *Dasar-dasar Aljabar Linear Jilid 1 Edisi 7*. Batam: Interaksara.

Bain, L J & Engelhardt, M. 1992. *Introduction To Probability and Mathematical Statistics Second Edition*. California: Duxbury Press

De Miguel, Victor. 2009. *Portofolio Selection with Robust Estimation*. Vol. 57, No.3. London: Operation Research.

Fabozzi, Frank J & Kolm, Petter N. 2007. *Robust Portofolio Optimizatiton and Management.* Canada: John Wiley and Sons.

Gujarati, G.N. 2007. *Dasar-dasar Ekonometrika*. Jakarta: Erlangga.

Halim, A. 2003. *Analisis Investasi*. Jakarta: Salemba Empat.

Jogiyanto. 2003. *Teori Portofolio dan Analisis Investasi*. Edisi ketiga. Yogyakarta: BPFE.

Johnson, R A & Wichern, D W. 2002. *Applied Multivariate Statistical Analysis*. Fifth Edition. New Jersey. Prentice-Hall Inc.

Perret-Gentil, Cedric. 2004. *Robust Mean Variance Portofolio Selection*. Geneva: International Center for Financial Asset Management and Engineering.

P. J, Huber. 1981. *Robust Statistics*. New York: John Wiley and Sons.

Purcell, E J & Varberg, D. 1987. *Kalkulus dan Geometri Analitis*. Edisi kelima. Jakarta: Erlangga.

Qudratullah, M.F, dkk. 2012. *Statistika*. Yogyakarta: suka press.

Ricardo A. Maronna, R. Douglas Martin and V´ıctor J. Yohai. 2006. *Robust Statistics*. New York: John Wiley & Sons.

Ruppert, D. 2004. *Statistics and Finance*. New York: Springer.

Samsul, M. 2006. *Pasar Modal & Manajemen Portofolio*. Jakarta: Erlangga

Subhra Sankar Dhar and Probal Chaudhuri. *On The Derivates Of Trimmed Mean*. Theoretical Statistics and Mathematics Unit, Indian Statistical Institute, Calcutta

Tandelilin, E. 2007. *Analisis Investasi dan Manajemen Portofolio*. Edisi pertama. Yogyakarta: BPFE.

Xinfeng, Zhou. 2006. *Application of robust statistics to asset allocation models*. Revstat.Statist. p 15-17

http://www.statistics.com/index.php?page=glossary&term_id=866

Lampiran 1

PROCEDURE PEMILIHAN PORTODOLIO DAN PROSENTASE PEMANGKAS

Procedure dalam pemilihan portofolio dan prosentase pemangkas dengan menggunakan metode *trimmed mean*, yaitu:

1) Menghitung *return* dari masing-masing saham (lampiran 4), yang kemudian diurutkan dari nilai *return* yang terkecil sampai nilai *return* yang terbesar (lampiran 5).
2) Menentukan proporsi pemangkasnya (p −trimmed), $p = p/100$

   Misal proporsi pemangkasnya adalah 35%, p= 35/100
3) Menghitung nilai $k = np$, nilai k menunjukan nilai-nilai k terkecil dan nilai-nilai k tebesar yang akan dibuang

   Didapat nilai p=35% dengan n=635 (jumlah *return* dari masing-masing saham), maka k= 635*(35/100) =222,25 ≈ 222

   Sehingga data yang dipangkas adalah 222 dari nilai *return* terkecil dan 222 dari nilai *return* terbesar (lampiran 5) dan didapat data baru (lampiran 6)
4) Mengestimasi untuk parameter *mean* dan matriks kovarians (μ, Σ) dengan estimator robust, yaitu $\hat{\mu}_{TM}$ dan $\hat{\Sigma}_{TM}$. Perhitungan ini dilakukan dengan menggunakan data *return* yang sudah dipangkas (lampiran 6)
5) Menentukan rata-rata bobot portofolio

$$w_{TM} = \frac{\hat{\Sigma}^{-1}\mathrm{e}}{\mathrm{e}^{\mathrm{T}}\hat{\Sigma}^{-1}\mathrm{e}}$$

6) Menentukan *return* portofolio

$$R_{p(MT)} = {w_{TM}}^{T}\hat{\mu}$$

7) Menentukan resiko portofolio

$$\sigma = \sqrt{{w_{TM}}^{T}\hat{\Sigma}w_{TM}}$$

Lampiran 2

PERBANDINGAN PROSENTASE PEMANGKAS PADA PEMILIHAN PORTOFOLIO OPTIMAL

- Portofolio Pertama **(**pada lima saham yang memiliki nilai *mean return* terbesar)

Prosentase Pemangkas	Portofolio 1	Asset	Bobot Proporsi	Mean Portofolio	Resiko Portofolio	Shape Ratio
5%	Proporsi 1	CPIN	-143,71%	0,1081%	1,3968%	0,0774%
		LPKR	29,41%			
		ASRI	-147,15%			
		KLBF	230,75%			
		SMGR	130,70%			
	Proporsi 2	LPKR	52,32%			
		KLBF	247,02%			
		SMGR	-199,34%			
	Proporsi 3	LPKR	6,52%			
		KLBF	93,48%			

Prosentase Pemangkas	Portofolio 1	Asset	Bobot Proporsi	Mean Portofolio	Resiko Portofolio	Shape Ratio
10%	Proporsi 1	CPIN	-141,37%	0,1140%	1,3535%	0,0842%
		LPKR	31,29%			
		ASRI	-147,10%			
		KLBF	224,01%			
		SMGR	133,16%			
	Proporsi 2	LPKR	57,87%%			
		KLBF	209,25			
		SMGR	-167,13%			
	Proporsi 3	LPKR	21,41%			
		KLBF	78,59%			

Prosentase Pemangkas	Portofolio 1	Asset	Bobot Proporsi	Mean Portofolio	Resiko Portofolio	Shape Ratio
15%	Proporsi 1	LPKR	33,21%	0,0938%	0,8727%	0,1075%
		ASRI	-137,56%			
		CPIN	-95,68%			
		SMGR	103,36%			
		KLBF	196,66%			
	Proporsi 2	LPKR	33,86%			
		SMGR	-25,28%			
		KLBF	91,43%			
	Proporsi 3	LPKR	28,63%			
		KLBF	71,37%			

Prosentase Pemangkas	Portofolio 1	Asset	Bobot Proporsi	Mean Portofolio	Resiko Portofolio	Shape Ratio
20%	Proporsi 1	LPKR	26,95%	0,0761%	0,6727%	0.1131%
		ASRI	-32,75%			
		CPIN	-188,34%			
		SMGR	48,41%			
		TLKM	245,74%			
	Proporsi 2	LPKR	25,47%			
		SMGR	-50,83%			
		TLKM	125,36%			
	Proporsi 3	LPKR	17,13%			
		TLKM	82,87%			

Prosentase Pemangkas	Portofolio 1	Asset	Bobot Proporsi	Mean Portofolio	Resiko Portofolio	Shape Ratio
25%	Proporsi 1	LPKR	37,61%	0,0938%	0,4895%	0.1916%
		ASRI	-29,89%			
		SMGR	33,33%			
		CPIN	-152,45%			
		TLKM	211,40%			
	Proporsi 2	LPKR	55,99%			
		SMGR	-51,54%			
		TLKM	95,55%			
		LPKR	48,49%			

	Proporsi 3	TLKM	51,51%			

Prosentase Pemangkas	Portofolio 1	Asset	Bobot Proporsi	Mean Portofolio	Resiko Portofolio	Shape Ratio
30%	Proporsi 1	SMGR	103,58%	0,0958%	0,2783%	0.3441%
		ASRI	-10,97%			
		LPKR	67,04%			
		CPIN	-67,63%			
		ASII	7,99%			
	Proporsi 2	SMGR	134,19%			
		LPKR	63,58%			
		ASII	-97,77%			
	Proporsi 3	SMGR	17,29%			
		LPKR	82,71%			

Prosentase Pemangkas	Portofolio 1	Asset	Bobot Proporsi	Mean Portofolio	Resiko Portofolio	Shape Ratio
35%	Proporsi 1	SMGR	19,29%	0,0654%	0,1797%	0.3637%
		ASRI	-119,72%			
		TLKM	012,02%			
		KLBF	213,06%			
		CPIN	-24,65%			
	Proporsi 2	SMGR	35,39%			
		TLKM	-30,50%			
		KLBF	9511%			
	Proporsi 3	SMGR	13,30%			
		KLBF	86,70%			

- Portofolio kedua (pada lima saham yang memiliki nilai varian terkecil)

Prosentase Pemangkas	Portofolio 2	Asset	Bobot Proporsi
5%	Proporsi 1	TLKM	373,84%
		UNVR	359,19%
		KLBF	-77,08%
		LPKR	11,04%

		SMGR	-567,00%
	Proporsi 2	TLKM	354,82%
		UNVR	-170,09%
		LPKR	-84,73%

Prosentase Pemangkas	Portofolio 2	Asset	Bobot Proporsi
10%	Proporsi 1	TLKM	347,10%
		UNVR	402,16%
		KLBF	-93,44%
		LPKR	9,41%
		SMGR	-565,23%
	Proporsi 2	TLKM	320,73%
		UNVR	-134,68%
		LPKR	-86,05%

Prosentase Pemangkas	Portofolio 2	Asset	Bobot Proporsi
15%	Proporsi 1	UNVR	487,89%
		TLKM	93,81%
		KLBF	-66,95%
		LPKR	-8,60%
		SMGR	-406,15%
	Proporsi 2	UNVR	167,52%
		TLKM	-67,52%

Prosentase Pemangkas	Portofolio 2	Asset	Bobot Proporsi
20%	Proporsi 1	UNVR	561,31%
		KLBF	44,23%
		TLKM	-3,10%
		SMGR	-75,30%
		INTP	-427,15%
	Proporsi 2	UNVR	176,46%
		KLBF	-76,46%

Prosentase Pemangkas	Portofolio 2	Asset	Bobot Proporsi	Mean Portofolio	Resiko Portofolio	Shape Ratio
25%	Proporsi 1	UNVR	504,85%	0,0535%	0.4662%	0.1148
		KLBF	63,14%			
		TLKM	-38,43%			
		LPKR	-9,04%			
		INTP	-420,53%			
	Proporsi 2	UNVR	87,70%			
		KLBF	12,30%			

Prosentase Pemangkas	Portofolio 2	Asset	Bobot Proporsi	Mean Portofolio	Resiko Portofolio	Shape Ratio
30%	Proporsi 1	LPKR	33,55%	0,0808%	0.2723%	0.2970%
		UNVR	332,76%			
		KLBF	23,99%			
		SMGR	-53,84%			
		INTP	-236,46%			
	Proporsi 2	LPKR	72,57%			
		UNVR	31,71%			
		KLBF	-4,29%			
	Proporsi 3	LPKR	71,88%			
		UNVR	28,12%			

Prosentase Pemangkas	Portofolio 2	Asset	Bobot Proporsi	Mean Portofolio	Resiko Portofolio	Shape Ratio
30%	Proporsi 1	KLBF	206,96%	0,0532%	0.1749%	0.3040%
		UNVR	86,42%			
		INTP	-54,40%			
		SMGR	-18,66%			
		ASRI	-120,33%			
	Proporsi 2	KLBF	75,03%			
		UNVR	24,97%			

Lampiran 3

Daftar Saham Harian Periode 3 Januari 2011- 30 Juni 2013

Tanggal	ASII	ASRI	INTP	KLBF	LPKR	SMGR	TLKM	UNVR	CPIN
1/3/2011	5440	305	16050	665	710	9850	1600	16050	1790
1/4/2011	5250	295	16600	660	730	9900	1580	16050	1760
1/5/2011	5205	295	16750	665	730	10000	1600	16350	1790
1/6/2011	5100	305	16500	650	740	9800	1540	16100	1810
1/7/2011	4900	295	16050	630	700	9350	1470	15950	1790
1/10/2011	4755	270	15000	590	670	8600	1440	15650	1730
1/11/2011	4740	275	14900	555	610	8850	1440	15500	1670
1/12/2011	4840	290	14950	620	630	8900	1500	15650	1730
1/13/2011	4800	290	15050	595	630	8950	1470	15900	1730
1/14/2011	4800	285	15150	610	620	9050	1500	16050	1730
1/17/2011	4745	275	14950	590	610	8800	1520	16450	1700
1/18/2011	4700	275	14900	595	630	8850	1560	16100	1680
1/19/2011	4900	265	14350	585	600	8400	1560	15700	1670
1/20/2011	4780	245	13800	575	570	8100	1510	15250	1640
1/21/2011	4715	240	13500	550	570	7850	1510	14250	1540
1/24/2011	4680	235	13500	530	550	7650	1540	14000	1430
1/25/2011	4920	250	13900	555	530	8000	1530	14150	1460
1/26/2011	5040	255	14650	600	580	8250	1550	14250	1520
1/27/2011	5120	260	14600	580	590	7950	1530	14800	1540
1/28/2011	5135	250	14150	580	590	7750	1550	14900	1530
1/31/2011	4890	245	13550	565	570	7750	1510	15050	1490
2/1/2011	4860	240	14200	575	560	8000	1510	15100	1650
2/2/2011	4835	245	14650	580	560	8200	1530	15250	1630
2/4/2011	4870	245	14650	580	560	8350	1550	15750	1700
2/7/2011	4950	245	14850	580	560	8350	1540	15550	1690
2/8/2011	4885	240	14800	580	550	8250	1540	14950	1640
2/9/2011	4825	235	14350	570	540	8100	1560	15000	1570
2/10/2011	4825	230	14150	545	520	8300	1530	14650	1500
2/11/2011	4840	235	14550	565	520	8350	1520	14600	1530
2/14/2011	4955	235	14500	585	540	8400	1490	14500	1500
2/16/2011	4930	230	14450	570	550	8400	1490	15150	1510

2/17/2011	5100	245	15050	570	560	8700	1490	14950	1600
2/18/2011	5300	255	15650	585	590	8750	1490	15500	1590
2/21/2011	5205	255	15300	590	600	8700	1520	15450	1560
2/22/2011	5165	250	14750	570	570	8700	1490	15250	1530
2/23/2011	5190	245	15000	585	570	8800	1490	15700	1550
2/24/2011	5140	235	14500	580	540	8650	1470	15600	1500
2/25/2011	5155	245	14350	575	540	8500	1490	15500	1500
2/28/2011	5205	245	14400	585	540	8650	1490	16200	1520
3/1/2011	5400	250	14500	585	550	8650	1500	16250	1500
3/2/2011	5400	240	14250	590	540	8450	1470	16200	1490
3/3/2011	5455	250	14300	590	540	8350	1470	16500	1490
3/4/2011	5490	255	14750	585	550	8800	1460	16700	1500
3/7/2011	5490	265	14700	580	560	8900	1470	16900	1500
3/8/2011	5520	265	14900	585	570	8900	1460	16800	1560
3/9/2011	5645	270	14500	600	590	8900	1490	16750	1640
3/10/2011	5630	275	14750	610	580	8850	1480	16700	1620
3/11/2011	5440	260	14800	620	570	8800	1460	16800	1600
3/14/2011	5535	265	14900	625	580	8900	1470	16500	1650
3/15/2011	5490	260	14750	600	580	8750	1430	16450	1630
3/16/2011	5430	260	14700	610	580	8600	1410	16550	1760
3/17/2011	5350	260	14300	595	550	8350	1360	16100	1800
3/18/2011	5400	265	14300	590	560	8400	1340	15600	1720
3/21/2011	5515	260	14400	590	560	8450	1350	16050	1790
3/22/2011	5505	255	14500	600	550	8650	1320	15950	1810
3/24/2011	5680	270	15800	620	570	9250	1430	16300	1880
3/25/2011	5790	265	15700	625	570	9200	1430	16000	1900
3/28/2011	5690	270	15900	615	580	9050	1420	15750	1900
3/29/2011	5470	280	15950	635	580	8750	1400	15300	1910
3/30/2011	5625	285	16200	640	610	9100	1440	15300	1960
3/31/2011	5700	285	16350	680	610	9100	1470	15300	2025
4/1/2011	5790	285	16600	695	630	9550	1460	15450	2025
4/4/2011	5645	285	16700	700	630	9600	1460	15200	2000
4/5/2011	5665	285	16650	690	610	9600	1450	15300	1980
4/6/2011	5810	290	16600	695	630	9450	1450	15300	1940
4/7/2011	5760	290	16300	710	660	9500	1420	15300	1930
4/8/2011	5675	290	16500	745	690	9700	1400	15100	1970
4/11/2011	5680	290	16700	735	710	9700	1420	15150	1980

4/12/2011	5615	290	16400	730	700	9650	1420	15150	1960
4/13/2011	5610	280	16850	735	700	9600	1400	15100	1960
4/14/2011	5485	280	16600	725	700	9550	1440	14950	1930
4/15/2011	5510	280	17000	735	700	9550	1450	14950	1910
4/18/2011	5440	275	16950	735	720	9500	1470	15000	1950
4/19/2011	5365	275	17200	735	720	9500	1530	15150	1940
4/20/2011	5515	285	17550	725	760	9550	1560	15300	1940
4/21/2011	5580	285	17800	715	780	9550	1550	15350	1930
4/25/2011	5490	295	17650	735	790	9550	1510	15200	1930
4/26/2011	5410	295	17200	720	790	9450	1490	15250	1930
4/27/2011	5515	300	17150	715	780	9550	1540	15250	1940
4/28/2011	5560	305	17100	715	780	9450	1530	15300	1950
4/29/2011	5615	295	17000	715	780	9500	1540	15300	1930
5/2/2011	5665	295	17100	720	800	9550	1550	15300	1940
5/3/2011	5615	290	16950	720	780	9500	1540	15200	1880
5/4/2011	5640	285	16600	705	770	9400	1530	15000	1860
5/5/2011	5625	285	17050	715	780	9500	1500	15000	1850
5/6/2011	5650	290	17000	695	780	9350	1510	14950	1870
5/9/2011	5640	290	16700	690	770	9400	1510	14950	1910
5/10/2011	5695	295	16700	690	760	9300	1510	14900	1890
5/11/2011	5925	315	17000	695	760	9350	1520	15000	1910
5/12/2011	5815	315	16800	685	760	9300	1540	14900	1890
5/13/2011	5850	310	16650	685	750	9350	1540	14900	1910
5/16/2011	5905	310	16350	700	740	9300	1540	14800	1910
5/18/2011	5970	310	16450	710	750	9450	1550	14900	1930
5/19/2011	6110	305	16650	700	680	9600	1520	14950	1940
5/20/2011	6200	310	17200	700	670	9750	1530	15000	1930
5/23/2011	5920	290	17000	665	650	9650	1510	14850	1830
5/24/2011	5810	290	17050	675	640	9650	1530	14800	1870
5/25/2011	5810	300	16950	675	630	9700	1540	14800	1870
5/26/2011	5930	300	17050	670	670	9750	1540	14850	1900
5/27/2011	5920	305	17250	685	680	9700	1540	14850	1900
5/30/2011	5905	300	17150	675	670	9650	1520	14850	1890
5/31/2011	5875	310	16900	715	680	9700	1540	14700	1930
6/1/2011	5910	335	16800	690	680	9650	1550	14800	1930
6/3/2011	5895	335	17200	690	680	9650	1530	14950	1940
6/6/2011	5930	330	17550	685	660	9550	1520	14900	1930

6/7/2011	5960	330	17450	685	650	9400	1500	14950	1940
6/8/2011	5950	325	16900	675	640	9300	1500	14800	1930
6/9/2011	5880	325	16800	675	650	9250	1490	14700	1920
6/10/2011	5745	320	16550	660	650	9250	1490	14700	1900
6/13/2011	5640	315	16500	650	640	9200	1490	14600	1870
6/14/2011	5735	320	16750	655	640	9200	1460	14800	1880
6/15/2011	5900	315	16800	660	640	9400	1450	14850	1900
6/16/2011	5815	320	16750	665	630	9600	1420	14800	1880
6/17/2011	5830	315	16900	650	640	9500	1370	14800	1870
6/20/2011	5845	310	16550	660	640	9650	1390	14750	1860
6/21/2011	5910	315	16800	685	650	9700	1420	14850	1910
6/22/2011	6000	325	16850	685	660	9650	1430	15000	1930
6/23/2011	6080	320	16800	680	660	9550	1430	15000	1910
6/24/2011	6190	320	16850	690	660	9600	1450	15200	1920
6/27/2011	6105	315	16650	680	650	9400	1420	15150	1910
6/28/2011	6155	315	16850	675	650	9600	1450	14900	1960
6/30/2011	6355	325	17050	675	650	9600	1470	14900	1990
7/1/2011	6555	330	17300	690	650	9850	1440	14950	2025
7/5/2011	6630	320	16750	725	650	9700	1440	14800	2125
7/6/2011	6510	320	16550	725	650	9750	1430	14850	2275
7/7/2011	6585	320	16600	725	660	9800	1430	14750	2300
7/8/2011	6780	330	16850	725	660	9900	1440	15000	2350
7/11/2011	6800	335	16700	715	660	9800	1410	15100	2325
7/12/2011	6705	325	16400	705	650	9800	1400	14800	2250
7/13/2011	6800	335	16400	710	650	9900	1410	14750	2425
7/14/2011	6895	355	16300	710	660	9950	1410	14850	2425
7/15/2011	7040	365	16450	710	660	9950	1430	15000	2425
7/18/2011	7260	365	16250	695	670	9800	1420	14950	2500
7/19/2011	7150	380	16050	690	690	9800	1410	14900	2475
7/20/2011	7195	405	16100	690	740	9800	1420	14950	2500
7/21/2011	7125	385	16400	685	740	9850	1460	15000	2525
7/22/2011	7290	395	16450	700	750	9900	1480	15050	2700
7/25/2011	7245	425	16300	700	750	9800	1460	14950	2700
7/26/2011	7395	425	16450	705	770	9950	1460	15000	2800
7/27/2011	7500	425	16400	690	780	10000	1470	15250	2775
7/28/2011	7175	430	15900	690	780	9650	1460	15750	2775
7/29/2011	7050	420	15450	695	780	9450	1470	15600	2725

8/1/2011	7165	440	15500	705	850	9400	1500	15900	2700
8/2/2011	7120	435	15250	695	850	9450	1520	16000	2525
8/3/2011	7065	425	14750	680	830	9250	1510	16100	2750
8/4/2011	7040	415	14600	665	820	9150	1560	17000	2850
8/5/2011	6720	385	13850	640	770	8900	1510	16250	2625
8/8/2011	6505	390	14500	635	730	9150	1500	16000	2500
8/9/2011	6410	375	14400	595	720	8700	1440	15000	2475
8/10/2011	6780	405	14800	665	760	8850	1420	15800	2575
8/11/2011	6740	430	14450	690	780	8800	1470	16400	2550
8/12/2011	6715	430	14500	685	790	8850	1460	16400	2600
8/15/2011	7000	430	15300	685	790	8900	1450	16750	2725
8/16/2011	7000	430	15000	670	790	8900	1440	16800	2700
8/18/2011	7275	425	15400	705	800	9100	1490	17350	2750
8/19/2011	6610	400	14600	685	730	8800	1480	16550	2625
8/22/2011	6775	400	15000	680	730	9050	1460	16650	2625
8/23/2011	6725	420	15050	690	730	9250	1460	16800	2800
8/24/2011	6715	420	14800	680	730	9250	1450	16450	2850
8/25/2011	6740	430	14750	680	740	9100	1440	16150	2700
8/26/2011	6615	420	15200	695	740	9100	1450	16900	2750
9/5/2011	6780	425	15500	690	730	9350	1510	16750	2700
9/6/2011	6850	415	15600	705	730	9200	1530	17000	2825
9/7/2011	7125	425	15900	720	740	9300	1580	17400	2950
9/8/2011	7100	420	15600	720	740	9250	1530	17550	2875
9/9/2011	7030	440	15450	720	750	9150	1520	17550	2800
9/12/2011	6940	420	15000	725	730	8900	1480	17000	2750
9/13/2011	6900	420	14800	725	730	8900	1470	17050	2775
9/14/2011	6675	415	14150	715	720	8750	1470	17100	2650
9/15/2011	6530	425	14100	690	700	8500	1500	16700	2600
9/16/2011	6590	430	14050	710	700	8700	1470	16850	2750
9/19/2011	6500	420	13350	695	700	8500	1490	16050	2675
9/20/2011	6540	415	13250	690	700	8400	1490	16050	2750
9/21/2011	6405	415	13200	680	700	8250	1510	15800	2625
9/22/2011	5800	370	11200	565	660	7700	1380	15000	2200
9/23/2011	5885	365	12500	580	660	8150	1440	15350	2200
9/26/2011	5700	360	11950	590	630	7850	1440	15200	2025
9/27/2011	6055	375	12850	620	680	8100	1450	15600	2425
9/28/2011	6220	370	13350	645	680	8350	1470	15600	2375

9/29/2011	6405	370	13900	655	680	8550	1490	15700	2400
9/30/2011	6365	385	14000	650	680	8300	1520	16500	2400
10/3/2011	5895	355	12700	610	610	8000	1480	16100	2175
10/4/2011	5870	340	12000	620	590	7900	1490	15750	2225
10/5/2011	5730	345	11800	640	600	7900	1540	15850	2200
10/6/2011	6070	365	13150	670	620	8100	1520	16050	2400
10/7/2011	6325	365	12850	665	620	7700	1450	15900	2300
10/10/2011	6415	365	12900	675	620	7800	1440	15600	2375
10/11/2011	6590	385	13600	680	630	7950	1460	15550	2525
10/12/2011	6595	425	14700	695	640	8300	1470	16000	2625
10/13/2011	6790	425	14900	690	640	8600	1450	15850	2625
10/14/2011	6695	415	14800	675	650	8950	1420	15700	2625
10/17/2011	6900	460	14800	680	670	8950	1420	15450	2700
10/18/2011	6805	430	14300	670	640	8550	1430	15700	2600
10/19/2011	6930	475	14750	690	640	9000	1440	15700	2675
10/20/2011	6780	460	14300	680	630	8650	1450	15650	2525
10/21/2011	6610	460	14250	670	640	8750	1450	15950	2550
10/24/2011	6805	450	14950	695	660	9350	1450	16150	2675
10/25/2011	6830	445	15100	690	650	9000	1470	16200	2700
10/26/2011	6840	445	15500	695	650	9150	1480	16100	2725
10/27/2011	6895	445	16000	695	660	9250	1500	16050	2800
10/28/2011	6990	430	16350	705	660	9400	1490	15700	2775
10/31/2011	6900	435	16350	695	640	9500	1480	15650	2675
11/1/2011	6650	410	15250	675	630	9000	1480	15650	2500
11/2/2011	6900	450	15400	685	620	9050	1510	15800	2675
11/3/2011	6730	440	14950	675	610	8850	1500	15700	2625
11/4/2011	6830	450	15500	695	630	9250	1520	15850	2675
11/7/2011	6785	435	15950	695	630	9450	1500	15750	2675
11/8/2011	6850	445	15800	700	640	9400	1500	15800	2700
11/9/2011	7080	445	15500	715	660	9450	1500	16200	2700
11/10/2011	6915	440	15000	700	630	9150	1480	16050	2625
11/11/2011	6950	450	14900	705	640	9200	1480	15950	2575
11/14/2011	7200	460	15300	700	650	9450	1500	16000	2625
11/15/2011	7130	460	15350	700	650	9350	1490	15900	2575
11/16/2011	7135	460	15550	690	670	9450	1510	15850	2625
11/17/2011	6940	450	15750	690	660	9400	1510	16150	2600
11/18/2011	6870	445	15500	690	640	9150	1500	16150	2550

11/21/2011	6765	425	14650	680	630	8900	1490	16200	2500
11/22/2011	6935	440	15200	690	640	9100	1490	16800	2550
11/23/2011	6800	430	14900	675	620	8750	1510	17500	2450
11/24/2011	6940	430	14950	675	630	8800	1500	17400	2475
11/25/2011	6810	420	14550	675	620	8850	1460	17850	2325
11/28/2011	6915	425	14550	700	630	8850	1460	17550	2275
11/29/2011	7095	425	14900	695	630	9050	1430	18100	2275
11/30/2011	7090	425	15000	705	630	9250	1470	18200	2300
12/1/2011	7090	425	15000	705	630	9250	1470	18200	2300
12/2/2011	7100	445	15100	710	640	9400	1470	17600	2450
12/5/2011	7155	460	15400	710	640	9650	1450	17900	2450
12/6/2011	7165	450	15300	705	630	9550	1470	18000	2325
12/7/2011	7295	445	15800	705	640	9700	1460	17900	2375
12/8/2011	7265	440	15500	685	640	9700	1450	17800	2350
12/9/2011	7305	455	15300	685	640	9550	1440	17550	2325
12/12/2011	7495	455	15500	685	640	9900	1450	17600	2325
12/13/2011	7495	455	15900	685	650	10250	1430	17300	2300
12/14/2011	7200	455	16250	685	650	10750	1420	17600	2300
12/15/2011	6905	450	16050	665	630	10300	1430	17500	2250
12/16/2011	7115	460	16500	680	640	10350	1430	17300	2325
12/19/2011	7115	460	16150	675	640	10850	1410	18300	2325
12/20/2011	7170	465	16300	680	640	10600	1400	17950	2275
12/21/2011	7305	470	16850	675	670	10900	1420	18200	2275
12/22/2011	7360	465	17150	675	660	11100	1430	18600	2250
12/23/2011	7370	460	17200	675	660	10750	1430	18750	2175
12/26/2011	7370	460	17200	675	660	10750	1430	18750	2175
12/27/2011	7400	460	17050	680	660	10950	1440	18300	2175
12/28/2011	7325	460	16750	680	660	11000	1410	18300	2125
12/29/2011	7400	465	17050	680	660	11000	1430	18500	2125
12/30/2011	7400	460	17050	680	660	11450	1410	18800	2150
1/2/2012	7370	460	17150	685	660	11200	1410	18550	2100
1/3/2012	7500	465	17450	695	650	11300	1410	18500	2175
1/4/2012	7715	480	18050	690	680	11100	1420	19300	2200
1/5/2012	7745	485	18400	690	680	11350	1410	20050	2225
1/6/2012	7730	490	18100	690	670	10900	1390	19200	2225
1/9/2012	7600	500	18400	700	660	10850	1410	19600	2275
1/10/2012	7695	495	18500	700	670	11150	1420	19800	2325

1/11/2012	7560	490	17750	695	670	11450	1400	19300	2250
1/12/2012	7545	480	17700	695	670	11500	1400	19700	2300
1/13/2012	7545	480	17700	695	670	11500	1400	19700	2300
1/16/2012	7620	475	17650	685	680	11550	1400	19750	2250
1/17/2012	7730	480	18400	690	690	11850	1400	19800	2250
1/18/2012	7780	485	18600	705	680	12350	1400	20000	2325
1/19/2012	7880	480	18800	705	680	12450	1380	20250	2475
1/20/2012	7895	470	18000	715	680	11850	1380	20450	2450
1/23/2012	7895	470	18000	715	680	11850	1380	20450	2450
1/24/2012	7865	475	17700	730	680	11600	1390	21300	2475
1/25/2012	7800	475	17850	715	680	11650	1380	20600	2425
1/26/2012	7835	475	17800	715	670	11400	1400	20750	2475
1/27/2012	7940	490	17650	710	670	11300	1400	20500	2525
1/30/2012	7710	480	16850	710	660	10850	1380	19600	2450
1/31/2012	7890	485	16950	705	670	11300	1370	19600	2500
2/1/2012	7770	495	17000	700	680	11350	1350	19800	2500
2/2/2012	7805	530	17200	695	710	11350	1380	20000	2650
2/3/2012	7875	540	17100	715	700	11350	1380	19900	2675
2/6/2012	7700	540	16650	715	720	11400	1360	19600	2600
2/7/2012	7565	550	16650	700	710	11400	1370	19950	2575
2/8/2012	7485	550	17400	700	710	11350	1380	19800	2625
2/9/2012	7295	550	17450	715	710	11400	1360	19950	2725
2/10/2012	7120	560	17100	715	700	11450	1350	19300	2700
2/13/2012	7335	570	17500	715	700	11500	1370	19850	2825
2/14/2012	7370	580	17800	705	720	11550	1380	19900	2800
2/15/2012	7295	600	17450	695	720	11650	1360	19950	2875
2/16/2012	7150	570	17450	690	710	11400	1370	19500	2775
2/17/2012	7390	590	17550	690	700	11500	1390	19650	2775
2/20/2012	7395	590	17500	700	700	11200	1400	19700	2750
2/21/2012	7380	590	17050	700	710	11050	1410	19400	2800
2/22/2012	7235	570	17100	700	700	11100	1410	19150	2800
2/23/2012	7085	580	17050	690	700	11250	1400	18550	2750
2/24/2012	6825	570	17100	690	690	10850	1380	18200	2625
2/27/2012	6870	540	16350	685	680	10550	1370	18600	2550
2/28/2012	6980	560	16750	685	690	10850	1390	18550	2600
2/29/2012	7085	570	17450	700	700	11250	1410	19250	2675
3/1/2012	6965	560	17450	700	710	11200	1400	18650	2675

3/2/2012	7000	570	17750	705	710	11450	1430	19250	2675
3/5/2012	6960	580	17350	695	700	11300	1430	19000	2600
3/6/2012	6945	580	17650	695	700	11300	1420	18650	2575
3/7/2012	6915	580	17500	685	690	11150	1400	18800	2625
3/8/2012	6985	580	17600	695	690	11250	1390	19200	2700
3/9/2012	7020	580	17750	695	700	11300	1390	19550	2700
3/12/2012	6980	590	17900	685	690	11300	1360	19800	2700
3/13/2012	7060	590	18000	685	690	11500	1370	19700	2675
3/14/2012	7305	580	18350	695	690	12200	1380	19800	2675
3/15/2012	7305	610	18350	700	720	12550	1360	19150	2700
3/16/2012	7100	610	17300	700	720	12450	1350	19650	2725
3/19/2012	7050	600	18350	685	710	12550	1360	19250	2700
3/20/2012	6985	610	18400	680	710	12550	1390	19300	2650
3/21/2012	7165	630	18200	685	710	12400	1400	19450	2675
3/22/2012	7220	610	18250	685	710	11900	1390	19400	2675
3/23/2012	7220	610	18250	685	710	11900	1390	19400	2675
3/26/2012	7160	590	18200	695	720	12050	1410	19500	2625
3/27/2012	7285	610	18700	700	760	12300	1410	19300	2675
3/28/2012	7155	600	18700	700	780	12350	1400	19500	2700
3/29/2012	7295	610	18700	705	790	12350	1410	19550	2700
3/30/2012	7395	620	18450	710	800	12250	1400	20000	2750
4/2/2012	7520	610	18400	720	810	12400	1410	20150	2775
4/3/2012	7520	610	18400	720	810	12400	1410	20150	2775
4/4/2012	7400	600	18200	725	810	12200	1460	19450	2725
4/5/2012	7475	610	18150	730	810	12050	1510	19500	2700
4/6/2012	7475	610	18150	730	810	12050	1510	19500	2700
4/9/2012	7525	590	18050	715	820	11900	1510	19450	2675
4/10/2012	7410	590	18150	710	820	12000	1520	19350	2650
4/11/2012	7330	590	18000	710	810	11900	1500	19500	2675
4/12/2012	7380	600	18550	710	820	12150	1520	18950	2650
4/13/2012	7430	610	18800	710	840	12300	1520	19000	2675
4/16/2012	7355	610	18150	695	820	12100	1520	18850	2675
4/17/2012	7405	590	18550	690	820	12200	1510	18900	2700
4/18/2012	7385	600	18500	690	830	12150	1530	19050	2675
4/19/2012	7275	580	18250	685	830	11950	1550	18850	2675
4/20/2012	7330	580	18300	700	830	11950	1560	19100	2650
4/23/2012	7220	580	18000	695	810	11750	1560	19300	2650

4/24/2012	7140	560	17950	720	830	11800	1590	19500	2700
4/25/2012	7090	580	18000	765	820	11950	1580	19250	2675
4/26/2012	7075	580	18050	790	820	12350	1600	19450	2750
4/27/2012	7070	600	18200	800	810	12300	1700	19300	2750
4/30/2012	7100	600	18050	805	830	12150	1700	19850	2750
5/1/2012	7175	610	18200	805	820	12300	1650	20150	2700
5/2/2012	7365	600	18300	800	830	12200	1670	20800	2700
5/3/2012	7420	610	18550	795	830	12300	1670	20700	2650
5/4/2012	7270	610	18850	780	830	12150	1670	21250	2650
5/7/2012	7150	600	18550	795	810	12000	1660	21150	2600
5/8/2012	7090	580	18450	800	820	11900	1660	22400	2650
5/9/2012	6965	580	18750	795	810	11850	1580	21850	2650
5/10/2012	6895	570	18550	785	800	11600	1640	21900	2675
5/11/2012	6885	550	18150	785	800	11300	1640	21600	2775
5/14/2012	6860	540	18050	785	800	10950	1600	21800	2750
5/15/2012	6795	570	17650	785	800	10900	1630	21250	2750
5/16/2012	6840	560	17300	775	760	10650	1580	21250	2675
5/17/2012	6840	560	17300	775	760	10650	1580	21250	2675
5/18/2012	6840	560	17300	775	760	10650	1580	21250	2675
5/21/2012	6685	570	17000	775	790	10900	1570	20750	2650
5/22/2012	6885	580	17650	780	820	11050	1570	21100	2700
5/23/2012	6775	570	17850	780	810	11300	1550	21200	2700
5/24/2012	6775	580	18050	785	800	11350	1500	21100	2725
5/25/2012	6585	550	17200	770	800	10950	1450	21050	2675
5/28/2012	6600	540	17350	770	800	11000	1480	21000	2725
5/29/2012	6520	530	17400	770	800	10850	1520	21100	2675
5/30/2012	6600	530	18000	790	790	11200	1580	21100	2650
5/31/2012	6430	540	17800	775	790	10950	1560	20550	2625
6/1/2012	6335	540	17250	785	800	10850	1520	20550	2550
6/4/2012	6240	520	16200	755	760	9950	1520	20300	2375
6/5/2012	6600	530	17050	770	770	10400	1540	20250	2400
6/6/2012	6950	550	17400	785	770	10900	1510	20650	2625
6/7/2012	6800	560	17000	790	760	11050	1500	21900	2625
6/8/2012	6650	550	16950	790	760	11050	1470	22900	2600
6/11/2012	6600	560	16850	785	760	11000	1480	22800	2675
6/12/2012	6650	550	16800	790	740	10800	1520	23750	2675
6/13/2012	6850	550	17050	795	740	11150	1570	22950	2725

6/14/2012	6650	540	16850	795	730	11050	1540	22700	2675
6/15/2012	6600	540	17000	790	740	11100	1580	22450	2800
6/18/2012	6750	540	17200	775	750	11600	1500	23800	2875
6/19/2012	6750	530	17050	780	750	11450	1520	23850	2950
6/20/2012	6800	540	17150	775	770	11450	1600	24000	3125
6/21/2012	6650	520	16850	760	780	11200	1570	23700	3175
6/22/2012	6850	500	16850	760	780	11300	1550	23050	3150
6/25/2012	6700	470	16700	745	780	11250	1560	22750	3150
6/26/2012	6750	455	16950	760	770	11300	1560	22650	3150
6/27/2012	6800	455	17300	765	780	11350	1600	23200	3200
6/28/2012	6650	475	17000	755	790	11250	1580	23150	3250
6/29/2012	6850	490	17350	755	800	11300	1630	22900	3425
7/2/2012	6900	500	18150	755	800	11800	1620	23600	3250
7/3/2012	6950	510	18650	760	800	12100	1670	24750	3225
7/4/2012	7050	510	18900	760	830	12250	1680	24050	3300
7/5/2012	7050	500	18800	760	820	12250	1680	24100	3250
7/6/2012	6950	500	18500	760	820	12050	1640	24200	3250
7/9/2012	6750	485	18550	750	820	11700	1600	23650	3200
7/10/2012	6800	490	18500	755	830	11700	1650	23350	3200
7/11/2012	6800	485	18850	775	830	11700	1690	23450	3250
7/12/2012	6650	480	18850	770	830	11250	1690	23000	3125
7/13/2012	6700	480	18400	770	830	11350	1730	23900	3225
7/16/2012	6700	485	18400	770	840	11450	1770	23800	3225
7/17/2012	6800	495	18400	775	850	11550	1790	24100	3225
7/18/2012	6800	510	18900	775	860	11550	1790	23600	3150
7/19/2012	6800	510	18850	765	850	11900	1760	23750	3150
7/20/2012	6600	500	18900	765	860	12000	1800	23000	3100
7/23/2012	6400	480	18900	740	850	11800	1790	22700	3000
7/24/2012	6350	475	19150	740	840	12000	1750	22400	2975
7/25/2012	6350	470	18900	735	840	11850	1770	22550	3150
7/26/2012	6450	460	18900	740	840	11800	1780	23300	3100
7/27/2012	6650	460	19500	760	860	12200	1860	24100	3100
7/30/2012	6700	465	20150	765	880	13050	1810	24100	3100
7/31/2012	7000	460	21500	765	890	12950	1820	24250	3200
8/1/2012	7100	460	20800	770	880	12650	1850	24100	3125
8/2/2012	7000	455	20250	770	880	12450	1780	24600	2975
8/3/2012	7000	455	20000	775	880	12450	1790	24450	2925

8/6/2012	6950	450	20000	780	880	12750	1770	24600	2900
8/7/2012	6950	440	20000	790	890	12700	1790	24000	2875
8/8/2012	7050	450	19950	790	920	12450	1800	24600	2775
8/9/2012	7150	455	19950	780	940	12400	1830	24800	2875
8/10/2012	7200	460	20000	780	980	12550	1840	24800	2850
8/13/2012	7100	450	20050	775	980	12500	1790	24950	2825
8/14/2012	7200	460	20150	775	970	12950	1770	25500	2825
8/15/2012	7350	480	20500	795	950	13050	1850	25450	2950
8/16/2012	7300	485	20650	785	910	13150	1960	25550	2975
8/17/2012	7300	485	20650	785	910	13150	1960	25550	2975
8/20/2012	7300	485	20650	785	910	13150	1960	25550	2975
8/21/2012	7300	485	20650	785	910	13150	1960	25550	2975
8/22/2012	7300	485	20650	785	910	13150	1960	25550	2975
8/23/2012	7100	490	21000	785	890	13250	1920	25500	3000
8/24/2012	7100	475	20600	785	900	13100	1900	25550	2950
8/27/2012	7100	475	20450	790	910	12950	1890	25700	2900
8/28/2012	7150	465	20850	790	910	12900	1860	25800	2850
8/29/2012	7000	455	20200	770	900	12400	1860	26950	2750
8/30/2012	6800	440	19350	775	860	12100	1860	26850	2650
8/31/2012	6750	440	20250	775	870	12400	1860	27100	2700
9/3/2012	6900	450	20100	800	900	12350	1910	28100	2725
9/4/2012	6900	435	20150	810	900	12450	1930	28000	2725
9/5/2012	6900	420	19600	815	900	12650	1920	26500	2700
9/6/2012	7000	415	19800	840	910	12800	1910	27100	2725
9/7/2012	7100	425	19850	865	910	12850	1930	28000	2800
9/10/2012	7400	440	20000	865	920	12900	1880	28350	2875
9/11/2012	7250	445	20000	870	920	13000	1890	28000	2850
9/12/2012	7350	465	20050	870	910	13000	1890	27950	2825
9/13/2012	7300	460	19600	865	910	13100	1890	27950	2800
9/14/2012	7400	480	20150	875	930	14000	1930	27800	2850
9/17/2012	7450	480	20300	875	920	14100	1850	28000	2875
9/18/2012	7450	480	20350	860	920	13700	1880	27700	2825
9/19/2012	7400	485	20350	880	930	13800	1880	27700	2825
9/20/2012	7250	480	20500	870	950	14100	1880	26650	2800
9/21/2012	7400	485	20350	860	980	14250	1880	26650	2875
9/24/2012	7350	490	20350	850	980	14150	1850	25750	2875
9/25/2012	7400	510	20500	855	990	14250	1870	25750	2925

9/26/2012	7200	500	20300	855	980	13650	1840	25100	2875
9/27/2012	7300	500	20150	860	970	13950	1870	25750	3000
9/28/2012	7400	495	20350	940	990	14450	1890	26050	3025
10/1/2012	7300	490	20000	910	990	14050	1880	25750	2975
10/2/2012	7400	490	20350	915	970	14200	1900	26050	3025
10/3/2012	7400	480	20550	915	960	14650	1900	26100	3075
10/4/2012	7750	490	20850	940	960	14800	1900	26100	3100
10/5/2012	8200	490	20900	960	990	14950	1900	26050	3025
10/8/2012	8000	490	21000	950	990	14600	1920	25900	2975
10/9/2012	8100	490	20450	960	980	14500	1930	26000	3000
10/10/2012	8050	485	20750	980	970	14650	1930	25900	3025
10/11/2012	8000	500	20850	980	950	14650	1950	25950	3050
10/12/2012	7950	530	21000	970	930	14600	1930	26100	3050
10/15/2012	7850	540	21150	980	930	14650	1920	26000	3100
10/16/2012	8050	550	21450	970	940	14650	1970	25900	3050
10/17/2012	7950	560	21950	990	960	14650	1950	25850	3150
10/18/2012	8200	560	22100	980	950	14700	1930	25950	3150
10/19/2012	8050	570	21500	1000	950	14650	1930	26000	3150
10/22/2012	8000	570	21850	1050	950	14600	1910	25950	3150
10/23/2012	7950	570	21750	1000	940	14550	1930	25500	3100
10/24/2012	8050	570	21800	990	950	14750	1960	25500	3050
10/25/2012	7950	570	21850	1000	970	14750	1930	25450	3025
10/26/2012	7950	570	21850	1000	970	14750	1930	25450	3025
10/29/2012	7850	570	21950	990	940	14750	1930	25550	3025
10/30/2012	8000	580	21650	980	940	14850	1920	26150	3075
10/31/2012	8050	580	21400	970	930	14900	1950	26050	3125
11/1/2012	7900	580	22150	990	950	14900	1950	26300	3125
11/2/2012	7900	590	21800	990	970	14700	1910	26350	3175
11/5/2012	7750	570	21750	970	970	14550	1880	26100	3150
11/6/2012	7650	560	22400	980	970	14750	1880	26000	3175
11/7/2012	7750	570	22800	980	960	14900	1880	26300	3225
11/8/2012	7800	560	22550	970	950	14850	1870	26250	3275
11/9/2012	7800	570	23100	980	930	14700	1880	26000	3225
11/12/2012	7650	570	22850	980	930	14700	1870	25850	3175
11/13/2012	7650	580	22800	980	950	14700	1880	25850	3225
11/14/2012	7750	590	23000	980	950	14900	1890	26150	3225
11/15/2012	7750	590	23000	980	950	14900	1890	26150	3225

11/19/2012	7800	610	22500	980	930	15000	1850	25650	3150
11/20/2012	7700	610	22400	980	930	14850	1870	26000	3075
11/21/2012	7700	600	22350	990	930	14700	1840	26200	3125
11/22/2012	7750	610	22050	1020	950	14450	1850	26300	3100
11/23/2012	7800	600	22000	1010	970	14450	1840	26450	3150
11/26/2012	7900	610	21800	1020	990	14450	1880	26900	3175
11/27/2012	7800	610	22050	1010	1030	14450	1880	25800	3225
11/28/2012	7400	610	21900	1030	1030	14500	1860	26300	3275
11/29/2012	7350	600	22950	1020	1060	14650	1850	26800	3375
11/30/2012	7250	610	23250	1030	1070	14800	1800	26350	3425
12/3/2012	7200	610	23100	1010	1050	15150	1770	26200	3400
12/4/2012	6900	610	23100	1040	1020	15000	1770	26250	3375
12/5/2012	7050	630	23000	1040	1000	15000	1760	26000	3350
12/6/2012	7050	630	23000	1040	1000	14950	1780	26000	3400
12/7/2012	7050	630	22400	1040	1040	14850	1840	26250	3350
12/10/2012	7100	620	22500	1040	1030	14650	1860	25950	3250
12/11/2012	7150	620	22300	1110	1020	14800	1830	25950	3175
12/12/2012	7450	600	22350	1110	1010	14950	1850	23150	3200
12/13/2012	7450	580	22950	1130	1040	15000	1830	20350	3375
12/14/2012	7450	590	23000	1120	1070	15100	1770	22200	3350
12/17/2012	7550	590	22600	1070	1030	15500	1810	21800	3350
12/18/2012	7650	590	22500	1030	1000	15800	1800	21600	3450
12/19/2012	7700	580	22250	1020	1000	15550	1780	21550	3450
12/20/2012	7500	570	22350	1010	1000	15800	1800	20550	3500
12/21/2012	7500	580	22300	1040	1000	16100	1830	20800	3425
12/24/2012	7500	580	22300	1040	1000	16100	1830	20800	3425
12/25/2012	7500	580	22300	1040	1000	16100	1830	20800	3425
12/26/2012	7400	600	22850	1030	1000	15850	1820	21300	3375
12/27/2012	7550	570	22650	1030	1000	15700	1790	21200	3500
12/28/2012	7600	600	22450	1060	1000	15700	1810	20850	3500
12/31/2012	7550	600	22650	1030	1000	15700	1790	21200	3500
1/1/2013	7550	600	22650	1030	1000	15700	1790	21200	3500
1/2/2013	7500	610	21900	1040	1000	15950	1790	21850	3600
1/3/2013	7850	600	21950	1070	1040	16100	1800	22100	3550
1/4/2013	7850	630	22050	1040	1040	16100	1820	21750	3550
1/7/2013	7750	680	21850	1030	1020	15950	1840	21700	3400
1/8/2013	7650	680	22100	1020	1010	16000	1830	21650	3550

1/9/2013	7700	670	21900	1030	990	15700	1790	21450	3600
1/10/2013	7350	670	21300	1000	1000	15450	1790	21250	3575
1/11/2013	7300	680	21400	1000	1000	15000	1810	21300	3600
1/14/2013	7500	710	21600	1020	1030	15750	1830	21150	3625
1/15/2013	7600	720	21850	1010	1030	15700	1890	21250	3600
1/16/2013	7650	720	21900	1010	1020	15450	1900	21600	3600
1/17/2013	7500	710	21800	1000	1000	15700	1910	21500	3600
1/18/2013	7750	750	22050	1040	1030	15850	1960	22450	3775
1/21/2013	7700	730	21500	1040	1000	15600	1920	23000	3750
1/22/2013	7750	740	21500	1040	1000	15600	1920	23000	3750
1/23/2013	7800	720	21550	1060	1010	15700	1920	22450	3700
1/24/2013	7800	720	21550	1060	1010	15700	1920	22450	3700
1/25/2013	7800	720	21600	1060	990	15450	1960	22250	3650
1/28/2013	7750	720	21350	1060	990	15200	1910	22050	3750
1/29/2013	7700	760	21700	1090	1020	15300	1930	21650	3775
1/30/2013	7600	800	21650	1120	1040	15600	1940	21600	3800
1/31/2013	7350	770	21750	1090	1030	15750	1940	22050	3875
2/1/2013	7450	780	21500	1090	1030	15950	1930	21950	3800
2/4/2013	7600	770	21450	1100	1030	15850	1940	21950	3850
2/5/2013	7600	780	21500	1130	1040	16250	1940	22200	3875
2/6/2013	7550	790	21550	1120	1010	16400	1960	22200	3850
2/7/2013	7650	780	21550	1120	1020	16300	1930	22300	3850
2/8/2013	7750	800	21400	1090	1030	16150	1930	22000	3900
2/11/2013	7700	820	21450	1090	1020	16400	1930	21950	3900
2/12/2013	7750	840	21700	1120	1030	16700	1930	22300	3925
2/13/2013	7800	860	21900	1140	1070	16750	1920	22800	3975
2/14/2013	7750	840	22000	1130	1070	16500	1950	22750	4150
2/15/2013	7750	830	22050	1130	1080	16350	1990	23000	4225
2/18/2013	7700	880	21850	1120	1070	16500	1990	22900	4300
2/19/2013	7700	860	21750	1110	1080	16500	1980	22750	4175
2/20/2013	7750	900	21700	1120	1100	16500	1970	23200	4325
2/21/2013	7750	900	21600	1150	1100	16550	1980	23150	4300
2/22/2013	7750	930	21450	1150	1100	16550	1970	22950	4300
2/25/2013	7850	930	21450	1210	1100	16650	1980	22850	4550
2/26/2013	7800	920	21450	1230	1080	16650	1970	22300	4625
2/27/2013	7900	930	21600	1270	1100	16650	2030	22650	4550
2/28/2013	7950	930	21950	1290	1130	17350	2150	22850	4400

3/1/2013	8100	960	22700	1260	1140	18150	2170	22750	4450
3/4/2013	8100	960	22400	1300	1140	17900	2100	23000	4450
3/5/2013	8100	970	22400	1280	1120	18050	2100	22800	4350
3/6/2013	8100	1000	22750	1280	1180	18050	2220	22950	4325
3/7/2013	8200	1030	22900	1320	1190	18000	2120	22850	4475
3/8/2013	8300	1050	22750	1330	1190	18300	2150	23000	4575
3/11/2013	8050	1030	22550	1290	1190	18350	2170	22900	4725
3/12/2013	8300	1050	22750	1330	1190	18300	2150	23000	4575
3/13/2013	7950	1000	22850	1270	1140	18000	2170	22800	4775
3/14/2013	7750	990	22500	1230	1140	17750	2120	22000	4600
3/15/2013	7600	1000	22500	1230	1150	18250	2060	22300	5000
3/18/2013	7700	1010	22450	1270	1150	17950	2100	22500	5000
3/19/2013	7650	1020	22400	1260	1180	17850	2110	22750	4950
3/20/2013	7700	1120	23150	1260	1200	17750	2140	22550	4850
3/21/2013	7600	1130	23000	1240	1220	17500	2150	22800	4700
3/22/2013	7500	1080	22150	1190	1220	16850	2110	22100	4700
3/25/2013	7650	1090	22200	1240	1290	17500	2140	22750	4725
3/26/2013	7750	1080	23050	1260	1310	18150	2170	22450	4750
3/27/2013	7950	1080	23500	1290	1340	18450	2170	22750	4825
3/28/2013	7900	1070	23300	1240	1370	17700	2200	22800	5050
3/29/2013	7900	1070	23300	1240	1370	17700	2200	22800	5050
4/1/2013	7850	1070	23000	1250	1380	17950	2150	22150	5100
4/2/2013	7950	1030	23250	1270	1330	18150	2180	22650	5000
4/3/2013	7950	1030	23250	1270	1330	18150	2180	22650	5000
4/4/2013	7700	1020	24000	1230	1280	17800	2170	22750	4875
4/5/2013	7650	1020	24050	1230	1310	17800	2140	22950	4775
4/8/2013	7700	980	24200	1220	1290	17750	2100	22900	4725
4/9/2013	7700	990	24000	1210	1310	17750	2160	22700	4725
4/10/2013	7550	980	24000	1230	1320	17600	2150	22750	4700
4/11/2013	7750	1020	24100	1230	1340	17850	2200	22900	4675
4/12/2013	7650	1030	24000	1230	1390	18000	2230	22800	4700
4/15/2013	7600	1020	23600	1260	1390	17750	2230	22500	4675
4/16/2013	7750	1040	24400	1260	1380	18150	2350	22850	4725
4/17/2013	7650	1070	25800	1260	1360	19000	2400	22700	4725
4/18/2013	7750	1060	25350	1270	1330	18850	2310	22650	4875
4/19/2013	7700	1080	25200	1320	1350	18850	2340	22650	4725
4/22/2013	7800	1040	24500	1330	1350	18850	2340	22650	4750

4/23/2013	7800	1040	24500	1330	1350	18850	2340	22650	4750
4/24/2013	7800	1050	25550	1370	1350	18150	2390	23000	4775
4/25/2013	7350	1040	25000	1360	1340	18150	2360	23000	4800
4/26/2013	7200	1030	25150	1350	1350	18150	2250	22750	4900
4/29/2013	7400	1050	25500	1380	1350	18350	2280	23000	4975
4/30/2013	7350	1050	26400	1390	1350	18400	2340	26250	5050
5/1/2013	7350	1090	26950	1360	1350	18800	2360	25700	4975
5/2/2013	7200	1050	26500	1350	1350	18950	2360	25250	4850
5/3/2013	6900	1040	26250	1330	1350	18600	2260	25900	4800
5/6/2013	7000	1030	25250	1350	1370	18450	2320	27000	4975
5/7/2013	7050	1040	25250	1400	1440	18600	2340	27050	4950
5/8/2013	7100	1080	25450	1430	1460	18600	2360	27700	4950
5/9/2013	7100	1080	25450	1430	1460	18600	2360	27700	4950
5/10/2013	7200	1100	25300	1450	1460	19000	2370	27500	5000
5/13/2013	6950	1080	25200	1470	1440	18600	2370	27650	4850
5/14/2013	7050	1090	25200	1460	1500	18700	2370	28200	4900
5/15/2013	7050	1080	25650	1460	1480	18700	2380	28100	4850
5/16/2013	7050	1080	25200	1470	1500	18550	2380	28150	4850
5/17/2013	7050	1080	25250	1540	1490	18550	2390	31250	4925
5/20/2013	7200	1070	25600	1540	1530	18700	2460	31550	5350
5/21/2013	7150	1080	25450	1500	1530	18850	2450	30950	5350
5/22/2013	7150	1110	25400	1510	1550	18800	2470	30850	5500
5/23/2013	7050	1050	25300	1450	1550	18500	2440	31600	5200
5/24/2013	7200	1050	25250	1480	1560	18200	2460	32300	5300
5/27/2013	7000	1050	24150	1450	1580	18000	2440	31500	5050
5/28/2013	7450	1080	24200	1480	1580	18400	2460	33050	5100
5/29/2013	7200	1070	24450	1530	1680	18500	2480	33450	5000
5/30/2013	7050	1050	24100	1500	1690	18250	2370	32350	5100
5/31/2013	7050	1060	23750	1450	1840	18000	2210	30500	4950
6/3/2013	7050	1020	22750	1430	1790	17700	2280	29050	4900
6/4/2013	7150	970	23900	1440	1770	17550	2270	31300	5000
6/5/2013	7100	940	23100	1410	1770	17450	2240	31000	5050
6/6/2013	7100	940	23100	1410	1770	17450	2240	31000	5050
6/7/2013	6800	900	22300	1370	1680	16100	2200	28900	4750
6/10/2013	6850	890	22200	1350	1580	16300	2100	27700	4775
6/11/2013	6650	800	20600	1280	1600	15300	2000	26900	4550
6/12/2013	7150	850	21800	1310	1570	16550	2060	29450	4725

6/13/2013	6900	820	22800	1290	1530	16700	2040	27800	4400
6/14/2013	7050	840	23700	1320	1650	17600	2110	28850	4750
6/17/2013	6950	880	23900	1340	1660	17950	2080	28900	5100
6/18/2013	7000	870	23700	1300	1650	17850	2170	29500	5100
6/19/2013	6850	860	23300	1320	1570	17800	2200	29000	5000
6/20/2013	6600	800	22650	1230	1490	17500	2100	27550	4700
6/21/2013	6350	800	22400	1190	1470	16100	1990	27250	4600
6/24/2013	6300	760	21450	1200	1490	15600	2000	26400	4550
6/25/2013	6150	770	21600	1190	1470	15600	1950	26000	4400
6/26/2013	6500	800	23700	1320	1510	16350	2050	28000	4700
6/27/2013	6700	810	23000	1380	1480	16500	2160	29400	4875
6/28/2013	7000	750	24450	1440	1520	17100	2250	30750	5150

Lampiran 4

Daftar *Return* Saham Harian Klasik

Periode 3 Januari 2011- 30 Juni 2013

ASII	ASRI	INTP	KLBF	LPKR	SMGR	TLKM	UNVR	CPIN
0	0	0	0	0	0	0	0	0
-0.03555	-0.03334	0.033694	-0.00755	0.02778	0.005063	-0.01258	0	-0.0169
-0.00861	0	0.008996	0.007547	0	0.01005	0.012579	0.018519	0.016902
-0.02038	0.033336	-0.01504	-0.02281	0.013606	-0.0202	-0.03822	-0.01541	0.011111
-0.04001	-0.03334	-0.02765	-0.03125	-0.05557	-0.04701	-0.04652	-0.00936	-0.01111
-0.03004	-0.08855	-0.06766	-0.0656	-0.0438	-0.08361	-0.02062	-0.01899	-0.03409
-0.00316	0.018349	-0.00669	-0.06115	-0.09382	0.028655	0	-0.00963	-0.0353
0.020878	0.05311	0.00335	0.110751	0.032261	0.005634	0.040822	0.009631	0.035298
-0.0083	0	0.006667	-0.04116	0	0.005602	-0.0202	0.015848	0
0	-0.01739	0.006623	0.024898	-0.016	0.011111	0.020203	0.00939	0
-0.01152	-0.03572	-0.01329	-0.03334	-0.01626	-0.02801	0.013245	0.024617	-0.01749
-0.00953	0	-0.00335	0.008439	0.032261	0.005666	0.025975	-0.02151	-0.01183
0.041673	-0.03704	-0.03761	-0.01695	-0.04879	-0.05219	0	-0.02516	-0.00597
-0.02479	-0.07847	-0.03908	-0.01724	-0.05129	-0.03637	-0.03258	-0.02908	-0.01813
-0.01369	-0.02062	-0.02198	-0.04445	0	-0.03135	0	-0.06782	-0.06291
-0.00745	-0.02105	0	-0.03704	-0.03572	-0.02581	0.019673	-0.0177	-0.07411
0.05001	0.061875	0.029199	0.046091	-0.03704	0.044736	-0.00651	0.010657	0.020762
0.024098	0.019803	0.052551	0.077962	0.090151	0.030772	0.012987	0.007042	0.040274
0.015748	0.019418	-0.00342	-0.0339	0.017094	-0.03704	-0.01299	0.03787	0.013072
0.002925	-0.03922	-0.03131	0	0	-0.02548	0.012987	0.006734	-0.00651
-0.04889	-0.0202	-0.04333	-0.0262	-0.03449	0	-0.02615	0.010017	-0.02649
-0.00615	-0.02062	0.046855	0.017544	-0.0177	0.031749	0	0.003317	0.101999
-0.00516	0.020619	0.031198	0.008658	0	0.024693	0.013158	0.009885	-0.0122
0.007213	0	0	0	0	0.018127	0.012987	0.032261	0.042048
0.016294	0	0.01356	0	0	0	-0.00647	-0.01278	-0.0059
-0.01322	-0.02062	-0.00337	0	-0.01802	-0.01205	0	-0.03935	-0.03003
-0.01236	-0.02105	-0.03088	-0.01739	-0.01835	-0.01835	0.012903	0.003339	-0.04362
0	-0.02151	-0.01404	-0.04485	-0.03774	0.024391	-0.01942	-0.02361	-0.04561
0.003104	0.021506	0.027876	0.03604	0	0.006006	-0.00656	-0.00342	0.019803
0.023482	0	-0.00344	0.034786	0.03774	0.00597	-0.01993	-0.00687	-0.0198
-0.00506	-0.02151	-0.00345	-0.02598	0.018349	0	0	0.043852	0.006645

0.033902	0.063179	0.040684	0	0.018019	0.035091	0	-0.01329	0.057894
0.038466	0.040005	0.039093	0.025975	0.052186	0.005731	0	0.036129	-0.00627
-0.01809	0	-0.02262	0.008511	0.016807	-0.00573	0.019934	-0.00323	-0.01905
-0.00771	-0.0198	-0.03661	-0.03449	-0.05129	0	-0.01993	-0.01303	-0.01942
0.004829	-0.0202	0.016807	0.025975	0	0.011429	0	0.029081	0.012987
-0.00968	-0.04167	-0.0339	-0.00858	-0.05407	-0.01719	-0.01351	-0.00639	-0.03279
0.002914	0.041673	-0.0104	-0.00866	0	-0.01749	0.013514	-0.00643	0
0.009653	0	0.003478	0.017242	0	0.017493	0	0.044171	0.013245
0.036779	0.020203	0.00692	0	0.018349	0	0.006689	0.003082	-0.01325
0	-0.04082	-0.01739	0.008511	-0.01835	-0.02339	-0.0202	-0.00308	-0.00669
0.010134	0.040822	0.003503	0	0	-0.0119	0	0.018349	0
0.006396	0.019803	0.030984	-0.00851	0.018349	0.05249	-0.00683	0.012048	0.006689
0	0.038466	-0.0034	-0.00858	0.018019	0.0113	0.006826	0.011905	0
0.00545	0	0.013514	0.008584	0.0177	0	-0.00683	-0.00593	0.039221
0.022392	0.018692	-0.02721	0.025318	0.034486	0	0.02034	-0.00298	0.05001
-0.00266	0.018349	0.017094	0.016529	-0.01709	-0.00563	-0.00673	-0.00299	-0.01227
-0.03433	-0.05609	0.003384	0.016261	-0.01739	-0.00567	-0.01361	0.00597	-0.01242
0.017313	0.019048	0.006734	0.008032	0.017392	0.0113	0.006826	-0.01802	0.030772
-0.00816	-0.01905	-0.01012	-0.04082	0	-0.017	-0.02759	-0.00303	-0.0122
-0.01099	0	-0.0034	0.016529	0	-0.01729	-0.01408	0.006061	0.076734
-0.01484	0	-0.02759	-0.0249	-0.05311	-0.0295	-0.03611	-0.02757	0.022473
0.009302	0.019048	0	-0.00844	0.018019	0.00597	-0.01482	-0.03155	-0.04546
0.021073	-0.01905	0.006969	0	0	0.005935	0.007435	0.028438	0.039891
-0.00181	-0.01942	0.00692	0.016807	-0.01802	0.023393	-0.02247	-0.00625	0.011111
0.031294	0.057158	0.085861	0.03279	0.035718	0.067064	0.080043	0.021706	0.037945
0.019181	-0.01869	-0.00635	0.008032	0	-0.00542	0	-0.01858	0.010582
-0.01742	0.018692	0.012658	-0.01613	0.017392	-0.01644	-0.00702	-0.01575	0
-0.03943	0.036368	0.00314	0.032003	0	-0.03371	-0.01418	-0.02899	0.005249
0.027942	0.0177	0.015552	0.007843	0.050431	0.039221	0.028171	0	0.025841
0.013245	0	0.009217	0.060625	0	0	0.020619	0	0.032625
0.015666	0	0.015175	0.021819	0.032261	0.048267	-0.00683	0.009756	0
-0.02536	0	0.006006	0.007168	0	0.005222	0	-0.01631	-0.01242
0.003537	0	-0.003	-0.01439	-0.03226	0	-0.00687	0.006557	-0.01005
0.025274	0.017392	-0.00301	0.00722	0.032261	-0.01575	0	0	-0.02041
-0.00864	0	-0.01824	0.021353	0.04652	0.005277	-0.02091	0	-0.00517
-0.01487	0	0.012195	0.048119	0.044452	0.020834	-0.01418	-0.01316	0.020514
0.000881	0	0.012048	-0.01351	0.028573	0	0.014185	0.003306	0.005063
-0.01151	0	-0.01813	-0.00683	-0.01418	-0.00517	0	0	-0.01015

-0.00089	-0.03509	0.027069	0.006826	0	-0.00519	-0.01418	-0.00331	0
-0.02253	0	-0.01495	-0.0137	0	-0.00522	0.028171	-0.00998	-0.01542
0.004548	0	0.023811	0.013699	0	0	0.00692	0	-0.01042
-0.01279	-0.01802	-0.00295	0	0.028171	-0.00525	0.013699	0.003339	0.020726
-0.01388	0	0.014642	0	0	0	0.040005	0.00995	-0.00514
0.027575	0.035718	0.020145	-0.0137	0.054067	0.005249	0.019418	0.009852	0
0.011717	0	0.014145	-0.01389	0.025975	0	-0.00643	0.003263	-0.00517
-0.01626	0.034486	-0.00846	0.027588	0.012739	0	-0.02615	-0.00982	0
-0.01468	0	-0.02583	-0.02062	0	-0.01053	-0.01333	0.003284	0
0.019223	0.016807	-0.00291	-0.00697	-0.01274	0.010526	0.033006	0	0.005168
0.008126	0.016529	-0.00292	0	0	-0.01053	-0.00651	0.003273	0.005141
0.009843	-0.03334	-0.00587	0	0	0.005277	0.006515	0	-0.01031
0.008865	0	0.005865	0.006969	0.025318	0.005249	0.006473	0	0.005168
-0.00887	-0.01709	-0.00881	0	-0.02532	-0.00525	-0.00647	-0.00656	-0.03142
0.004442	-0.01739	-0.02087	-0.02105	-0.0129	-0.01058	-0.00651	-0.01325	-0.0107
-0.00266	0	0.026748	0.014085	0.012903	0.010582	-0.0198	0	-0.00539
0.004435	0.017392	-0.00294	-0.02837	0	-0.01592	0.006645	-0.00334	0.010753
-0.00177	0	-0.0178	-0.00722	-0.0129	0.005333	0	0	0.021165
0.009705	0.017094	0	0	-0.01307	-0.0107	0	-0.00335	-0.01053
0.039592	0.065597	0.017805	0.00722	0	0.005362	0.006601	0.006689	0.010526
-0.01874	0	-0.01183	-0.01449	0	-0.00536	0.013072	-0.00669	-0.01053
0.006001	-0.016	-0.00897	0	-0.01325	0.005362	0	0	0.010526
0.009358	0	-0.01818	0.021661	-0.01342	-0.00536	0	-0.00673	0
0.010947	0	0.006098	0.014185	0.013423	0.016	0.006473	0.006734	0.010417
0.02318	-0.01626	0.012085	-0.01418	-0.09798	0.015748	-0.01954	0.00335	0.005168
0.014623	0.016261	0.032499	0	-0.01482	0.015504	0.006557	0.003339	-0.00517
-0.04621	-0.06669	-0.0117	-0.05129	-0.03031	-0.01031	-0.01316	-0.01005	-0.0532
-0.01876	0	0.002937	0.014926	-0.0155	0	0.013158	-0.00337	0.021622
0	0.033902	-0.00588	0	-0.01575	0.005168	0.006515	0	0
0.020444	0	0.005882	-0.00743	0.061558	0.005141	0	0.003373	0.015915
-0.00169	0.016529	0.011662	0.022141	0.014815	-0.00514	0	0	0
-0.00254	-0.01653	-0.00581	-0.01471	-0.01482	-0.00517	-0.01307	0	-0.00528
-0.00509	0.03279	-0.01468	0.05757	0.014815	0.005168	0.013072	-0.01015	0.020943
0.00594	0.077558	-0.00593	-0.03559	0	-0.00517	0.006473	0.00678	0
-0.00254	0	0.02353	0	0	0	-0.01299	0.010084	0.005168
0.00592	-0.01504	0.020145	-0.00727	-0.02985	-0.01042	-0.00656	-0.00335	-0.00517
0.005046	0	-0.00571	0	-0.01527	-0.01583	-0.01325	0.00335	0.005168
-0.00168	-0.01527	-0.03203	-0.01471	-0.0155	-0.0107	0	-0.01008	-0.00517

-0.01183	0	-0.00593	0	0.015504	-0.00539	-0.00669	-0.00678	-0.00519
-0.02323	-0.0155	-0.01499	-0.02247	0	0	0	0	-0.01047
-0.01845	-0.01575	-0.00303	-0.01527	-0.0155	-0.00542	0	-0.00683	-0.01592
0.016704	0.015748	0.015038	0.007663	0	0	-0.02034	0.013606	0.005333
0.028365	-0.01575	0.002981	0.007605	0	0.021506	-0.00687	0.003373	0.010582
-0.01451	0.015748	-0.00298	0.007547	-0.01575	0.021053	-0.02091	-0.00337	-0.01058
0.002576	-0.01575	0.008915	-0.02281	0.015748	-0.01047	-0.03585	0	-0.00533
0.00257	-0.016	-0.02093	0.015267	0	0.015666	0.014493	-0.00338	-0.00536
0.011059	0.016	0.014993	0.037179	0.015504	0.005168	0.021353	0.006757	0.026527
0.015114	0.031253	0.002972	0	0.015267	-0.00517	0.007018	0.01005	0.010417
0.013245	-0.0155	-0.00297	-0.00733	0	-0.01042	0	0	-0.01042
0.01793	0	0.002972	0.014599	0	0.005222	0.013889	0.013245	0.005222
-0.01383	-0.01575	-0.01194	-0.0146	-0.01527	-0.02105	-0.02091	-0.00329	-0.00522
0.008157	0	0.01194	-0.00738	0	0.021053	0.020907	-0.01664	0.025841
0.031977	0.031253	0.0118	0	0	0	0.013699	0	0.01519
0.030986	0.015267	0.014556	0.021979	0	0.025708	-0.02062	0.00335	0.017435
0.011377	-0.03077	-0.03231	0.04948	0	-0.01535	0	-0.01008	0.048202
-0.01827	0	-0.01201	0	0	0.005141	-0.00697	0.003373	0.068208
0.011455	0	0.003017	0	0.015267	0.005115	0	-0.00676	0.010929
0.029183	0.030772	0.014948	0	0	0.010152	0.006969	0.016807	0.021506
0.002946	0.015038	-0.00894	-0.01389	0	-0.01015	-0.02105	0.006645	-0.0107
-0.01407	-0.03031	-0.01813	-0.01408	-0.01527	0	-0.00712	-0.02007	-0.03279
0.014069	0.030305	0	0.007067	0	0.010152	0.007117	-0.00338	0.074901
0.013874	0.057987	-0.00612	0	0.015267	0.005038	0	0.006757	0
0.020812	0.02778	0.00916	0	0	0	0.014085	0.01005	0
0.030772	0	-0.01223	-0.02135	0.015038	-0.01519	-0.00702	-0.00334	0.030459
-0.01527	0.040274	-0.01238	-0.00722	0.029414	0	-0.00707	-0.00335	-0.01005
0.006274	0.063716	0.00311	0	0.069959	0	0.007067	0.00335	0.01005
-0.00978	-0.05064	0.018462	-0.00727	0	0.005089	0.02778	0.003339	0.00995
0.022894	0.025642	0.003044	0.021661	0.013423	0.005063	0.013606	0.003328	0.067011
-0.00619	0.073203	-0.00916	0	0	-0.01015	-0.01361	-0.00667	0
0.020493	0	0.00916	0.007117	0.026317	0.01519	0	0.003339	0.036368
0.014099	0	-0.00304	-0.02151	0.012903	0.005013	0.006826	0.016529	-0.00897
-0.0443	0.011696	-0.03096	0	0	-0.03563	-0.00683	0.032261	0
-0.01758	-0.02353	-0.02871	0.00722	0	-0.02094	0.006826	-0.00957	-0.01818
0.01618	0.04652	0.003231	0.014286	0.085942	-0.00531	0.020203	0.019048	-0.00922
-0.0063	-0.01143	-0.01626	-0.01429	0	0.005305	0.013245	0.00627	-0.06701
-0.00775	-0.02326	-0.03334	-0.02182	-0.02381	-0.02139	-0.0066	0.006231	0.08536

-0.00354	-0.02381	-0.01022	-0.02231	-0.01212	-0.01087	0.032576	0.054394	0.035718
-0.04652	-0.07504	-0.05274	-0.03832	-0.06291	-0.0277	-0.03258	-0.04512	-0.08224
-0.03252	0.012903	0.045863	-0.00784	-0.05335	0.027703	-0.00664	-0.0155	-0.04879
-0.01471	-0.03922	-0.00692	-0.06506	-0.01379	-0.05043	-0.04082	-0.06454	-0.01005
0.056118	0.076961	0.027399	0.111226	0.054067	0.017094	-0.01399	0.05196	0.039609
-0.00592	0.059898	-0.02393	0.036905	0.025975	-0.00567	0.034606	0.037271	-0.00976
-0.00372	0	0.003454	-0.00727	0.012739	0.005666	-0.00683	0	0.019418
0.041566	0	0.053704	0	0	0.005634	-0.00687	0.021117	0.046957
0	0	-0.0198	-0.02214	0	0	-0.00692	0.002981	-0.00922
0.038534	-0.0117	0.026317	0.05092	0.012579	0.022223	0.034133	0.032214	0.018349
-0.09586	-0.06062	-0.05335	-0.02878	-0.09157	-0.03352	-0.00673	-0.04721	-0.04652
0.024656	0	0.027029	-0.00733	0	0.028013	-0.01361	0.006024	0
-0.00741	0.04879	0.003328	0.014599	0	0.021859	0	0.008969	0.064539
-0.00149	0	-0.01675	-0.0146	0	0	-0.00687	-0.02105	0.0177
0.003716	0.02353	-0.00338	0	0.013606	-0.01635	-0.00692	-0.01841	-0.05407
-0.01872	-0.02353	0.030052	0.021819	0	0	0.00692	0.045394	0.018349
0.024637	0.011834	0.019545	-0.00722	-0.01361	0.027102	0.040546	-0.00892	-0.01835
0.010272	-0.02381	0.006431	0.021506	0	-0.01617	0.013158	0.014815	0.045257
0.039361	0.023811	0.019048	0.021053	0.013606	0.010811	0.032157	0.023257	0.043297
-0.00351	-0.01183	-0.01905	0	0	-0.00539	-0.03216	0.008584	-0.02575
-0.00991	0.04652	-0.00966	0	0.013423	-0.01087	-0.00656	0	-0.02643
-0.01288	-0.04652	-0.02956	0.00692	-0.02703	-0.0277	-0.02667	-0.03184	-0.01802
-0.00578	0	-0.01342	0	0	0	-0.00678	0.002937	0.00905
-0.03315	-0.01198	-0.04491	-0.01389	-0.01379	-0.017	0	0.002928	-0.04609
-0.02196	0.023811	-0.00354	-0.03559	-0.02817	-0.02899	0.020203	-0.02367	-0.01905
0.009146	0.011696	-0.00355	0.028573	0	0.023257	-0.0202	0.008942	0.056089
-0.01375	-0.02353	-0.05111	-0.02135	0	-0.02326	0.013514	-0.04864	-0.02765
0.006135	-0.01198	-0.00752	-0.00722	0	-0.01183	0	0	0.027652
-0.02086	0	-0.00378	-0.0146	0	-0.01802	0.013334	-0.0157	-0.04652
-0.09922	-0.11478	-0.1643	-0.18527	-0.05884	-0.06899	-0.09003	-0.05196	-0.17662
0.014549	-0.01361	0.109815	0.026202	0	0.056798	0.04256	0.023065	0
-0.03194	-0.01379	-0.045	0.017094	-0.04652	-0.0375	0	-0.00982	-0.08289
0.060418	0.040822	0.072613	0.049597	0.076373	0.031351	0.00692	0.025975	0.180262
0.026886	-0.01342	0.038173	0.039531	0	0.030397	0.013699	0	-0.02083
0.029309	0	0.040372	0.015385	0	0.02367	0.013514	0.00639	0.010471
-0.00626	0.03974	0.007168	-0.00766	0	-0.02968	0.019934	0.0497	0
-0.07671	-0.08113	-0.09746	-0.06351	-0.10863	-0.03681	-0.02667	-0.02454	-0.09844
-0.00425	-0.04317	-0.0567	0.016261	-0.03334	-0.01258	0.006734	-0.02198	0.022728

-0.02414	0.014599	-0.01681	0.031749	0.016807	0	0.033006	0.006329	-0.0113
0.057643	0.056353	0.108322	0.04581	0.03279	0.025001	-0.01307	0.012539	0.087011
0.041151	0	-0.02308	-0.00749	0	-0.05064	-0.04715	-0.00939	-0.04256
0.014129	0	0.003884	0.014926	0	0.012903	-0.00692	-0.01905	0.032088
0.026914	0.053346	0.052842	0.00738	0.016	0.019048	0.013793	-0.00321	0.061244
0.000758	0.098846	0.077778	0.021819	0.015748	0.043084	0.006826	0.028528	0.03884
0.029139	0	0.013514	-0.00722	0	0.035507	-0.0137	-0.00942	0
-0.01409	-0.02381	-0.00673	-0.02198	0.015504	0.039891	-0.02091	-0.00951	0
0.03016	0.102948	0	0.00738	0.030305	0	0	-0.01605	0.028171
-0.01386	-0.06744	-0.03437	-0.01482	-0.04581	-0.04572	0.007018	0.016052	-0.03774
0.018202	0.09953	0.030984	0.029414	0	0.051293	0.006969	0	0.028438
-0.02188	-0.03209	-0.03098	-0.0146	-0.01575	-0.03967	0.00692	-0.00319	-0.05771
-0.02539	0	-0.0035	-0.01482	0.015748	0.011494	0	0.018988	0.009852
0.029074	-0.02198	0.047954	0.036634	0.030772	0.066323	0	0.012461	0.047856
0.003667	-0.01117	0.009983	-0.00722	-0.01527	-0.03815	0.013699	0.003091	0.009302
0.001463	0	0.026145	0.00722	0	0.016529	0.00678	-0.00619	0.009217
0.008009	0	0.031749	0	0.015267	0.01087	0.013423	-0.00311	0.027151
0.013684	-0.03429	0.021639	0.014286	0	0.016086	-0.00669	-0.02205	-0.00897
-0.01296	0.011561	0	-0.01429	-0.03077	0.010582	-0.00673	-0.00319	-0.0367
-0.0369	-0.05919	-0.06965	-0.0292	-0.01575	-0.05407	0	0	-0.06766
0.036905	0.09309	0.009788	0.014706	-0.016	0.00554	0.020068	0.009539	0.067659
-0.02495	-0.02247	-0.02966	-0.01471	-0.01626	-0.02235	-0.00664	-0.00635	-0.01887
0.01475	0.022473	0.036129	0.029199	0.032261	0.044206	0.013245	0.009509	0.018868
-0.00661	-0.0339	0.028619	0	0	0.021391	-0.01325	-0.00633	0
0.009534	0.022728	-0.00945	0.007168	0.015748	-0.00531	0	0.00317	0.009302
0.033025	0	-0.01917	0.021202	0.030772	0.005305	0	0.025001	0
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0.005049	0.022473	-0.00669	0.007117	0.015748	0.00545	0	-0.00625	-0.01923
0.035339	0.021979	0.026492	-0.00712	0.015504	0.026811	0.013423	0.00313	0.019231
-0.00977	0	0.003263	0	0	-0.01064	-0.00669	-0.00627	-0.01923
0.000701	0	0.012945	-0.01439	0.030305	0.010638	0.013334	-0.00315	0.019231
-0.02771	-0.02198	0.01278	0	-0.01504	-0.00531	0	0.018751	-0.00957
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0.024819	0.034686	0.036855	0.014599	0.015748	0.022223	0	0.036368	0.019803
-0.01966	-0.02299	-0.01993	-0.02198	-0.03175	-0.03922	0.013334	0.040822	-0.04001
0.020379	0	0.00335	0	0.016	0.005698	-0.00664	-0.00573	0.010152
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0.015301	0.011834	0	0.036368	0.016	0	0	-0.01695	-0.02174
0.025697	0	0.02377	-0.00717	0	0.022347	-0.02076	0.030858	0
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0.001409	0.045985	0.006645	0.007067	0.015748	0.016086	0	-0.03352	0.063179
0.007717	0.033152	0.019673	0	0	0.026248	-0.0137	0.016902	0
0.001397	-0.02198	-0.00651	-0.00707	-0.01575	-0.01042	0.013699	0.005571	-0.05237
0.017981	-0.01117	0.032157	0	0.015748	0.015585	-0.00683	-0.00557	0.021277
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0.025677	0	0.012987	0	0	0.035994	0.00692	0.002845	0
0	0	0.025479	0	0.015504	0.034743	-0.01389	-0.01719	-0.01081
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0.029959	0.021979	0.027652	0.022306	0.015748	0.004843	0	-0.01149	0.03279
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0.0077	0.010811	0.009245	0.00738	0	-0.02331	-0.00712	-0.01931	-0.02174
0.018653	0.010695	0.033186	-0.00738	0.04581	0.027909	0.014185	0.013831	0
0.007501	-0.0107	0.017648	0	-0.01504	0.018182	0.007018	0.02174	-0.01105
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0.004062	0	-0.00876	0.00738	0	0.018434	0.006969	-0.02429	0
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0	-0.01081	0	0	0	0.040094	-0.01408	0.016086	0.011696
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0.017485	0.010811	0.017341	0.014493	-0.01527	0.008889	0	-0.0027	0.035091
0.028263	0.031749	0.033806	-0.00722	0.04512	-0.01786	0.007067	0.042334	0.011429
0.003881	0.010363	0.019205	0	0	0.022273	-0.00707	0.038124	0.0113
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0.012423	-0.01005	0.00542	0	0.015038	0.027274	0.007067	0.010152	0.02174
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0.009891	-0.01047	-0.00283	-0.01449	0.014815	0.004338	0	0.002535	-0.02198
0.014332	0.010471	0.041615	0.007273	0.014599	0.025642	0	0.002528	0
0.006447	0.010363	0.010811	0.021506	-0.0146	0.041328	0	0.01005	0.03279

0.012772	-0.01036	0.010695	0	0	0.008065	-0.01439	0.012423	0.06252
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0.004477	0	-0.00281	0	-0.01482	-0.02169	0.014389	0.007255	0.020409
0.013312	0.031091	-0.00846	-0.00702	0	-0.00881	0	-0.01212	0.020001
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0.023078	0.010363	0.005917	-0.00707	0.015038	0.040638	-0.00727	0	0.020203
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0.004494	0.068319	0.011696	-0.00717	0.043172	0	0.021979	0.01005	0.058269
0.008929	0.018692	-0.00583	0.028371	-0.01418	0	0	-0.00501	0.00939
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0.02975	0.0177	0.023122	0	0	0.004357	0.014706	0.028099	0.045257
0.00476	0.017392	0.016998	-0.01408	0.028171	0.004338	0.007273	0.002516	-0.00889
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0.033015	0.034486	0.005714	0	-0.01418	0.008734	0.014493	0.007663	0
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0.015885	0.036368	0.02417	0	0.014599	0.028039	0.014493	-0.00269	0.019418
0.014931	0.0177	0.040941	0.021661	0.014389	0.036203	0.014286	0.037041	0.028438
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0.002275	-0.01835	0.008683	0	0	0.004556	0.020479	-0.00238	0.018519
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0.012195	0	0.033902	0.025642	-0.01258	0.031749	0.038715	0	-0.00939
-0.0261	0.018692	-0.01117	-0.01917	0	-0.02257	-0.01274	-0.02641	-0.00948
-0.01488	0	-0.03139	0.012821	0.012579	-0.00917	-0.02598	0	-0.02899
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0.056089	0.019048	0.051139	0.019673	0.013072	0.044233	0.013072	-0.00247	0.010471
0.051672	0.037041	0.02032	0.019293	0	0.046957	-0.01967	0.019561	0.089612
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0.007547	-0.01802	-0.00297	0.006349	-0.02667	-0.01835	0.026668	0.040822	0
0.029632	0	0.014771	0.006309	0	0.031893	0.032365	-0.03426	0.018519
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-0.00755	0	0.008863	-0.00631	0.013606	0.004515	0.025642	-0.01107	0.04567
0.022473	0	0.011696	-0.01917	0.013423	0.04406	-0.05196	0.058395	0.026433
0	-0.01869	-0.00876	0.006431	0	-0.01302	0.013245	0.002099	0.025752
0.00738	0.018692	0.005848	-0.00643	0.026317	0	0.051293	0.00627	0.057629
-0.02231	-0.03774	-0.01765	-0.01954	0.012903	-0.02208	-0.01893	-0.01258	0.015873
0.029632	-0.03922	0	0	0	0.008889	-0.01282	-0.02781	-0.00791
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0.007435	-0.03244	0.014859	0.019934	-0.0129	0.004435	0	-0.00441	0

0.00738	0	0.020439	0.006557	0.012903	0.004415	0.025318	0.023992	0.015748
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0.029632	0.031091	0.020379	0	0.012579	0.004435	0.031155	-0.01086	0.052446
0.007273	0.020203	0.045078	0	0	0.043297	-0.00615	0.03011	-0.05245
0.00722	0.019803	0.027176	0.006601	0	0.025106	0.030397	0.047579	-0.00772
0.014286	0	0.013316	0	0.036814	0.01232	0.00597	-0.02869	0.02299
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0.00738	0.010257	-0.0027	0.006645	0.012121	0	0.030772	-0.01277	0
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0	0.029853	0.026811	0	0.011696	0	0	-0.02097	-0.02353
0	0	-0.00265	-0.01299	-0.0117	0.029853	-0.0169	0.006336	0
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0.030537	0	0.031253	0.026668	0.02353	0.033336	0.043963	0.033758	0
0.007491	0.010811	0.03279	0.006557	0.02299	0.067352	-0.02725	0	0
0.043803	-0.01081	0.064849	0	0.0113	-0.00769	0.00551	0.006205	0.031749
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-0.00647	0.024693	0.002334	0	-0.00976	0.015361	0	-0.00228	0
0.006473	0.024098	0.011588	0.027151	0.009756	0.018127	0	0.01582	0.00639
0.006431	0.02353	0.009174	0.0177	0.0381	0.00299	-0.00519	0.022174	0.012658
-0.00643	-0.02353	0.004556	-0.00881	0	-0.01504	0.015504	-0.0022	0.043084
0	-0.01198	0.00227	0	0.009302	-0.00913	0.020305	0.010929	0.017911
-0.00647	0.058496	-0.00911	-0.00889	-0.0093	0.009132	0	-0.00436	0.017596
0	-0.02299	-0.00459	-0.00897	0.009302	0	-0.00504	-0.00657	-0.0295
0.006473	0.045462	-0.0023	0.008969	0.018349	0	-0.00506	0.019587	0.035298
0	0	-0.00462	0.026433	0	0.003026	0.005063	-0.00216	-0.0058
0	0.03279	-0.00697	0	0	0	-0.00506	-0.00868	0
0.012821	0	0	0.050858	0	0.006024	0.005063	-0.00437	0.056512
-0.00639	-0.01081	0	0.016394	-0.01835	0	-0.00506	-0.02436	0.016349
0.012739	0.010811	0.006969	0.032003	0.018349	0	0.030002	0.015573	-0.01635
0.006309	0	0.016074	0.015625	0.026907	0.041182	0.057432	0.008791	-0.03352
0.018692	0.031749	0.033598	-0.02353	0.008811	0.045078	0.009259	-0.00439	0.0113
0	0	-0.0133	0.031253	0	-0.01387	-0.03279	0.010929	0
0	0.010363	0	-0.0155	-0.0177	0.008345	0	-0.00873	-0.02273
0	0.030459	0.015504	0	0.052186	0	0.05557	0.006557	-0.00576
0.01227	0.029559	0.006572	0.030772	0.008439	-0.00277	-0.04609	-0.00437	0.034094
0.012121	0.019231	-0.00657	0.007547	0	0.016529	0.014052	0.006543	0.0221
-0.03058	-0.01923	-0.00883	-0.03054	0	0.002729	0.009259	-0.00436	0.032261
0.030583	0.019231	0.00883	0.030537	0	-0.00273	-0.00926	0.004357	-0.03226
-0.04308	-0.04879	0.004386	-0.04616	-0.04293	-0.01653	0.009259	-0.00873	0.042787
-0.02548	-0.01005	-0.01544	-0.032	0	-0.01399	-0.02331	-0.03572	-0.03734
-0.01954	0.01005	0	0	0.008734	0.02778	-0.02871	0.013544	0.083382
0.013072	0.00995	-0.00222	0.032003	0	-0.01657	0.019231	0.008929	0
-0.00651	0.009852	-0.00223	-0.00791	0.025752	-0.00559	0.004751	0.01105	-0.01005
0.006515	0.093526	0.032934	0	0.016807	-0.00562	0.014118	-0.00883	-0.02041

-0.01307	0.008889	-0.0065	-0.016	0.016529	-0.01418	0.004662	0.011025	-0.03142
-0.01325	-0.04526	-0.03766	-0.04116	0	-0.03785	-0.01878	-0.03118	0
0.019803	0.009217	0.002255	0.041158	0.055791	0.03785	0.014118	0.028988	0.005305
0.012987	-0.00922	0.037573	0.016	0.015385	0.03647	0.013921	-0.01327	0.005277
0.025479	0	0.019335	0.02353	0.022642	0.016394	0	0.013275	0.015666
-0.00631	-0.0093	-0.00855	-0.03953	0.022141	-0.0415	0.01373	0.002195	0.045578
0	0	0	0	0	0	0	0	0
-0.00635	0	-0.01296	0.008032	0.007273	0.014025	-0.02299	-0.02892	0.009852
0.012658	-0.0381	0.010811	0.015873	-0.0369	0.01108	0.013857	0.022322	-0.0198
0	0	0	0	0	0	0	0	0
-0.03195	-0.00976	0.031749	-0.032	-0.03832	-0.01947	-0.0046	0.004405	-0.02532
-0.00651	0	0.002081	0	0.023167	0	-0.01392	0.008753	-0.02073
0.006515	-0.04001	0.006218	-0.00816	-0.01538	-0.00281	-0.01887	-0.00218	-0.01053
0	0.010152	-0.0083	-0.00823	0.015385	0	0.028171	-0.00877	0
-0.01967	-0.01015	0	0.016394	0.007605	-0.00849	-0.00464	0.0022	-0.00531
0.026145	0.040005	0.004158	0	0.015038	0.014105	0.02299	0.006572	-0.00533
-0.01299	0.009756	-0.00416	0	0.036634	0.008368	0.013544	-0.00438	0.005333
-0.00656	-0.00976	-0.01681	0.024098	0	-0.01399	0	-0.01325	-0.00533
0.019545	0.019418	0.033336	0	-0.00722	0.022285	0.052414	0.015436	0.010638
-0.01299	0.028438	0.055791	0	-0.0146	0.045768	0.021053	-0.00659	0
0.012987	-0.00939	-0.0176	0.007905	-0.02231	-0.00793	-0.03822	-0.00221	0.031253
-0.00647	0.018692	-0.00593	0.038615	0.014926	0	0.012903	0	-0.03125
0.012903	-0.03774	-0.02817	0.007547	0	0	0	0	0.005277
0	0	0	0	0	0	0	0	0
0	0.009569	0.041964	0.029632	0	-0.03784	0.021142	0.015334	0.005249
-0.05942	-0.00957	-0.02176	-0.00733	-0.00743	0	-0.01263	0	0.005222
-0.02062	-0.00966	0.005982	-0.00738	0.007435	0	-0.04773	-0.01093	0.020619
0.027399	0.019231	0.013821	0.021979	0	0.010959	0.013245	0.010929	0.01519
-0.00678	0	0.034686	0.00722	0	0.002721	0.025975	0.132172	0.014963
0	0.037388	0.020619	-0.02182	0	0.021506	0.008511	-0.02117	-0.01496
-0.02062	-0.03739	-0.01684	-0.00738	0	0.007947	0	-0.01766	-0.02545
-0.04256	-0.00957	-0.00948	-0.01493	0	-0.01864	-0.0433	0.025417	-0.01036
0.014389	-0.00966	-0.03884	0.014926	0.014706	-0.0081	0.026202	0.041594	0.035809
0.007117	0.009662	0	0.036368	0.049832	0.008097	0.008584	0.00185	-0.00504
0.007067	0.03774	0.00789	0.021202	0.013793	0	0.008511	0.023745	0
0	0	0	0	0	0	0	0	0
0.013986	0.018349	-0.00591	0.013889	0	0.021277	0.004228	-0.00725	0.01005
-0.03534	-0.01835	-0.00396	0.013699	-0.01379	-0.02128	0	0.00544	-0.03046

0.014286	0.009217	0	-0.00683	0.040822	0.005362	0	0.019696	0.010257
0	-0.00922	0.0177	0	-0.01342	0	0.004211	-0.00355	-0.01026
0	0	-0.0177	0.006826	0.013423	-0.00805	0	0.001778	0
0	0	0.001982	0.04652	-0.00669	0	0.004193	0.104472	0.015346
0.021053	-0.0093	0.013766	0	0.026492	0.008054	0.028868	0.009554	0.082772
-0.00697	0.009302	-0.00588	-0.02632	0	0.007989	-0.00407	-0.0192	0
0	0.027399	-0.00197	0.006645	0.012987	-0.00266	0.00813	-0.00324	0.027652
-0.01408	-0.05557	-0.00394	-0.04055	0	-0.01609	-0.01222	0.02402	-0.05609
0.021053	0	-0.00198	0.020479	0.006431	-0.01635	0.008163	0.02191	0.019048
-0.02817	0	-0.04454	-0.02048	0.012739	-0.01105	-0.00816	-0.02508	-0.04832
0.062304	0.028171	0.002068	0.020479	0	0.021979	0.008163	0.048034	0.009852
-0.03413	-0.0093	0.010278	0.033226	0.061369	0.00542	0.008097	0.01203	-0.0198
-0.02105	-0.01887	-0.01442	-0.0198	0.005935	-0.01361	-0.04537	-0.03344	0.019803
0	0.009479	-0.01463	-0.0339	0.085037	-0.01379	-0.0699	-0.05889	-0.02985
0	-0.03847	-0.04302	-0.01389	-0.02755	-0.01681	0.031183	-0.04871	-0.01015
0.014085	-0.05026	0.049313	0.006969	-0.01124	-0.00851	-0.0044	0.0746	0.020203
-0.00702	-0.03142	-0.03405	-0.02105	0	-0.00571	-0.0133	-0.00963	0.00995
0	0	0	0	0	0	0	0	0
-0.04317	-0.04349	-0.03525	-0.02878	-0.05219	-0.08052	-0.01802	-0.07015	-0.06124
0.007326	-0.01117	-0.00449	-0.01471	-0.06137	0.012346	-0.04652	-0.04241	0.005249
-0.02963	-0.10661	-0.0748	-0.05324	0.012579	-0.06331	-0.04879	-0.02931	-0.04827
0.072496	0.060625	0.056619	0.023167	-0.01893	0.078533	0.029559	0.090568	0.03774
-0.03559	-0.03593	0.044851	-0.01538	-0.02581	0.009023	-0.00976	-0.05766	-0.07126
0.021506	0.024098	0.038715	0.02299	0.075508	0.05249	0.033738	0.037074	0.07654
-0.01429	0.04652	0.008403	0.015038	0.006042	0.019691	-0.01432	0.001732	0.071096
0.007168	-0.01143	-0.0084	-0.03031	-0.00604	-0.00559	0.042359	0.020549	0
-0.02166	-0.01156	-0.01702	0.015267	-0.0497	-0.00281	0.01373	-0.01709	-0.0198
-0.03718	-0.07232	-0.02829	-0.07062	-0.0523	-0.017	-0.04652	-0.05129	-0.06188
-0.03861	0	-0.0111	-0.03306	-0.01351	-0.08338	-0.0538	-0.01095	-0.02151
-0.00791	-0.05129	-0.04334	0.008368	0.013514	-0.03155	0.005013	-0.03169	-0.01093
-0.0241	0.013072	0.006969	-0.00837	-0.01351	0	-0.02532	-0.01527	-0.03352
0.05535	0.038221	0.092782	0.103678	0.026847	0.046957	0.05001	0.074108	0.065958
0.030305	0.012423	-0.02998	0.044452	-0.02007	0.009132	0.052268	0.04879	0.036558
0.043803	-0.07696	0.061136	0.04256	0.026668	0.035718	0.040822	0.044895	0.054877

Lampiran 5

Daftar Return Saham Harian yang Sudah Diurutkan

Periode 3 Januari 2011- 30 Jani 2013

No	ASII	ASRI	INTP	KLBF	LPKR	SMGR	TLKM	UNVR	CPIN
1	-0.09922	-0.11478	-0.1643	-0.18527	-0.10863	-0.08659	-0.09003	-0.12891	-0.17662
2	-0.09586	-0.10661	-0.09746	-0.07062	-0.09798	-0.08361	-0.0699	-0.11418	-0.09844
3	-0.07671	-0.08855	-0.0748	-0.0656	-0.09382	-0.08338	-0.0538	-0.07015	-0.08289
4	-0.05942	-0.08113	-0.06965	-0.06506	-0.09157	-0.08052	-0.05196	-0.06782	-0.08224
5	-0.05264	-0.07847	-0.06766	-0.06351	-0.06291	-0.06899	-0.04939	-0.06454	-0.07411
6	-0.04889	-0.07696	-0.0628	-0.06115	-0.06137	-0.06331	-0.04879	-0.05889	-0.07126
7	-0.04652	-0.07504	-0.05892	-0.05324	-0.05884	-0.05407	-0.04773	-0.05766	-0.0711
8	-0.04652	-0.07232	-0.0567	-0.05129	-0.05557	-0.05219	-0.04715	-0.05506	-0.06766
9	-0.04621	-0.06744	-0.0564	-0.04879	-0.05407	-0.05064	-0.04652	-0.05196	-0.06701
10	-0.0443	-0.06669	-0.05335	-0.04616	-0.05335	-0.05043	-0.04652	-0.05129	-0.06291
11	-0.04317	-0.06188	-0.05274	-0.04567	-0.05311	-0.04939	-0.04652	-0.04871	-0.06252
12	-0.04308	-0.06062	-0.05111	-0.04485	-0.0523	-0.04701	-0.04609	-0.04864	-0.06188
13	-0.04256	-0.05919	-0.04824	-0.04445	-0.05219	-0.04572	-0.04537	-0.04751	-0.06124
14	-0.04256	-0.05609	-0.04639	-0.04116	-0.05129	-0.04302	-0.0433	-0.04721	-0.05771
15	-0.04184	-0.05557	-0.045	-0.04116	-0.05129	-0.04276	-0.04233	-0.04512	-0.05609
16	-0.04016	-0.05407	-0.04491	-0.04082	-0.05129	-0.0415	-0.04082	-0.0449	-0.05407
17	-0.04001	-0.05311	-0.04485	-0.04055	-0.05129	-0.04116	-0.03857	-0.04332	-0.0532
18	-0.03943	-0.05129	-0.04454	-0.03953	-0.0497	-0.04064	-0.03822	-0.04241	-0.05245
19	-0.03861	-0.05129	-0.04349	-0.03897	-0.04879	-0.04045	-0.03822	-0.04175	-0.05237
20	-0.03739	-0.05129	-0.04334	-0.03832	-0.04652	-0.03967	-0.03611	-0.03935	-0.04919
21	-0.03718	-0.05064	-0.04333	-0.0381	-0.04652	-0.03953	-0.03585	-0.03864	-0.04879
22	-0.0369	-0.05026	-0.04302	-0.03704	-0.04581	-0.03922	-0.0339	-0.03572	-0.04832
23	-0.03559	-0.04879	-0.04299	-0.03559	-0.04546	-0.03922	-0.03334	-0.03536	-0.04827
24	-0.03555	-0.04652	-0.04139	-0.03559	-0.0438	-0.03815	-0.03279	-0.03435	-0.04652
25	-0.03534	-0.04599	-0.03908	-0.03449	-0.04302	-0.03785	-0.03279	-0.03426	-0.04652
26	-0.03433	-0.04526	-0.03884	-0.0339	-0.04293	-0.03784	-0.03258	-0.03352	-0.04652
27	-0.03413	-0.04349	-0.03766	-0.0339	-0.03832	-0.0375	-0.03258	-0.03344	-0.04609
28	-0.03345	-0.04317	-0.03761	-0.03334	-0.0381	-0.03704	-0.03216	-0.03342	-0.04561
29	-0.03315	-0.04167	-0.03661	-0.03323	-0.03774	-0.03681	-0.03116	-0.03338	-0.04546
30	-0.03252	-0.04082	-0.03525	-0.03306	-0.03704	-0.03637	-0.02985	-0.03312	-0.04362

31	**-0.03195**	**-0.04082**	**-0.03519**	**-0.03244**	**-0.0369**	**-0.0362**	**-0.02871**	**-0.03209**	**-0.04317**
32	**-0.03194**	**-0.04001**	**-0.03437**	**-0.032**	**-0.03572**	**-0.03588**	**-0.02759**	**-0.03184**	**-0.04256**
33	**-0.03077**	**-0.03922**	**-0.03405**	**-0.032**	**-0.03449**	**-0.03563**	**-0.02755**	**-0.03183**	**-0.04001**
34	**-0.03058**	**-0.03922**	**-0.0339**	**-0.03125**	**-0.03334**	**-0.03371**	**-0.0274**	**-0.03169**	**-0.03922**
35	**-0.03004**	**-0.03922**	**-0.03367**	**-0.03054**	**-0.03226**	**-0.03352**	**-0.02725**	**-0.03166**	**-0.03774**
36	**-0.02985**	**-0.03847**	**-0.03334**	**-0.03031**	**-0.03175**	**-0.03226**	**-0.02703**	**-0.03155**	**-0.03734**
37	**-0.02963**	**-0.03822**	**-0.0331**	**-0.02963**	**-0.03142**	**-0.03204**	**-0.02667**	**-0.03118**	**-0.03704**
38	**-0.02963**	**-0.0381**	**-0.03279**	**-0.02956**	**-0.03125**	**-0.03155**	**-0.02667**	**-0.02931**	**-0.0367**
39	**-0.0294**	**-0.03774**	**-0.03231**	**-0.0292**	**-0.03077**	**-0.03146**	**-0.02625**	**-0.02908**	**-0.03572**
40	**-0.0292**	**-0.03774**	**-0.03203**	**-0.02878**	**-0.03077**	**-0.03135**	**-0.02615**	**-0.02899**	**-0.0354**
41	**-0.02899**	**-0.03774**	**-0.03167**	**-0.02878**	**-0.03031**	**-0.02968**	**-0.02615**	**-0.02892**	**-0.0354**
42	**-0.02846**	**-0.03739**	**-0.03139**	**-0.02878**	**-0.02985**	**-0.02956**	**-0.02598**	**-0.02869**	**-0.0353**
43	**-0.02845**	**-0.03704**	**-0.03131**	**-0.02871**	**-0.02956**	**-0.0295**	**-0.02584**	**-0.02861**	**-0.03409**
44	**-0.02817**	**-0.03593**	**-0.03098**	**-0.02844**	**-0.02956**	**-0.02948**	**-0.02532**	**-0.02781**	**-0.0339**
45	**-0.02778**	**-0.03572**	**-0.03096**	**-0.02837**	**-0.02927**	**-0.02899**	**-0.02469**	**-0.02757**	**-0.03352**
46	**-0.02771**	**-0.03572**	**-0.03088**	**-0.02715**	**-0.02899**	**-0.02878**	**-0.02469**	**-0.02641**	**-0.03352**
47	**-0.0274**	**-0.03509**	**-0.02998**	**-0.02715**	**-0.02817**	**-0.02807**	**-0.0241**	**-0.02558**	**-0.03279**
48	**-0.02632**	**-0.03509**	**-0.02966**	**-0.02632**	**-0.02755**	**-0.02804**	**-0.02331**	**-0.02557**	**-0.03279**
49	**-0.0261**	**-0.03509**	**-0.02956**	**-0.0262**	**-0.02703**	**-0.02801**	**-0.02299**	**-0.02555**	**-0.03279**
50	**-0.02571**	**-0.03449**	**-0.02871**	**-0.02598**	**-0.02667**	**-0.0277**	**-0.0226**	**-0.02516**	**-0.03279**
51	**-0.02548**	**-0.03449**	**-0.02829**	**-0.02564**	**-0.02581**	**-0.0277**	**-0.02247**	**-0.02508**	**-0.03226**
52	**-0.02539**	**-0.03429**	**-0.02817**	**-0.0249**	**-0.02532**	**-0.0277**	**-0.0221**	**-0.02486**	**-0.03142**
53	**-0.02536**	**-0.0339**	**-0.02778**	**-0.02353**	**-0.02439**	**-0.02696**	**-0.02182**	**-0.02469**	**-0.03142**
54	**-0.02495**	**-0.0339**	**-0.02767**	**-0.02281**	**-0.02439**	**-0.02643**	**-0.02139**	**-0.02454**	**-0.03125**
55	**-0.02479**	**-0.0339**	**-0.02765**	**-0.02281**	**-0.0241**	**-0.0262**	**-0.02105**	**-0.02436**	**-0.03046**
56	**-0.02469**	**-0.0339**	**-0.02759**	**-0.02247**	**-0.02381**	**-0.02581**	**-0.02105**	**-0.02429**	**-0.03031**
57	**-0.02428**	**-0.0339**	**-0.02752**	**-0.02231**	**-0.02231**	**-0.02548**	**-0.02091**	**-0.0242**	**-0.03015**
58	**-0.02414**	**-0.03352**	**-0.02721**	**-0.02214**	**-0.02222**	**-0.02449**	**-0.02091**	**-0.02381**	**-0.03003**
59	**-0.0241**	**-0.03334**	**-0.02712**	**-0.02198**	**-0.02128**	**-0.02369**	**-0.02091**	**-0.02367**	**-0.02985**
60	**-0.02358**	**-0.03334**	**-0.0268**	**-0.02198**	**-0.02128**	**-0.02344**	**-0.02091**	**-0.02361**	**-0.0295**
61	**-0.02323**	**-0.03334**	**-0.02667**	**-0.02182**	**-0.02128**	**-0.02339**	**-0.02076**	**-0.02299**	**-0.02899**
62	**-0.02292**	**-0.03334**	**-0.02654**	**-0.02182**	**-0.02083**	**-0.02331**	**-0.02073**	**-0.02281**	**-0.02899**
63	**-0.02253**	**-0.03334**	**-0.02643**	**-0.02166**	**-0.02083**	**-0.02326**	**-0.02062**	**-0.02205**	**-0.02844**
64	**-0.02247**	**-0.03334**	**-0.02605**	**-0.02151**	**-0.02041**	**-0.0232**	**-0.02062**	**-0.02198**	**-0.02844**
65	**-0.02231**	**-0.03279**	**-0.02583**	**-0.02135**	**-0.02007**	**-0.02257**	**-0.02062**	**-0.02151**	**-0.02817**
66	**-0.02231**	**-0.03244**	**-0.02526**	**-0.02135**	**-0.02**	**-0.02235**	**-0.02062**	**-0.02117**	**-0.02765**
67	**-0.02231**	**-0.03226**	**-0.02416**	**-0.02135**	**-0.02**	**-0.02208**	**-0.02034**	**-0.02105**	**-0.02765**
68	**-0.02231**	**-0.03209**	**-0.02393**	**-0.0212**	**-0.0198**	**-0.02208**	**-0.0202**	**-0.02097**	**-0.02649**

69	**-0.02214**	**-0.03142**	**-0.02326**	**-0.0212**	**-0.0198**	**-0.02169**	**-0.0202**	**-0.02057**	**-0.02643**
70	**-0.02196**	**-0.03109**	**-0.02308**	**-0.02105**	**-0.01942**	**-0.02169**	**-0.0202**	**-0.02007**	**-0.02575**
71	**-0.02188**	**-0.03077**	**-0.02279**	**-0.02105**	**-0.01893**	**-0.02139**	**-0.0202**	**-0.01938**	**-0.02545**
72	**-0.02182**	**-0.03046**	**-0.0227**	**-0.02076**	**-0.01887**	**-0.02132**	**-0.01993**	**-0.01931**	**-0.02532**
73	**-0.02166**	**-0.03031**	**-0.02262**	**-0.02076**	**-0.01835**	**-0.02132**	**-0.01993**	**-0.01931**	**-0.02449**
74	**-0.0212**	**-0.0274**	**-0.02241**	**-0.02062**	**-0.01835**	**-0.02128**	**-0.0198**	**-0.0192**	**-0.0241**
75	**-0.02105**	**-0.02703**	**-0.02198**	**-0.02048**	**-0.01835**	**-0.02105**	**-0.01967**	**-0.01905**	**-0.02372**
76	**-0.02095**	**-0.02381**	**-0.02198**	**-0.02041**	**-0.01802**	**-0.02094**	**-0.01954**	**-0.01905**	**-0.02353**
77	**-0.02086**	**-0.02381**	**-0.0218**	**-0.01993**	**-0.01802**	**-0.0202**	**-0.01942**	**-0.01899**	**-0.02353**
78	**-0.02062**	**-0.02381**	**-0.02176**	**-0.0198**	**-0.0177**	**-0.01988**	**-0.01929**	**-0.01859**	**-0.02353**
79	**-0.02062**	**-0.02353**	**-0.02144**	**-0.01961**	**-0.0177**	**-0.01947**	**-0.01893**	**-0.01858**	**-0.02335**
80	**-0.02048**	**-0.02353**	**-0.02093**	**-0.01954**	**-0.01739**	**-0.01893**	**-0.01887**	**-0.01841**	**-0.02326**
81	**-0.02048**	**-0.02353**	**-0.02087**	**-0.01929**	**-0.01709**	**-0.01864**	**-0.01878**	**-0.01831**	**-0.02273**
82	**-0.02042**	**-0.02353**	**-0.02026**	**-0.01917**	**-0.01626**	**-0.01835**	**-0.01802**	**-0.01818**	**-0.02198**
83	**-0.02038**	**-0.02353**	**-0.02003**	**-0.01917**	**-0.01626**	**-0.01835**	**-0.0169**	**-0.01802**	**-0.02198**
84	**-0.02008**	**-0.02326**	**-0.01993**	**-0.01905**	**-0.016**	**-0.01802**	**-0.01681**	**-0.0177**	**-0.02174**
85	**-0.01984**	**-0.02299**	**-0.01986**	**-0.01739**	**-0.016**	**-0.01786**	**-0.01662**	**-0.01766**	**-0.02174**
86	**-0.0198**	**-0.02299**	**-0.0198**	**-0.01729**	**-0.016**	**-0.01749**	**-0.01626**	**-0.01749**	**-0.02166**
87	**-0.01967**	**-0.02247**	**-0.01923**	**-0.01724**	**-0.01575**	**-0.01729**	**-0.01617**	**-0.01719**	**-0.02151**
88	**-0.01966**	**-0.02247**	**-0.01917**	**-0.01695**	**-0.01575**	**-0.01719**	**-0.01617**	**-0.01709**	**-0.02083**
89	**-0.01954**	**-0.02198**	**-0.01917**	**-0.01613**	**-0.01575**	**-0.01715**	**-0.01609**	**-0.01695**	**-0.02073**
90	**-0.01942**	**-0.02198**	**-0.01905**	**-0.016**	**-0.01575**	**-0.017**	**-0.016**	**-0.01693**	**-0.02041**
91	**-0.01917**	**-0.02198**	**-0.01824**	**-0.0155**	**-0.01575**	**-0.017**	**-0.01583**	**-0.01665**	**-0.02041**
92	**-0.01891**	**-0.02198**	**-0.01818**	**-0.01538**	**-0.01575**	**-0.017**	**-0.01542**	**-0.01664**	**-0.02041**
93	**-0.01881**	**-0.02174**	**-0.01813**	**-0.01527**	**-0.0155**	**-0.01688**	**-0.01542**	**-0.01631**	**-0.0198**
94	**-0.01876**	**-0.02151**	**-0.01813**	**-0.01493**	**-0.0155**	**-0.01681**	**-0.01482**	**-0.01605**	**-0.0198**
95	**-0.01874**	**-0.02151**	**-0.0178**	**-0.01482**	**-0.0155**	**-0.01681**	**-0.01471**	**-0.01596**	**-0.0198**
96	**-0.01872**	**-0.02151**	**-0.01775**	**-0.01482**	**-0.01538**	**-0.0166**	**-0.0146**	**-0.01575**	**-0.0198**
97	**-0.01846**	**-0.02128**	**-0.0177**	**-0.01471**	**-0.01527**	**-0.01657**	**-0.0146**	**-0.0157**	**-0.0198**
98	**-0.01845**	**-0.02105**	**-0.01765**	**-0.01471**	**-0.01527**	**-0.01653**	**-0.0146**	**-0.0155**	**-0.01954**
99	**-0.01827**	**-0.02105**	**-0.0176**	**-0.01471**	**-0.01527**	**-0.01646**	**-0.0146**	**-0.01541**	**-0.01942**
100	**-0.01809**	**-0.02105**	**-0.01754**	**-0.01471**	**-0.01527**	**-0.01644**	**-0.01439**	**-0.01535**	**-0.01942**
101	**-0.01801**	**-0.02062**	**-0.01749**	**-0.0146**	**-0.01527**	**-0.01639**	**-0.01439**	**-0.01527**	**-0.01923**
102	**-0.01779**	**-0.02062**	**-0.01749**	**-0.0146**	**-0.01504**	**-0.01635**	**-0.01439**	**-0.01519**	**-0.01923**
103	**-0.0177**	**-0.02062**	**-0.01739**	**-0.0146**	**-0.01504**	**-0.01635**	**-0.01432**	**-0.01414**	**-0.01905**
104	**-0.01769**	**-0.02062**	**-0.01735**	**-0.0146**	**-0.01504**	**-0.01631**	**-0.01429**	**-0.01379**	**-0.01905**
105	**-0.01758**	**-0.02062**	**-0.01702**	**-0.0146**	**-0.01504**	**-0.01626**	**-0.01418**	**-0.01354**	**-0.01905**
106	**-0.01742**	**-0.02062**	**-0.01684**	**-0.01449**	**-0.01482**	**-0.01617**	**-0.01418**	**-0.01339**	**-0.01887**

107	**-0.01708**	**-0.0202**	**-0.01681**	**-0.01449**	**-0.01482**	**-0.01609**	**-0.01418**	**-0.0133**	**-0.01887**
108	**-0.01696**	**-0.0202**	**-0.01681**	**-0.01449**	**-0.01482**	**-0.01605**	**-0.01418**	**-0.01329**	**-0.01869**
109	**-0.01664**	**-0.0198**	**-0.01681**	**-0.01449**	**-0.01482**	**-0.01605**	**-0.01418**	**-0.01327**	**-0.01869**
110	**-0.01626**	**-0.0198**	**-0.01675**	**-0.01439**	**-0.0146**	**-0.01605**	**-0.01408**	**-0.01325**	**-0.01852**
111	**-0.01611**	**-0.0198**	**-0.01653**	**-0.01439**	**-0.0146**	**-0.01595**	**-0.01408**	**-0.01325**	**-0.01852**
112	**-0.01609**	**-0.0198**	**-0.01644**	**-0.01439**	**-0.0146**	**-0.01594**	**-0.01408**	**-0.01316**	**-0.01852**
113	**-0.0154**	**-0.01942**	**-0.01626**	**-0.01429**	**-0.01439**	**-0.01592**	**-0.01399**	**-0.01313**	**-0.01835**
114	**-0.0154**	**-0.01923**	**-0.01609**	**-0.01429**	**-0.01439**	**-0.0159**	**-0.01392**	**-0.0131**	**-0.01835**
115	**-0.01533**	**-0.01905**	**-0.01604**	**-0.01429**	**-0.01439**	**-0.01583**	**-0.01389**	**-0.01307**	**-0.01818**
116	**-0.01527**	**-0.01905**	**-0.016**	**-0.01429**	**-0.01418**	**-0.01575**	**-0.0137**	**-0.01303**	**-0.01818**
117	**-0.01512**	**-0.01887**	**-0.01593**	**-0.01418**	**-0.01418**	**-0.01565**	**-0.0137**	**-0.01297**	**-0.01813**
118	**-0.01511**	**-0.01869**	**-0.01544**	**-0.01408**	**-0.01418**	**-0.01558**	**-0.01361**	**-0.0129**	**-0.01802**
119	**-0.01501**	**-0.01869**	**-0.01504**	**-0.01408**	**-0.01418**	**-0.01535**	**-0.01361**	**-0.01278**	**-0.01802**
120	**-0.01488**	**-0.01869**	**-0.01499**	**-0.01389**	**-0.01418**	**-0.01519**	**-0.01361**	**-0.01277**	**-0.01754**
121	**-0.01487**	**-0.01835**	**-0.01495**	**-0.01389**	**-0.01418**	**-0.01504**	**-0.01351**	**-0.01258**	**-0.01749**
122	**-0.01484**	**-0.01835**	**-0.01468**	**-0.01389**	**-0.01399**	**-0.01418**	**-0.01342**	**-0.01242**	**-0.01739**
123	**-0.01471**	**-0.01835**	**-0.01463**	**-0.01389**	**-0.01399**	**-0.01399**	**-0.01333**	**-0.01224**	**-0.01724**
124	**-0.01468**	**-0.01835**	**-0.01442**	**-0.0137**	**-0.01399**	**-0.01399**	**-0.0133**	**-0.01212**	**-0.01709**
125	**-0.01451**	**-0.01802**	**-0.01404**	**-0.0137**	**-0.01379**	**-0.01387**	**-0.01325**	**-0.01158**	**-0.01695**
126	**-0.01429**	**-0.01802**	**-0.01376**	**-0.01351**	**-0.01379**	**-0.01379**	**-0.01325**	**-0.01149**	**-0.0169**
127	**-0.01429**	**-0.01802**	**-0.01361**	**-0.01325**	**-0.01379**	**-0.01373**	**-0.01325**	**-0.01149**	**-0.01681**
128	**-0.01418**	**-0.0177**	**-0.01351**	**-0.01316**	**-0.01361**	**-0.01361**	**-0.01316**	**-0.01107**	**-0.01667**
129	**-0.01409**	**-0.0177**	**-0.01346**	**-0.01299**	**-0.01361**	**-0.01356**	**-0.01307**	**-0.01095**	**-0.01667**
130	**-0.01408**	**-0.0177**	**-0.01342**	**-0.01282**	**-0.01351**	**-0.01351**	**-0.01307**	**-0.01095**	**-0.01635**
131	**-0.01407**	**-0.0177**	**-0.0133**	**-0.01274**	**-0.01351**	**-0.01348**	**-0.01299**	**-0.01093**	**-0.01626**
132	**-0.01399**	**-0.01739**	**-0.01329**	**-0.01266**	**-0.01342**	**-0.01336**	**-0.01299**	**-0.01086**	**-0.01626**
133	**-0.01388**	**-0.01739**	**-0.01314**	**-0.01266**	**-0.01342**	**-0.01319**	**-0.01282**	**-0.01077**	**-0.016**
134	**-0.01386**	**-0.01739**	**-0.01299**	**-0.0117**	**-0.01325**	**-0.01302**	**-0.01282**	**-0.01055**	**-0.016**
135	**-0.01383**	**-0.01739**	**-0.01296**	**-0.01156**	**-0.01307**	**-0.01258**	**-0.01274**	**-0.01031**	**-0.016**
136	**-0.01375**	**-0.01739**	**-0.01242**	**-0.01143**	**-0.01307**	**-0.01258**	**-0.01263**	**-0.01015**	**-0.01592**
137	**-0.0137**	**-0.01739**	**-0.01238**	**-0.01047**	**-0.0129**	**-0.01253**	**-0.01258**	**-0.01008**	**-0.01563**
138	**-0.01369**	**-0.01709**	**-0.01238**	**-0.01026**	**-0.0129**	**-0.01242**	**-0.01258**	**-0.01008**	**-0.0155**
139	**-0.01361**	**-0.01709**	**-0.01223**	**-0.01026**	**-0.0129**	**-0.01237**	**-0.01222**	**-0.01005**	**-0.01542**
140	**-0.01342**	**-0.01709**	**-0.01201**	**-0.01026**	**-0.01274**	**-0.01227**	**-0.01124**	**-0.00998**	**-0.01538**
141	**-0.01325**	**-0.01653**	**-0.01194**	**-0.01026**	**-0.01258**	**-0.01227**	**-0.01124**	**-0.00982**	**-0.01527**
142	**-0.01322**	**-0.01653**	**-0.01183**	**-0.01015**	**-0.01242**	**-0.01205**	**-0.01117**	**-0.00982**	**-0.01496**
143	**-0.01307**	**-0.01653**	**-0.0118**	**-0.01015**	**-0.01242**	**-0.01202**	**-0.01111**	**-0.00963**	**-0.01482**
144	**-0.01307**	**-0.01653**	**-0.0117**	**-0.01005**	**-0.01227**	**-0.0119**	**-0.01087**	**-0.00963**	**-0.01471**

145	**-0.01299**	**-0.01653**	**-0.01164**	**-0.01005**	**-0.01227**	**-0.01183**	**-0.0107**	**-0.00957**	**-0.01399**
146	**-0.01299**	**-0.01653**	**-0.01161**	**-0.00995**	**-0.01227**	**-0.01152**	**-0.01047**	**-0.00957**	**-0.01361**
147	**-0.01299**	**-0.01653**	**-0.01156**	**-0.00985**	**-0.01227**	**-0.01139**	**-0.01042**	**-0.00957**	**-0.01342**
148	**-0.01299**	**-0.01653**	**-0.01117**	**-0.00985**	**-0.01212**	**-0.01105**	**-0.01031**	**-0.00953**	**-0.01325**
149	**-0.01296**	**-0.01653**	**-0.01117**	**-0.00985**	**-0.01212**	**-0.01087**	**-0.01031**	**-0.00951**	**-0.01242**
150	**-0.0129**	**-0.01653**	**-0.0111**	**-0.00985**	**-0.01212**	**-0.01087**	**-0.0102**	**-0.00942**	**-0.01242**
151	**-0.01288**	**-0.01626**	**-0.01103**	**-0.00976**	**-0.01212**	**-0.0107**	**-0.00976**	**-0.00939**	**-0.01227**
152	**-0.01282**	**-0.01626**	**-0.01093**	**-0.00976**	**-0.01183**	**-0.0107**	**-0.00926**	**-0.00937**	**-0.0122**
153	**-0.01279**	**-0.016**	**-0.01093**	**-0.00976**	**-0.0117**	**-0.01064**	**-0.00816**	**-0.00936**	**-0.0122**
154	**-0.01274**	**-0.016**	**-0.01088**	**-0.00966**	**-0.0117**	**-0.01058**	**-0.00738**	**-0.0093**	**-0.01183**
155	**-0.01266**	**-0.016**	**-0.01072**	**-0.00966**	**-0.0113**	**-0.01053**	**-0.00738**	**-0.00928**	**-0.0113**
156	**-0.01266**	**-0.01575**	**-0.0104**	**-0.00897**	**-0.01124**	**-0.01053**	**-0.00727**	**-0.00922**	**-0.01111**
157	**-0.0125**	**-0.01575**	**-0.01022**	**-0.00889**	**-0.01105**	**-0.01047**	**-0.00727**	**-0.00903**	**-0.01105**
158	**-0.0125**	**-0.01575**	**-0.01012**	**-0.00889**	**-0.01093**	**-0.01042**	**-0.00722**	**-0.00895**	**-0.01093**
159	**-0.01236**	**-0.01575**	**-0.0098**	**-0.00889**	**-0.01081**	**-0.01042**	**-0.00717**	**-0.00892**	**-0.01081**
160	**-0.0122**	**-0.0155**	**-0.00966**	**-0.00881**	**-0.0107**	**-0.01042**	**-0.00717**	**-0.00883**	**-0.0107**
161	**-0.01183**	**-0.0155**	**-0.00948**	**-0.00866**	**-0.01058**	**-0.01031**	**-0.00712**	**-0.00877**	**-0.0107**
162	**-0.01152**	**-0.01527**	**-0.00945**	**-0.00858**	**-0.01047**	**-0.01026**	**-0.00712**	**-0.00873**	**-0.0107**
163	**-0.01151**	**-0.01504**	**-0.00916**	**-0.00858**	**-0.01047**	**-0.01015**	**-0.00712**	**-0.00873**	**-0.01058**
164	**-0.01114**	**-0.01482**	**-0.00913**	**-0.00851**	**-0.01036**	**-0.01015**	**-0.00712**	**-0.00868**	**-0.01058**
165	**-0.01099**	**-0.01399**	**-0.00911**	**-0.00844**	**-0.01036**	**-0.01015**	**-0.00712**	**-0.00793**	**-0.01053**
166	**-0.01085**	**-0.01379**	**-0.00911**	**-0.00837**	**-0.01026**	**-0.01015**	**-0.00712**	**-0.00774**	**-0.01053**
167	**-0.01063**	**-0.01361**	**-0.00909**	**-0.00823**	**-0.01026**	**-0.01005**	**-0.00707**	**-0.00755**	**-0.01053**
168	**-0.01023**	**-0.01342**	**-0.00897**	**-0.00816**	**-0.01026**	**-0.00995**	**-0.00707**	**-0.00725**	**-0.01047**
169	**-0.01019**	**-0.0129**	**-0.00894**	**-0.00791**	**-0.01015**	**-0.00951**	**-0.00702**	**-0.00707**	**-0.01042**
170	**-0.01015**	**-0.01274**	**-0.00894**	**-0.00784**	**-0.01015**	**-0.00936**	**-0.00702**	**-0.00687**	**-0.01042**
171	**-0.01014**	**-0.01198**	**-0.00893**	**-0.00766**	**-0.00985**	**-0.00925**	**-0.00702**	**-0.00683**	**-0.01036**
172	**-0.0101**	**-0.01198**	**-0.00887**	**-0.00755**	**-0.00985**	**-0.00917**	**-0.00702**	**-0.00678**	**-0.01031**
173	**-0.00991**	**-0.01198**	**-0.00883**	**-0.00749**	**-0.00976**	**-0.00913**	**-0.00697**	**-0.00676**	**-0.01026**
174	**-0.00978**	**-0.01198**	**-0.00881**	**-0.00743**	**-0.00976**	**-0.00901**	**-0.00692**	**-0.00673**	**-0.01015**
175	**-0.00977**	**-0.01183**	**-0.00879**	**-0.00738**	**-0.00976**	**-0.00885**	**-0.00692**	**-0.00669**	**-0.01015**
176	**-0.00968**	**-0.0117**	**-0.00876**	**-0.00738**	**-0.00966**	**-0.00881**	**-0.00692**	**-0.00667**	**-0.01015**
177	**-0.00953**	**-0.01156**	**-0.00876**	**-0.00738**	**-0.00966**	**-0.00851**	**-0.00692**	**-0.00659**	**-0.01005**
178	**-0.00952**	**-0.01143**	**-0.00855**	**-0.00738**	**-0.0093**	**-0.00849**	**-0.00687**	**-0.00657**	**-0.01005**
179	**-0.00926**	**-0.01143**	**-0.00853**	**-0.00738**	**-0.00743**	**-0.00837**	**-0.00687**	**-0.00656**	**-0.01005**
180	**-0.00887**	**-0.0113**	**-0.00846**	**-0.00733**	**-0.00722**	**-0.00837**	**-0.00687**	**-0.00643**	**-0.01005**
181	**-0.00864**	**-0.0113**	**-0.00846**	**-0.00733**	**-0.00669**	**-0.00816**	**-0.00687**	**-0.00639**	**-0.00976**
182	**-0.00861**	**-0.01117**	**-0.0084**	**-0.00733**	**-0.00604**	**-0.00813**	**-0.00687**	**-0.00635**	**-0.00966**

183	**-0.00843**	**-0.01117**	**-0.0083**	**-0.00733**	**0**	**-0.0081**	**-0.00683**	**-0.00633**	**-0.00966**
184	**-0.00834**	**-0.01117**	**-0.0083**	**-0.00727**	**0**	**-0.00805**	**-0.00683**	**-0.00627**	**-0.00957**
185	**-0.0083**	**-0.01117**	**-0.00828**	**-0.00727**	**0**	**-0.008**	**-0.00683**	**-0.00625**	**-0.00957**
186	**-0.0083**	**-0.01105**	**-0.00752**	**-0.00727**	**0**	**-0.00793**	**-0.00683**	**-0.00625**	**-0.00948**
187	**-0.00816**	**-0.01105**	**-0.00743**	**-0.00727**	**0**	**-0.00769**	**-0.00683**	**-0.0062**	**-0.00939**
188	**-0.00791**	**-0.01093**	**-0.00742**	**-0.00727**	**0**	**-0.00704**	**-0.00683**	**-0.00619**	**-0.00939**
189	**-0.00784**	**-0.01081**	**-0.00734**	**-0.00722**	**0**	**-0.00687**	**-0.00678**	**-0.00612**	**-0.00939**
190	**-0.00775**	**-0.01081**	**-0.00731**	**-0.00722**	**0**	**-0.00671**	**-0.00673**	**-0.00593**	**-0.00939**
191	**-0.00771**	**-0.01081**	**-0.00698**	**-0.00722**	**0**	**-0.00629**	**-0.00673**	**-0.00579**	**-0.00939**
192	**-0.00755**	**-0.01081**	**-0.00697**	**-0.00722**	**0**	**-0.00612**	**-0.00673**	**-0.00577**	**-0.0093**
193	**-0.00755**	**-0.01081**	**-0.00692**	**-0.00722**	**0**	**-0.00573**	**-0.00669**	**-0.00573**	**-0.0093**
194	**-0.00745**	**-0.0107**	**-0.00683**	**-0.00722**	**0**	**-0.00571**	**-0.00669**	**-0.00571**	**-0.0093**
195	**-0.00741**	**-0.01058**	**-0.00673**	**-0.00722**	**0**	**-0.00567**	**-0.00669**	**-0.0057**	**-0.0093**
196	**-0.00738**	**-0.01047**	**-0.00669**	**-0.00722**	**0**	**-0.00567**	**-0.00669**	**-0.0056**	**-0.00922**
197	**-0.00717**	**-0.01047**	**-0.00669**	**-0.00722**	**0**	**-0.00563**	**-0.00664**	**-0.00557**	**-0.00922**
198	**-0.00707**	**-0.01036**	**-0.00657**	**-0.00717**	**0**	**-0.00562**	**-0.00664**	**-0.00538**	**-0.00922**
199	**-0.00703**	**-0.01036**	**-0.00651**	**-0.00717**	**0**	**-0.00559**	**-0.00664**	**-0.00515**	**-0.00922**
200	**-0.00702**	**-0.01036**	**-0.0065**	**-0.00717**	**0**	**-0.00559**	**-0.00664**	**-0.00506**	**-0.00922**
201	**-0.00697**	**-0.01026**	**-0.00647**	**-0.00717**	**0**	**-0.00542**	**-0.00664**	**-0.00501**	**-0.00922**
202	**-0.00692**	**-0.01026**	**-0.00635**	**-0.00712**	**0**	**-0.00542**	**-0.0066**	**-0.00482**	**-0.00905**
203	**-0.00683**	**-0.01015**	**-0.00612**	**-0.00712**	**0**	**-0.00539**	**-0.0066**	**-0.00473**	**-0.00905**
204	**-0.00683**	**-0.01015**	**-0.00593**	**-0.00707**	**0**	**-0.00539**	**-0.00656**	**-0.00472**	**-0.00897**
205	**-0.00683**	**-0.01015**	**-0.00593**	**-0.00707**	**0**	**-0.00536**	**-0.00656**	**-0.00471**	**-0.00897**
206	**-0.00678**	**-0.01005**	**-0.00593**	**-0.00702**	**0**	**-0.00536**	**-0.00656**	**-0.00464**	**-0.00889**
207	**-0.00678**	**-0.01005**	**-0.00592**	**-0.00702**	**0**	**-0.00531**	**-0.00651**	**-0.00455**	**-0.00889**
208	**-0.00678**	**-0.01005**	**-0.00591**	**-0.00697**	**0**	**-0.00531**	**-0.00651**	**-0.00441**	**-0.00889**
209	**-0.00673**	**-0.00976**	**-0.00588**	**-0.00683**	**0**	**-0.00531**	**-0.00651**	**-0.00439**	**-0.00881**
210	**-0.00664**	**-0.00976**	**-0.00588**	**-0.00683**	**0**	**-0.00525**	**-0.00647**	**-0.00438**	**-0.00881**
211	**-0.00661**	**-0.00966**	**-0.00587**	**-0.00678**	**0**	**-0.00525**	**-0.00647**	**-0.00438**	**-0.00873**
212	**-0.0066**	**-0.00966**	**-0.00583**	**-0.00647**	**0**	**-0.00522**	**-0.00643**	**-0.00437**	**-0.00873**
213	**-0.0066**	**-0.00957**	**-0.00581**	**-0.00643**	**0**	**-0.00519**	**-0.00635**	**-0.00437**	**-0.00866**
214	**-0.00656**	**-0.00957**	**-0.00571**	**-0.00643**	**0**	**-0.00517**	**-0.00631**	**-0.00436**	**-0.00858**
215	**-0.00651**	**-0.00939**	**-0.00552**	**-0.00635**	**0**	**-0.00517**	**-0.00615**	**-0.00436**	**-0.00837**
216	**-0.00651**	**-0.0093**	**-0.00552**	**-0.00631**	**0**	**-0.00517**	**-0.00601**	**-0.00419**	**-0.00823**
217	**-0.00647**	**-0.0093**	**-0.00541**	**-0.00627**	**0**	**-0.00517**	**-0.00567**	**-0.00385**	**-0.00803**
218	**-0.00647**	**-0.0093**	**-0.00531**	**-0.00627**	**0**	**-0.00514**	**-0.00557**	**-0.00385**	**-0.00791**
219	**-0.00647**	**-0.00922**	**-0.00462**	**-0.00623**	**0**	**-0.0046**	**-0.00554**	**-0.00384**	**-0.00791**
220	**-0.00647**	**-0.00922**	**-0.00459**	**-0.00576**	**0**	**-0.00458**	**-0.00548**	**-0.00384**	**-0.00772**

221	**-0.00647**	**0**	**-0.00459**	**0**	**0**	**-0.00454**	**-0.00545**	**-0.00383**	**-0.00743**
222	**-0.00643**	**0**	**-0.00458**	**0**	**0**	**-0.00445**	**-0.00542**	**-0.00372**	**-0.00743**
223	-0.00643	0	-0.00449	0	0	-0.00443	-0.00539	-0.00357	-0.00738
224	-0.00639	0	-0.00445	0	0	-0.0044	-0.00533	-0.00355	-0.00733
225	-0.00635	0	-0.00443	0	0	-0.00423	-0.00533	-0.00342	-0.00697
226	-0.00631	0	-0.00434	0	0	-0.00421	-0.00531	-0.00338	-0.00692
227	-0.0063	0	-0.00416	0	0	-0.00411	-0.00528	-0.00338	-0.00669
228	-0.00627	0	-0.00396	0	0	-0.00406	-0.00522	-0.00337	-0.00664
229	-0.00627	0	-0.00394	0	0	-0.00404	-0.00519	-0.00337	-0.00651
230	-0.00626	0	-0.00378	0	0	-0.00402	-0.00519	-0.00335	-0.00647
231	-0.00623	0	-0.00355	0	0	-0.00399	-0.00519	-0.00335	-0.00627
232	-0.00623	0	-0.00354	0	0	-0.00393	-0.00519	-0.00335	-0.00597
233	-0.00619	0	-0.0035	0	0	-0.00387	-0.00517	-0.00334	-0.0059
234	-0.00619	0	-0.00345	0	0	-0.00343	-0.00506	-0.00334	-0.0058
235	-0.00615	0	-0.00344	0	0	-0.00342	-0.00506	-0.00331	-0.00576
236	-0.00592	0	-0.00342	0	0	-0.00342	-0.00506	-0.00329	-0.00539
237	-0.00578	0	-0.0034	0	0	-0.00341	-0.00504	-0.00324	-0.00536
238	-0.00573	0	-0.0034	0	0	-0.00336	-0.00464	-0.00323	-0.00533
239	-0.00571	0	-0.00338	0	0	-0.00334	-0.0046	-0.00321	-0.00533
240	-0.00516	0	-0.00337	0	0	-0.00318	-0.0044	-0.00319	-0.00533
241	-0.00509	0	-0.00335	0	0	-0.00281	-0.00407	-0.00319	-0.00531
242	-0.00506	0	-0.00304	0	0	-0.00281	0	-0.00315	-0.00528
243	-0.00433	0	-0.00303	0	0	-0.00277	0	-0.00311	-0.00522
244	-0.00425	0	-0.00301	0	0	-0.00273	0	-0.00308	-0.00519
245	-0.00412	0	-0.003	0	0	-0.00266	0	-0.00303	-0.00517
246	-0.00406	0	-0.00298	0	0	0	0	-0.00299	-0.00517
247	-0.00381	0	-0.00297	0	0	0	0	-0.00298	-0.00517
248	-0.00372	0	-0.00297	0	0	0	0	-0.0027	-0.00517
249	-0.00364	0	-0.00295	0	0	0	0	-0.00269	-0.00517
250	-0.00354	0	-0.00295	0	0	0	0	-0.00257	-0.00514
251	-0.00351	0	-0.00294	0	0	0	0	-0.00257	-0.00504
252	-0.00316	0	-0.00293	0	0	0	0	-0.00247	0
253	-0.0027	0	-0.00292	0	0	0	0	-0.00238	0
254	-0.00266	0	-0.00291	0	0	0	0	-0.00237	0
255	-0.00266	0	-0.00285	0	0	0	0	-0.00232	0
256	-0.00254	0	-0.00283	0	0	0	0	-0.00231	0
257	-0.00254	0	-0.00282	0	0	0	0	-0.00231	0
258	-0.00216	0	-0.00281	0	0	0	0	-0.0023	0

259	-0.00212	0	-0.00278	0	0	0	0	-0.00228	0
260	-0.00203	0	-0.00275	0	0	0	0	-0.00221	0
261	-0.00199	0	-0.00274	0	0	0	0	-0.0022	0
262	-0.00194	0	-0.00271	0	0	0	0	-0.00218	0
263	-0.00181	0	-0.0027	0	0	0	0	-0.00216	0
264	-0.00177	0	-0.0027	0	0	0	0	-0.00216	0
265	-0.00169	0	-0.00265	0	0	0	0	-0.00196	0
266	-0.00168	0	-0.0025	0	0	0	0	-0.00196	0
267	-0.00149	0	-0.00233	0	0	0	0	-0.00196	0
268	-0.00145	0	-0.00231	0	0	0	0	-0.00193	0
269	-0.00089	0	-0.0023	0	0	0	0	-0.00192	0
270	-0.00071	0	-0.0023	0	0	0	0	-0.00192	0
271	-0.0007	0	-0.00227	0	0	0	0	-0.0019	0
272	0	0	-0.00224	0	0	0	0	-0.00179	0
273	0	0	-0.00223	0	0	0	0	0	0
274	0	0	-0.00223	0	0	0	0	0	0
275	0	0	-0.00222	0	0	0	0	0	0
276	0	0	-0.00219	0	0	0	0	0	0
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347	0	0	0.002255	0	0	0	0	0.001732	0
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349	0	0	0.002281	0	0	0	0	0.00185	0
350	0	0	0.002286	0	0	0	0	0.001899	0
351	0.000676	0	0.002291	0	0	0.002721	0	0.001907	0
352	0.000701	0	0.002296	0	0	0.002729	0	0.001918	0
353	0.000758	0	0.002317	0	0	0.00299	0	0.001925	0
354	0.000881	0	0.002323	0	0	0.003026	0	0.001929	0
355	0.001358	0	0.002323	0	0	0.00313	0	0.001959	0
356	0.001397	0	0.002328	0	0	0.003339	0	0.002077	0
357	0.001409	0	0.002334	0	0	0.003361	0	0.002099	0
358	0.001463	0	0.002395	0	0	0.003407	0	0.002195	0
359	0.001902	0	0.00246	0	0	0.003419	0	0.0022	0
360	0.002275	0	0.002484	0	0	0.003454	0	0.002286	0
361	0.00257	0	0.002497	0	0	0.003884	0	0.00235	0
362	0.002576	0	0.002497	0	0	0.003899	0	0.002509	0
363	0.002914	0	0.002503	0	0	0.004057	0	0.002516	0
364	0.002925	0	0.002522	0	0	0.004246	0	0.002528	0
365	0.002946	0	0.002649	0	0	0.004301	0	0.002535	0
366	0.003104	0	0.002699	0	0	0.004338	0	0.002541	0
367	0.003537	0	0.002721	0	0	0.004338	0	0.002561	0
368	0.003667	0	0.002736	0	0	0.004357	0	0.002567	0
369	0.003716	0	0.002743	0	0	0.004357	0	0.002594	0
370	0.003881	0	0.002774	0	0	0.004376	0	0.002635	0
371	0.004062	0	0.002782	0	0	0.004396	0	0.002649	0
372	0.004234	0	0.002869	0	0	0.004396	0	0.002845	0

373	0.004435	0	0.002878	0	0	0.004415	0	0.002928	0
374	0.004442	0	0.002911	0	0	0.004415	0	0.002937	0
375	0.004477	0	0.002928	0	0	0.004415	0	0.002981	0.005063
376	0.004494	0	0.002928	0	0	0.004435	0	0.003082	0.005141
377	0.004548	0	0.002937	0	0	0.004435	0	0.003091	0.005168
378	0.00476	0	0.002946	0	0	0.004435	0.004193	0.003091	0.005168
379	0.004829	0	0.002972	0	0	0.004515	0.004211	0.00313	0.005168
380	0.004998	0	0.002972	0	0	0.004515	0.004228	0.00317	0.005168
381	0.005013	0	0.002981	0	0	0.004556	0.004662	0.003263	0.005168
382	0.005046	0	0.003017	0	0	0.004556	0.004751	0.003273	0.005222
383	0.005049	0	0.003044	0	0	0.004843	0.005013	0.003284	0.005222
384	0.00545	0	0.00311	0	0	0.005013	0.005063	0.003306	0.005249
385	0.005491	0	0.00314	0	0	0.005038	0.005063	0.003317	0.005249
386	0.00592	0	0.003231	0	0	0.005063	0.005168	0.003328	0.005249
387	0.00594	0	0.003263	0	0	0.005063	0.005168	0.003339	0.005277
388	0.006001	0	0.003328	0	0	0.005089	0.005195	0.003339	0.005277
389	0.006135	0	0.00335	0	0	0.005115	0.005249	0.003339	0.005305
390	0.006231	0	0.00335	0	0	0.005141	0.005277	0.003339	0.005333
391	0.006274	0	0.003384	0	0	0.005141	0.005305	0.003339	0.005333
392	0.006309	0	0.003454	0	0	0.005168	0.005305	0.00335	0.00639
393	0.006396	0	0.003478	0	0	0.005168	0.005333	0.00335	0.006473
394	0.006431	0	0.003503	0	0	0.005168	0.005333	0.00335	0.006601
395	0.006431	0	0.003884	0	0	0.005222	0.00542	0.00335	0.006645
396	0.006431	0	0.004158	0.005479	0	0.005222	0.00545	0.003373	0.006645
397	0.006431	0.008889	0.004386	0.005764	0	0.005249	0.00551	0.003373	0.006689
398	0.006431	0.009217	0.004454	0.005831	0	0.005249	0.005571	0.003373	0.00692
399	0.006447	0.009217	0.004484	0.005865	0	0.005277	0.005571	0.00381	0.006969
400	0.006473	0.009302	0.004545	0.006154	0	0.005277	0.005602	0.003854	0.007843
401	0.006473	0.009479	0.004556	0.006231	0	0.005305	0.005634	0.003861	0.007905
402	0.006473	0.009569	0.004566	0.00627	0	0.005305	0.00597	0.003884	0.007905
403	0.006473	0.009662	0.004608	0.006309	0	0.005333	0.006431	0.003922	0.008097
404	0.006515	0.009756	0.004684	0.006349	0	0.005362	0.006431	0.003922	0.00823
405	0.006515	0.009852	0.004773	0.006349	0	0.005362	0.006473	0.004141	0.008299
406	0.006515	0.00995	0.004808	0.006349	0	0.005362	0.006473	0.004274	0.008299
407	0.006515	0.01005	0.004975	0.00639	0	0.00542	0.006473	0.004357	0.008368
408	0.006557	0.010152	0.00542	0.006431	0	0.00545	0.006515	0.004405	0.008368
409	0.006572	0.010257	0.005479	0.006431	0	0.00554	0.006515	0.004494	0.008439
410	0.006601	0.010257	0.005525	0.006431	0	0.005602	0.006557	0.004717	0.008734

411	0.006601	0.010257	0.005571	0.006473	0	0.005634	0.006601	0.004728	0.00905
412	0.006667	0.010257	0.005698	0.006473	0	0.005634	0.006601	0.004751	0.00905
413	0.006734	0.010363	0.005714	0.006473	0	0.005666	0.006645	0.005063	0.009217
414	**0.006752**	**0.010363**	**0.005848**	**0.006515**	**0**	**0.005666**	**0.006689**	**0.005141**	**0.009217**
415	**0.006775**	**0.010363**	**0.005848**	**0.006557**	**0**	**0.005666**	**0.006734**	**0.00544**	**0.009217**
416	**0.00678**	**0.010363**	**0.005865**	**0.006557**	**0**	**0.005698**	**0.00678**	**0.00551**	**0.009217**
417	**0.006798**	**0.010363**	**0.005882**	**0.006601**	**0**	**0.005731**	**0.00678**	**0.005571**	**0.009217**
418	**0.006969**	**0.010363**	**0.005917**	**0.006645**	**0**	**0.005935**	**0.006826**	**0.005687**	**0.009302**
419	**0.007018**	**0.010363**	**0.005982**	**0.006645**	**0**	**0.00597**	**0.006826**	**0.005764**	**0.009302**
420	**0.007018**	**0.010363**	**0.006006**	**0.00678**	**0.005935**	**0.00597**	**0.006826**	**0.005854**	**0.009302**
421	**0.007067**	**0.010471**	**0.006098**	**0.006826**	**0.006042**	**0.006006**	**0.006826**	**0.00597**	**0.009302**
422	**0.007067**	**0.010582**	**0.006218**	**0.006826**	**0.006431**	**0.006024**	**0.006826**	**0.006024**	**0.009302**
423	**0.007117**	**0.010695**	**0.006431**	**0.006873**	**0.007273**	**0.00639**	**0.00692**	**0.00603**	**0.00939**
424	**0.007168**	**0.010811**	**0.006572**	**0.00692**	**0.007435**	**0.006557**	**0.00692**	**0.006061**	**0.00939**
425	**0.007213**	**0.010811**	**0.006623**	**0.00692**	**0.007605**	**0.006645**	**0.00692**	**0.006116**	**0.00939**
426	**0.00722**	**0.010811**	**0.006645**	**0.006969**	**0.008439**	**0.006689**	**0.00692**	**0.006205**	**0.00939**
427	**0.007273**	**0.010811**	**0.006667**	**0.006969**	**0.008734**	**0.006757**	**0.00692**	**0.006231**	**0.00939**
428	**0.007326**	**0.010811**	**0.006689**	**0.007067**	**0.008811**	**0.007042**	**0.006969**	**0.00627**	**0.009852**
429	**0.00738**	**0.010929**	**0.006734**	**0.007067**	**0.009302**	**0.007117**	**0.006969**	**0.00627**	**0.009852**
430	**0.00738**	**0.01105**	**0.00681**	**0.007067**	**0.009302**	**0.007273**	**0.006969**	**0.006329**	**0.009852**
431	**0.00738**	**0.0113**	**0.00692**	**0.007117**	**0.00939**	**0.007576**	**0.007018**	**0.006336**	**0.00995**
432	**0.007435**	**0.011561**	**0.00692**	**0.007117**	**0.009662**	**0.007634**	**0.007018**	**0.00639**	**0.00995**
433	**0.00744**	**0.011696**	**0.006969**	**0.007117**	**0.009756**	**0.007663**	**0.007018**	**0.006543**	**0.01005**
434	**0.007491**	**0.011696**	**0.006969**	**0.007117**	**0.009756**	**0.007692**	**0.007018**	**0.006557**	**0.01005**
435	**0.007491**	**0.011834**	**0.006969**	**0.007168**	**0.009852**	**0.007722**	**0.007067**	**0.006557**	**0.010152**
436	**0.007501**	**0.011834**	**0.007117**	**0.007168**	**0.00995**	**0.007947**	**0.007067**	**0.006572**	**0.010152**
437	**0.007532**	**0.012423**	**0.007168**	**0.007168**	**0.01005**	**0.007989**	**0.007067**	**0.006645**	**0.010257**
438	**0.007547**	**0.012739**	**0.007168**	**0.007168**	**0.010152**	**0.008**	**0.007117**	**0.006674**	**0.010417**
439	**0.007647**	**0.012903**	**0.00729**	**0.00722**	**0.010582**	**0.008054**	**0.007117**	**0.006689**	**0.010417**
440	**0.0077**	**0.012903**	**0.007344**	**0.00722**	**0.010695**	**0.008065**	**0.007117**	**0.006734**	**0.010471**
441	**0.007717**	**0.012903**	**0.007344**	**0.00722**	**0.010811**	**0.008065**	**0.007117**	**0.006734**	**0.010471**
442	**0.008009**	**0.013072**	**0.007417**	**0.00722**	**0.010929**	**0.008097**	**0.007168**	**0.006757**	**0.010526**
443	**0.008126**	**0.013606**	**0.007528**	**0.00722**	**0.01105**	**0.008163**	**0.007168**	**0.006757**	**0.010526**
444	**0.008157**	**0.013986**	**0.00789**	**0.007273**	**0.01105**	**0.00823**	**0.00722**	**0.00678**	**0.010582**
445	**0.008865**	**0.014599**	**0.008276**	**0.007326**	**0.011173**	**0.008345**	**0.007273**	**0.007042**	**0.010582**
446	**0.008929**	**0.014815**	**0.008276**	**0.007326**	**0.0113**	**0.008368**	**0.007273**	**0.007168**	**0.010638**
447	**0.009146**	**0.015038**	**0.008403**	**0.00738**	**0.0113**	**0.008368**	**0.007273**	**0.007255**	**0.010753**
448	**0.009302**	**0.015267**	**0.008415**	**0.00738**	**0.011561**	**0.008368**	**0.007326**	**0.007472**	**0.010929**

449	**0.009358**	**0.015748**	**0.008439**	**0.00738**	**0.011696**	**0.008621**	**0.007326**	**0.007547**	**0.010929**
450	**0.009534**	**0.015748**	**0.008487**	**0.00738**	**0.011696**	**0.008696**	**0.007326**	**0.007663**	**0.011111**
451	**0.009653**	**0.016**	**0.008683**	**0.007547**	**0.011834**	**0.008734**	**0.00738**	**0.007663**	**0.011111**
452	**0.009705**	**0.016261**	**0.008734**	**0.007547**	**0.011976**	**0.008772**	**0.007435**	**0.007722**	**0.0113**
453	**0.009843**	**0.016261**	**0.00883**	**0.007547**	**0.012121**	**0.00885**	**0.008097**	**0.007742**	**0.0113**
454	**0.009891**	**0.016529**	**0.008863**	**0.007547**	**0.012121**	**0.008889**	**0.00813**	**0.007905**	**0.011429**
455	**0.010072**	**0.016529**	**0.008869**	**0.007605**	**0.012121**	**0.008889**	**0.008163**	**0.008011**	**0.011696**
456	**0.010084**	**0.016529**	**0.008915**	**0.007663**	**0.01227**	**0.008929**	**0.008163**	**0.008032**	**0.012658**
457	**0.010134**	**0.016529**	**0.008996**	**0.007843**	**0.01227**	**0.009023**	**0.008511**	**0.008097**	**0.012903**
458	**0.010187**	**0.016529**	**0.00916**	**0.007905**	**0.01227**	**0.009132**	**0.008511**	**0.008584**	**0.012987**
459	**0.010272**	**0.016529**	**0.00916**	**0.008032**	**0.012423**	**0.009132**	**0.008584**	**0.008753**	**0.013072**
460	**0.010508**	**0.016529**	**0.009174**	**0.008032**	**0.012579**	**0.009188**	**0.009259**	**0.008791**	**0.013072**
461	**0.010947**	**0.016529**	**0.009217**	**0.008032**	**0.012579**	**0.00936**	**0.009259**	**0.008929**	**0.013245**
462	**0.011059**	**0.016529**	**0.009245**	**0.008368**	**0.012579**	**0.009509**	**0.009259**	**0.008942**	**0.013986**
463	**0.011377**	**0.016529**	**0.009302**	**0.008439**	**0.012579**	**0.009569**	**0.010257**	**0.008969**	**0.014389**
464	**0.011396**	**0.016529**	**0.00978**	**0.008511**	**0.012579**	**0.01005**	**0.010309**	**0.009217**	**0.014706**
465	**0.011455**	**0.016529**	**0.009788**	**0.008511**	**0.012739**	**0.010084**	**0.010417**	**0.009268**	**0.014815**
466	**0.011717**	**0.016807**	**0.009877**	**0.008584**	**0.012739**	**0.010084**	**0.010417**	**0.00939**	**0.014963**
467	**0.012121**	**0.016807**	**0.009983**	**0.008658**	**0.012739**	**0.010118**	**0.010417**	**0.009509**	**0.01519**
468	**0.012195**	**0.016807**	**0.010152**	**0.008969**	**0.012739**	**0.010152**	**0.010417**	**0.009539**	**0.01519**
469	**0.01227**	**0.017094**	**0.010278**	**0.009132**	**0.012739**	**0.010152**	**0.010471**	**0.009551**	**0.015346**
470	**0.012423**	**0.017094**	**0.010695**	**0.009662**	**0.012903**	**0.010187**	**0.010582**	**0.009554**	**0.015385**
471	**0.012423**	**0.017094**	**0.010811**	**0.009756**	**0.012903**	**0.010187**	**0.010638**	**0.009569**	**0.015385**
472	**0.0125**	**0.017094**	**0.010811**	**0.009756**	**0.012903**	**0.010187**	**0.010753**	**0.009631**	**0.015504**
473	**0.012658**	**0.017094**	**0.011142**	**0.009852**	**0.012903**	**0.010292**	**0.010753**	**0.009756**	**0.015504**
474	**0.012739**	**0.017392**	**0.011268**	**0.01005**	**0.012987**	**0.010292**	**0.010811**	**0.009828**	**0.015625**
475	**0.012739**	**0.017392**	**0.011377**	**0.010152**	**0.013072**	**0.010526**	**0.01087**	**0.009852**	**0.015625**
476	**0.012772**	**0.017392**	**0.011403**	**0.010257**	**0.013423**	**0.010582**	**0.010929**	**0.009885**	**0.015625**
477	**0.012821**	**0.017392**	**0.011403**	**0.010257**	**0.013423**	**0.010582**	**0.010989**	**0.00995**	**0.015666**
478	**0.012903**	**0.017392**	**0.011508**	**0.010257**	**0.013423**	**0.010582**	**0.01105**	**0.010017**	**0.015748**
479	**0.012987**	**0.017392**	**0.011588**	**0.010471**	**0.013423**	**0.01062**	**0.011111**	**0.01005**	**0.015873**
480	**0.012987**	**0.017392**	**0.011662**	**0.011494**	**0.013423**	**0.010638**	**0.011111**	**0.01005**	**0.015873**
481	**0.012987**	**0.017392**	**0.011696**	**0.012423**	**0.013514**	**0.010811**	**0.011173**	**0.01005**	**0.015915**
482	**0.012987**	**0.017392**	**0.011696**	**0.012579**	**0.013606**	**0.01087**	**0.011236**	**0.01005**	**0.016**
483	**0.012987**	**0.017392**	**0.0118**	**0.012739**	**0.013606**	**0.010959**	**0.011236**	**0.010084**	**0.016129**
484	**0.013072**	**0.0177**	**0.01194**	**0.012821**	**0.013606**	**0.01108**	**0.0113**	**0.010152**	**0.016129**
485	**0.013158**	**0.0177**	**0.012048**	**0.013699**	**0.013606**	**0.011111**	**0.011364**	**0.010152**	**0.016261**
486	**0.013158**	**0.0177**	**0.012085**	**0.013699**	**0.013793**	**0.0113**	**0.012048**	**0.010309**	**0.016349**

487	**0.013245**	**0.0177**	**0.012195**	**0.013889**	**0.013986**	**0.0113**	**0.012579**	**0.010309**	**0.016394**
488	**0.013245**	**0.0177**	**0.012658**	**0.013986**	**0.014185**	**0.011429**	**0.012579**	**0.010336**	**0.016394**
489	**0.013245**	**0.0177**	**0.01278**	**0.014085**	**0.014185**	**0.011494**	**0.012903**	**0.010417**	**0.016667**
490	**0.013312**	**0.0177**	**0.012945**	**0.014085**	**0.014389**	**0.011788**	**0.012903**	**0.010657**	**0.016902**
491	**0.013334**	**0.0177**	**0.012987**	**0.014185**	**0.014389**	**0.012024**	**0.012987**	**0.01087**	**0.017242**
492	**0.013514**	**0.018019**	**0.012987**	**0.014286**	**0.014599**	**0.012171**	**0.012987**	**0.010929**	**0.017435**
493	**0.013606**	**0.018019**	**0.013141**	**0.014286**	**0.014599**	**0.01227**	**0.012987**	**0.010929**	**0.017596**
494	**0.013606**	**0.018019**	**0.013316**	**0.014286**	**0.014706**	**0.01227**	**0.012987**	**0.010929**	**0.0177**
495	**0.013606**	**0.018019**	**0.013387**	**0.014389**	**0.014815**	**0.01232**	**0.013072**	**0.011025**	**0.0177**
496	**0.013615**	**0.018349**	**0.013514**	**0.014389**	**0.014815**	**0.012346**	**0.013072**	**0.01105**	**0.017911**
497	**0.013684**	**0.018349**	**0.013514**	**0.014493**	**0.014815**	**0.012526**	**0.013072**	**0.011325**	**0.018019**
498	**0.013699**	**0.018349**	**0.01356**	**0.014493**	**0.014815**	**0.012618**	**0.013158**	**0.011377**	**0.018349**
499	**0.013793**	**0.018349**	**0.013569**	**0.014493**	**0.014926**	**0.012632**	**0.013158**	**0.011472**	**0.018349**
500	**0.013874**	**0.018349**	**0.013766**	**0.014493**	**0.015038**	**0.012903**	**0.013158**	**0.011539**	**0.018349**
501	**0.013986**	**0.018692**	**0.013821**	**0.014599**	**0.015038**	**0.013423**	**0.013158**	**0.011583**	**0.018519**
502	**0.013986**	**0.018692**	**0.014085**	**0.014599**	**0.015038**	**0.013514**	**0.013245**	**0.011583**	**0.018519**
503	**0.014069**	**0.018692**	**0.014145**	**0.014599**	**0.015038**	**0.013652**	**0.013245**	**0.011905**	**0.018692**
504	**0.014085**	**0.018692**	**0.014493**	**0.014706**	**0.015267**	**0.013652**	**0.013245**	**0.01203**	**0.018692**
505	**0.014085**	**0.018692**	**0.014556**	**0.014926**	**0.015267**	**0.013668**	**0.013245**	**0.012048**	**0.018692**
506	**0.014099**	**0.018692**	**0.014563**	**0.014926**	**0.015267**	**0.013668**	**0.013245**	**0.012092**	**0.018868**
507	**0.014129**	**0.018692**	**0.014642**	**0.014926**	**0.015267**	**0.014025**	**0.013245**	**0.012423**	**0.018868**
508	**0.014185**	**0.019048**	**0.014771**	**0.015038**	**0.015385**	**0.014105**	**0.013334**	**0.012423**	**0.019048**
509	**0.014185**	**0.019048**	**0.014859**	**0.015267**	**0.015385**	**0.01519**	**0.013334**	**0.012461**	**0.019048**
510	**0.014286**	**0.019048**	**0.014948**	**0.015267**	**0.015504**	**0.015361**	**0.013334**	**0.012526**	**0.019231**
511	**0.014286**	**0.019231**	**0.014993**	**0.015385**	**0.015504**	**0.015504**	**0.013423**	**0.012539**	**0.019231**
512	**0.014286**	**0.019231**	**0.015038**	**0.015625**	**0.015504**	**0.015585**	**0.013423**	**0.012707**	**0.019231**
513	**0.014332**	**0.019231**	**0.015175**	**0.015873**	**0.015504**	**0.015666**	**0.013514**	**0.013175**	**0.019231**
514	**0.014389**	**0.019418**	**0.015504**	**0.016**	**0.015504**	**0.015748**	**0.013514**	**0.013245**	**0.019418**
515	**0.014389**	**0.019418**	**0.015552**	**0.016261**	**0.015748**	**0.015798**	**0.013514**	**0.013275**	**0.019418**
516	**0.014549**	**0.019803**	**0.016043**	**0.016261**	**0.015748**	**0.015937**	**0.013544**	**0.013544**	**0.019545**
517	**0.014623**	**0.019803**	**0.016074**	**0.016394**	**0.015748**	**0.015949**	**0.013606**	**0.013553**	**0.019803**
518	**0.01475**	**0.019803**	**0.016129**	**0.016394**	**0.015748**	**0.016**	**0.013699**	**0.013606**	**0.019803**
519	**0.014815**	**0.020203**	**0.016148**	**0.016529**	**0.015748**	**0.016052**	**0.013699**	**0.013831**	**0.019803**
520	**0.014931**	**0.020203**	**0.016261**	**0.016529**	**0.015748**	**0.016086**	**0.013699**	**0.014815**	**0.020001**
521	**0.015114**	**0.020203**	**0.016439**	**0.016807**	**0.015748**	**0.016086**	**0.013699**	**0.015**	**0.020203**
522	**0.015301**	**0.020409**	**0.016807**	**0.017094**	**0.015748**	**0.016394**	**0.013699**	**0.015334**	**0.020203**
523	**0.015625**	**0.020409**	**0.016807**	**0.017242**	**0.015748**	**0.016529**	**0.01373**	**0.015436**	**0.020409**
524	**0.015666**	**0.020619**	**0.016998**	**0.017544**	**0.016**	**0.016529**	**0.01373**	**0.015573**	**0.020514**

525	**0.015748**	**0.020619**	**0.017046**	**0.0177**	**0.016**	**0.016807**	**0.013793**	**0.01582**	**0.020619**
526	**0.015885**	**0.021506**	**0.017094**	**0.017858**	**0.016**	**0.017094**	**0.013857**	**0.015848**	**0.020726**
527	**0.01618**	**0.021979**	**0.017143**	**0.019048**	**0.016529**	**0.017493**	**0.013889**	**0.016052**	**0.020762**
528	**0.016294**	**0.021979**	**0.017221**	**0.019048**	**0.016807**	**0.017544**	**0.013921**	**0.016086**	**0.020943**
529	**0.016704**	**0.021979**	**0.017341**	**0.019293**	**0.016807**	**0.018127**	**0.014052**	**0.016336**	**0.021165**
530	**0.016762**	**0.022473**	**0.017349**	**0.019608**	**0.016807**	**0.018127**	**0.014085**	**0.016529**	**0.021277**
531	**0.017307**	**0.022473**	**0.017648**	**0.019673**	**0.017094**	**0.018182**	**0.014085**	**0.016647**	**0.021506**
532	**0.017313**	**0.022473**	**0.0177**	**0.019803**	**0.017392**	**0.018434**	**0.014118**	**0.016727**	**0.021622**
533	**0.017485**	**0.022473**	**0.0177**	**0.019934**	**0.017392**	**0.018809**	**0.014118**	**0.016807**	**0.02174**
534	**0.01793**	**0.022728**	**0.017752**	**0.020203**	**0.0177**	**0.019048**	**0.014185**	**0.01687**	**0.021979**
535	**0.017981**	**0.02353**	**0.017805**	**0.020409**	**0.018019**	**0.01917**	**0.014185**	**0.016902**	**0.0221**
536	**0.018202**	**0.02353**	**0.018462**	**0.020409**	**0.018019**	**0.019418**	**0.014286**	**0.017192**	**0.022223**
537	**0.018653**	**0.023811**	**0.018742**	**0.020479**	**0.018019**	**0.019691**	**0.014286**	**0.0177**	**0.022473**
538	**0.018692**	**0.023811**	**0.019048**	**0.020479**	**0.018349**	**0.020535**	**0.014286**	**0.018065**	**0.022728**
539	**0.018928**	**0.023811**	**0.019205**	**0.020619**	**0.018349**	**0.020791**	**0.014389**	**0.018349**	**0.02299**
540	**0.019181**	**0.024098**	**0.019258**	**0.020762**	**0.018349**	**0.020834**	**0.014493**	**0.018519**	**0.025752**
541	**0.019223**	**0.024098**	**0.019335**	**0.021053**	**0.018349**	**0.021053**	**0.014493**	**0.018751**	**0.025841**
542	**0.019378**	**0.024693**	**0.019371**	**0.021053**	**0.018349**	**0.021053**	**0.014493**	**0.018833**	**0.025841**
543	**0.019545**	**0.025318**	**0.019545**	**0.021202**	**0.019418**	**0.021277**	**0.014706**	**0.018988**	**0.026433**
544	**0.019803**	**0.025642**	**0.019673**	**0.021202**	**0.020409**	**0.021391**	**0.015424**	**0.019048**	**0.026433**
545	**0.019934**	**0.027399**	**0.020145**	**0.021202**	**0.020409**	**0.021506**	**0.015504**	**0.019194**	**0.026433**
546	**0.020068**	**0.02778**	**0.020145**	**0.021353**	**0.020834**	**0.021506**	**0.015504**	**0.019561**	**0.026433**
547	**0.020379**	**0.028171**	**0.02032**	**0.021506**	**0.020834**	**0.021506**	**0.016086**	**0.019587**	**0.026527**
548	**0.020444**	**0.028438**	**0.020379**	**0.021506**	**0.020834**	**0.02174**	**0.016173**	**0.019696**	**0.027029**
549	**0.020479**	**0.029559**	**0.020439**	**0.021661**	**0.021053**	**0.021859**	**0.016349**	**0.020514**	**0.027151**
550	**0.020493**	**0.029853**	**0.020619**	**0.021661**	**0.021277**	**0.021859**	**0.016529**	**0.020535**	**0.027151**
551	**0.020619**	**0.030305**	**0.021639**	**0.021661**	**0.021277**	**0.021979**	**0.016529**	**0.020549**	**0.027652**
552	**0.020812**	**0.030459**	**0.021774**	**0.021661**	**0.021277**	**0.022076**	**0.018576**	**0.020619**	**0.027652**
553	**0.020878**	**0.030459**	**0.021799**	**0.021819**	**0.021277**	**0.022223**	**0.019048**	**0.020619**	**0.027652**
554	**0.021053**	**0.030772**	**0.023042**	**0.021819**	**0.021506**	**0.022223**	**0.019231**	**0.021053**	**0.028171**
555	**0.021053**	**0.031091**	**0.023122**	**0.021819**	**0.02174**	**0.022273**	**0.019418**	**0.021117**	**0.028171**
556	**0.021073**	**0.031091**	**0.02353**	**0.021979**	**0.022141**	**0.022285**	**0.019673**	**0.021706**	**0.028171**
557	**0.021506**	**0.031253**	**0.02377**	**0.021979**	**0.022642**	**0.022347**	**0.019934**	**0.02174**	**0.028438**
558	**0.021506**	**0.031253**	**0.023811**	**0.022141**	**0.02299**	**0.022372**	**0.019934**	**0.02174**	**0.028438**
559	**0.021979**	**0.031749**	**0.024098**	**0.022306**	**0.023167**	**0.023203**	**0.020068**	**0.021805**	**0.028438**
560	**0.022392**	**0.031749**	**0.02417**	**0.02299**	**0.02353**	**0.023257**	**0.020203**	**0.02191**	**0.029414**
561	**0.022473**	**0.032261**	**0.024364**	**0.02299**	**0.024098**	**0.023373**	**0.020203**	**0.022174**	**0.030077**
562	**0.022894**	**0.032261**	**0.025479**	**0.023167**	**0.024391**	**0.023393**	**0.020203**	**0.022322**	**0.030459**

563	**0.023078**	**0.03279**	**0.026145**	**0.02353**	**0.024391**	**0.02367**	**0.020305**	**0.022389**	**0.030772**
564	**0.02318**	**0.03279**	**0.026317**	**0.024098**	**0.025318**	**0.023811**	**0.02034**	**0.022757**	**0.031253**
565	**0.023482**	**0.033152**	**0.026492**	**0.024898**	**0.025752**	**0.024391**	**0.020479**	**0.023065**	**0.031499**
566	**0.024098**	**0.033336**	**0.026492**	**0.025318**	**0.025975**	**0.024491**	**0.020619**	**0.023212**	**0.031749**
567	**0.024637**	**0.033336**	**0.026748**	**0.025479**	**0.025975**	**0.024693**	**0.020619**	**0.023257**	**0.032088**
568	**0.024656**	**0.033336**	**0.026811**	**0.025642**	**0.025975**	**0.024923**	**0.020907**	**0.023745**	**0.032261**
569	**0.024819**	**0.033523**	**0.027029**	**0.025975**	**0.026317**	**0.025001**	**0.020943**	**0.023754**	**0.032261**
570	**0.025159**	**0.033902**	**0.027069**	**0.025975**	**0.026317**	**0.025106**	**0.021053**	**0.023992**	**0.032625**
571	**0.025274**	**0.033902**	**0.027102**	**0.026145**	**0.026492**	**0.025642**	**0.021142**	**0.02402**	**0.03279**
572	**0.025443**	**0.033902**	**0.027176**	**0.026202**	**0.026668**	**0.025708**	**0.021202**	**0.024204**	**0.03279**
573	**0.025479**	**0.033902**	**0.027399**	**0.026433**	**0.026847**	**0.026145**	**0.021353**	**0.024617**	**0.034094**
574	**0.025677**	**0.034486**	**0.027652**	**0.026668**	**0.026907**	**0.026248**	**0.021506**	**0.024693**	**0.035091**
575	**0.025697**	**0.034486**	**0.027675**	**0.026907**	**0.02778**	**0.02655**	**0.021819**	**0.025001**	**0.035298**
576	**0.026136**	**0.034686**	**0.027876**	**0.026956**	**0.028171**	**0.026811**	**0.021979**	**0.025417**	**0.035298**
577	**0.026145**	**0.034686**	**0.028619**	**0.027151**	**0.028171**	**0.027102**	**0.022347**	**0.025533**	**0.035402**
578	**0.026886**	**0.035091**	**0.029199**	**0.027151**	**0.028171**	**0.027274**	**0.022473**	**0.025567**	**0.035718**
579	**0.026914**	**0.035718**	**0.029447**	**0.027588**	**0.028438**	**0.027703**	**0.022858**	**0.025775**	**0.035809**
580	**0.027029**	**0.036368**	**0.030052**	**0.027909**	**0.028573**	**0.02778**	**0.02299**	**0.025975**	**0.036368**
581	**0.027399**	**0.036368**	**0.030098**	**0.028371**	**0.02871**	**0.027909**	**0.023393**	**0.026223**	**0.036368**
582	**0.027575**	**0.037041**	**0.030984**	**0.028438**	**0.02927**	**0.028013**	**0.023953**	**0.028099**	**0.036558**
583	**0.027942**	**0.037388**	**0.030984**	**0.028573**	**0.029414**	**0.028039**	**0.025318**	**0.028099**	**0.036701**
584	**0.028263**	**0.03774**	**0.031198**	**0.02871**	**0.029559**	**0.028285**	**0.025642**	**0.028438**	**0.037388**
585	**0.028365**	**0.038221**	**0.031253**	**0.029199**	**0.029559**	**0.028655**	**0.025708**	**0.028528**	**0.03774**
586	**0.029074**	**0.038466**	**0.031749**	**0.02927**	**0.029853**	**0.029853**	**0.025841**	**0.028988**	**0.037945**
587	**0.029139**	**0.03974**	**0.031749**	**0.02927**	**0.030305**	**0.030397**	**0.025975**	**0.029081**	**0.03884**
588	**0.029183**	**0.040005**	**0.032157**	**0.029328**	**0.030305**	**0.030772**	**0.025975**	**0.03011**	**0.039221**
589	**0.029309**	**0.040005**	**0.032499**	**0.029414**	**0.030772**	**0.031198**	**0.026202**	**0.0302**	**0.039609**
590	**0.029479**	**0.040005**	**0.03279**	**0.029632**	**0.030772**	**0.031351**	**0.026527**	**0.030858**	**0.039891**
591	**0.029632**	**0.040274**	**0.032934**	**0.029853**	**0.030772**	**0.031749**	**0.026668**	**0.031665**	**0.040274**
592	**0.029632**	**0.040822**	**0.033186**	**0.030214**	**0.031091**	**0.031749**	**0.026668**	**0.031749**	**0.042048**
593	**0.029632**	**0.040822**	**0.033336**	**0.030537**	**0.032261**	**0.031893**	**0.027588**	**0.032214**	**0.04256**
594	**0.02975**	**0.041673**	**0.033598**	**0.030772**	**0.032261**	**0.032925**	**0.02778**	**0.032261**	**0.042787**
595	**0.029959**	**0.04256**	**0.033694**	**0.031253**	**0.032261**	**0.033336**	**0.028171**	**0.032261**	**0.043084**
596	**0.03016**	**0.04256**	**0.033806**	**0.031749**	**0.032261**	**0.034743**	**0.028171**	**0.032671**	**0.043172**
597	**0.030305**	**0.043017**	**0.033902**	**0.031749**	**0.032261**	**0.035091**	**0.028171**	**0.032718**	**0.043297**
598	**0.030537**	**0.043172**	**0.034447**	**0.032003**	**0.03279**	**0.035215**	**0.028868**	**0.033758**	**0.043297**
599	**0.030583**	**0.043963**	**0.034686**	**0.032003**	**0.033152**	**0.035367**	**0.029559**	**0.036129**	**0.045257**
600	**0.030772**	**0.045462**	**0.036129**	**0.032003**	**0.033902**	**0.035507**	**0.030002**	**0.036236**	**0.045257**

601	**0.030962**	**0.045985**	**0.036855**	**0.032157**	**0.034486**	**0.035718**	**0.030397**	**0.036368**	**0.045578**
602	**0.030986**	**0.04652**	**0.037522**	**0.03279**	**0.035718**	**0.035994**	**0.030772**	**0.037041**	**0.04567**
603	**0.031294**	**0.04652**	**0.037573**	**0.033226**	**0.036634**	**0.036203**	**0.031155**	**0.037074**	**0.046957**
604	**0.031977**	**0.04652**	**0.038173**	**0.034786**	**0.036814**	**0.03647**	**0.031183**	**0.037271**	**0.047467**
605	**0.03279**	**0.04879**	**0.038715**	**0.035339**	**0.037271**	**0.03785**	**0.032157**	**0.03787**	**0.047856**
606	**0.033015**	**0.04879**	**0.039093**	**0.03604**	**0.03774**	**0.039221**	**0.032261**	**0.038124**	**0.048202**
607	**0.033025**	**0.050431**	**0.040372**	**0.036368**	**0.0381**	**0.039891**	**0.032365**	**0.038384**	**0.05001**
608	**0.033902**	**0.051293**	**0.040684**	**0.036368**	**0.038715**	**0.040094**	**0.032576**	**0.040724**	**0.052446**
609	**0.034114**	**0.051293**	**0.040941**	**0.036634**	**0.039221**	**0.040638**	**0.033006**	**0.040822**	**0.053245**
610	**0.035339**	**0.05311**	**0.041615**	**0.036905**	**0.039221**	**0.041182**	**0.033006**	**0.040822**	**0.054877**
611	**0.036779**	**0.053346**	**0.041964**	**0.037179**	**0.039609**	**0.041328**	**0.033152**	**0.041594**	**0.056089**
612	**0.036905**	**0.054067**	**0.04406**	**0.038615**	**0.040822**	**0.043084**	**0.033673**	**0.042334**	**0.056512**
613	**0.038466**	**0.054067**	**0.044851**	**0.039221**	**0.041673**	**0.043297**	**0.033738**	**0.043238**	**0.057158**
614	**0.038534**	**0.054808**	**0.045078**	**0.039531**	**0.04256**	**0.04406**	**0.034133**	**0.043609**	**0.057629**
615	**0.039361**	**0.056353**	**0.045462**	**0.041158**	**0.043172**	**0.044206**	**0.034606**	**0.043852**	**0.057894**
616	**0.039592**	**0.057158**	**0.045863**	**0.04256**	**0.044452**	**0.044233**	**0.034847**	**0.044171**	**0.058269**
617	**0.041102**	**0.057987**	**0.046831**	**0.044452**	**0.04512**	**0.044736**	**0.037271**	**0.04465**	**0.061244**
618	**0.041151**	**0.058269**	**0.046855**	**0.04581**	**0.04581**	**0.045078**	**0.038715**	**0.044895**	**0.06252**
619	**0.041385**	**0.058496**	**0.047954**	**0.046091**	**0.04652**	**0.045768**	**0.040005**	**0.045394**	**0.063179**
620	**0.041566**	**0.059898**	**0.049313**	**0.04652**	**0.049832**	**0.046957**	**0.040546**	**0.047579**	**0.064539**
621	**0.041673**	**0.060625**	**0.051139**	**0.048119**	**0.050431**	**0.046957**	**0.040822**	**0.048034**	**0.065958**
622	**0.043803**	**0.061875**	**0.052551**	**0.04879**	**0.052186**	**0.047179**	**0.040822**	**0.04879**	**0.067011**
623	**0.043803**	**0.063179**	**0.052842**	**0.04948**	**0.052186**	**0.047628**	**0.042359**	**0.0497**	**0.067659**
624	**0.045611**	**0.063716**	**0.053704**	**0.049597**	**0.054067**	**0.048267**	**0.04256**	**0.05196**	**0.068208**
625	**0.046213**	**0.065597**	**0.055791**	**0.050858**	**0.054067**	**0.04879**	**0.043963**	**0.054394**	**0.071096**
626	**0.05001**	**0.068319**	**0.056619**	**0.05092**	**0.054067**	**0.051293**	**0.044206**	**0.056195**	**0.074901**
627	**0.051672**	**0.073203**	**0.058923**	**0.05757**	**0.055791**	**0.05249**	**0.05001**	**0.057421**	**0.07654**
628	**0.05535**	**0.076373**	**0.061136**	**0.060625**	**0.061369**	**0.05249**	**0.051293**	**0.058395**	**0.076734**
629	**0.056089**	**0.076961**	**0.064849**	**0.060625**	**0.061558**	**0.056798**	**0.052268**	**0.058771**	**0.082772**
630	**0.056118**	**0.077558**	**0.072613**	**0.065139**	**0.069959**	**0.059089**	**0.052414**	**0.074108**	**0.083382**
631	**0.056441**	**0.09309**	**0.077778**	**0.077962**	**0.075508**	**0.066323**	**0.05557**	**0.0746**	**0.08536**
632	**0.057643**	**0.093526**	**0.085861**	**0.088947**	**0.076373**	**0.066445**	**0.057432**	**0.087011**	**0.087011**
633	**0.060418**	**0.098846**	**0.092782**	**0.103678**	**0.085037**	**0.067064**	**0.057759**	**0.090568**	**0.089612**
634	**0.062304**	**0.09953**	**0.108322**	**0.110751**	**0.085942**	**0.067352**	**0.060625**	**0.104472**	**0.101999**
635	**0.072496**	**0.102948**	**0.109815**	**0.111226**	**0.090151**	**0.078533**	**0.080043**	**0.132172**	**0.180262**

Lampiran 6

Daftar *Return* Saham Harian Terpangkas

Periode 3 Januari 2011- 30 Juni 2013

No	ASII	ASRI	INTP	KLBF	LPKR	SMGR	TLKM	UNVR	CPIN
1	-0.00643	0	-0.00449	0	0	-0.00443	-0.00539	-0.00357	-0.00738
2	-0.00639	0	-0.00445	0	0	-0.0044	-0.00533	-0.00355	-0.00733
3	-0.00635	0	-0.00443	0	0	-0.00423	-0.00533	-0.00342	-0.00697
4	-0.00631	0	-0.00434	0	0	-0.00421	-0.00531	-0.00338	-0.00692
5	-0.0063	0	-0.00416	0	0	-0.00411	-0.00528	-0.00338	-0.00669
6	-0.00627	0	-0.00396	0	0	-0.00406	-0.00522	-0.00337	-0.00664
7	-0.00627	0	-0.00394	0	0	-0.00404	-0.00519	-0.00337	-0.00651
8	-0.00626	0	-0.00378	0	0	-0.00402	-0.00519	-0.00335	-0.00647
9	-0.00623	0	-0.00355	0	0	-0.00399	-0.00519	-0.00335	-0.00627
10	-0.00623	0	-0.00354	0	0	-0.00393	-0.00519	-0.00335	-0.00597
11	-0.00619	0	-0.0035	0	0	-0.00387	-0.00517	-0.00334	-0.0059
12	-0.00619	0	-0.00345	0	0	-0.00343	-0.00506	-0.00334	-0.0058
13	-0.00615	0	-0.00344	0	0	-0.00342	-0.00506	-0.00331	-0.00576
14	-0.00592	0	-0.00342	0	0	-0.00342	-0.00506	-0.00329	-0.00539
15	-0.00578	0	-0.0034	0	0	-0.00341	-0.00504	-0.00324	-0.00536
16	-0.00573	0	-0.0034	0	0	-0.00336	-0.00464	-0.00323	-0.00533
17	-0.00571	0	-0.00338	0	0	-0.00334	-0.0046	-0.00321	-0.00533
18	-0.00516	0	-0.00337	0	0	-0.00318	-0.0044	-0.00319	-0.00533
19	-0.00509	0	-0.00335	0	0	-0.00281	-0.00407	-0.00319	-0.00531
20	-0.00506	0	-0.00304	0	0	-0.00281	0	-0.00315	-0.00528
21	-0.00433	0	-0.00303	0	0	-0.00277	0	-0.00311	-0.00522
22	-0.00425	0	-0.00301	0	0	-0.00273	0	-0.00308	-0.00519
23	-0.00412	0	-0.003	0	0	-0.00266	0	-0.00303	-0.00517
24	-0.00406	0	-0.00298	0	0	0	0	-0.00299	-0.00517
25	-0.00381	0	-0.00297	0	0	0	0	-0.00298	-0.00517
26	-0.00372	0	-0.00297	0	0	0	0	-0.0027	-0.00517
27	-0.00364	0	-0.00295	0	0	0	0	-0.00269	-0.00517
28	-0.00354	0	-0.00295	0	0	0	0	-0.00257	-0.00514
29	-0.00351	0	-0.00294	0	0	0	0	-0.00257	-0.00504
30	-0.00316	0	-0.00293	0	0	0	0	-0.00247	0
31	-0.0027	0	-0.00292	0	0	0	0	-0.00238	0

32	-0.00266	0	-0.00291	0	0	0	0	-0.00237	0
33	-0.00266	0	-0.00285	0	0	0	0	-0.00232	0
34	-0.00254	0	-0.00283	0	0	0	0	-0.00231	0
35	-0.00254	0	-0.00282	0	0	0	0	-0.00231	0
36	-0.00216	0	-0.00281	0	0	0	0	-0.0023	0
37	-0.00212	0	-0.00278	0	0	0	0	-0.00228	0
38	-0.00203	0	-0.00275	0	0	0	0	-0.00221	0
39	-0.00199	0	-0.00274	0	0	0	0	-0.0022	0
40	-0.00194	0	-0.00271	0	0	0	0	-0.00218	0
41	-0.00181	0	-0.0027	0	0	0	0	-0.00216	0
42	-0.00177	0	-0.0027	0	0	0	0	-0.00216	0
43	-0.00169	0	-0.00265	0	0	0	0	-0.00196	0
44	-0.00168	0	-0.0025	0	0	0	0	-0.00196	0
45	-0.00149	0	-0.00233	0	0	0	0	-0.00196	0
46	-0.00145	0	-0.00231	0	0	0	0	-0.00193	0
47	-0.00089	0	-0.0023	0	0	0	0	-0.00192	0
48	-0.00071	0	-0.0023	0	0	0	0	-0.00192	0
49	-0.0007	0	-0.00227	0	0	0	0	-0.0019	0
50	0	0	-0.00224	0	0	0	0	-0.00179	0
51	0	0	-0.00223	0	0	0	0	0	0
52	0	0	-0.00223	0	0	0	0	0	0
53	0	0	-0.00222	0	0	0	0	0	0
54	0	0	-0.00219	0	0	0	0	0	0
55	0	0	-0.00198	0	0	0	0	0	0
56	0	0	-0.00197	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0
58	0	0	0	0	0	0	0	0	0
59	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0
61	0	0	0	0	0	0	0	0	0
62	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0
67	0	0	0	0	0	0	0	0	0
68	0	0	0	0	0	0	0	0	0
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72	0	0	0	0	0	0	0	0	0
73	0	0	0	0	0	0	0	0	0
74	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0
76	0	0	0	0	0	0	0	0	0
77	0	0	0	0	0	0	0	0	0
78	0	0	0	0	0	0	0	0	0
79	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0
81	0	0	0	0	0	0	0	0	0
82	0	0	0	0	0	0	0	0	0
83	0	0	0	0	0	0	0	0	0
84	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0
86	0	0	0	0	0	0	0	0	0
87	0	0	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0	0	0
89	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0
101	0	0	0	0	0	0	0	0	0
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107	0	0	0	0	0	0	0	0	0

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111	0	0	0	0	0	0	0	0	0
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118	0	0	0	0	0	0	0	0	0
119	0	0	0	0	0	0	0	0	0
120	0	0	0.001982	0	0	0	0	0	0
121	0	0	0.002068	0	0	0	0	0	0
122	0	0	0.002081	0	0	0	0	0	0
123	0	0	0.002176	0	0	0	0	0	0
124	0	0	0.00224	0	0	0	0	0	0
125	0	0	0.002255	0	0	0	0	0.001732	0
126	0	0	0.00227	0	0	0	0	0.001778	0
127	0	0	0.002281	0	0	0	0	0.00185	0
128	0	0	0.002286	0	0	0	0	0.001899	0
129	0.000676	0	0.002291	0	0	0.002721	0	0.001907	0
130	0.000701	0	0.002296	0	0	0.002729	0	0.001918	0
131	0.000758	0	0.002317	0	0	0.00299	0	0.001925	0
132	0.000881	0	0.002323	0	0	0.003026	0	0.001929	0
133	0.001358	0	0.002323	0	0	0.00313	0	0.001959	0
134	0.001397	0	0.002328	0	0	0.003339	0	0.002077	0
135	0.001409	0	0.002334	0	0	0.003361	0	0.002099	0
136	0.001463	0	0.002395	0	0	0.003407	0	0.002195	0
137	0.001902	0	0.00246	0	0	0.003419	0	0.0022	0
138	0.002275	0	0.002484	0	0	0.003454	0	0.002286	0
139	0.00257	0	0.002497	0	0	0.003884	0	0.00235	0
140	0.002576	0	0.002497	0	0	0.003899	0	0.002509	0
141	0.002914	0	0.002503	0	0	0.004057	0	0.002516	0
142	0.002925	0	0.002522	0	0	0.004246	0	0.002528	0
143	0.002946	0	0.002649	0	0	0.004301	0	0.002535	0
144	0.003104	0	0.002699	0	0	0.004338	0	0.002541	0
145	0.003537	0	0.002721	0	0	0.004338	0	0.002561	0

146	0.003667	0	0.002736	0	0	0.004357	0	0.002567	0
147	0.003716	0	0.002743	0	0	0.004357	0	0.002594	0
148	0.003881	0	0.002774	0	0	0.004376	0	0.002635	0
149	0.004062	0	0.002782	0	0	0.004396	0	0.002649	0
150	0.004234	0	0.002869	0	0	0.004396	0	0.002845	0
151	0.004435	0	0.002878	0	0	0.004415	0	0.002928	0
152	0.004442	0	0.002911	0	0	0.004415	0	0.002937	0
153	0.004477	0	0.002928	0	0	0.004415	0	0.002981	0.005063
154	0.004494	0	0.002928	0	0	0.004435	0	0.003082	0.005141
155	0.004548	0	0.002937	0	0	0.004435	0	0.003091	0.005168
156	0.00476	0	0.002946	0	0	0.004435	0.004193	0.003091	0.005168
157	0.004829	0	0.002972	0	0	0.004515	0.004211	0.00313	0.005168
158	0.004998	0	0.002972	0	0	0.004515	0.004228	0.00317	0.005168
159	0.005013	0	0.002981	0	0	0.004556	0.004662	0.003263	0.005168
160	0.005046	0	0.003017	0	0	0.004556	0.004751	0.003273	0.005222
161	0.005049	0	0.003044	0	0	0.004843	0.005013	0.003284	0.005222
162	0.00545	0	0.00311	0	0	0.005013	0.005063	0.003306	0.005249
163	0.005491	0	0.00314	0	0	0.005038	0.005063	0.003317	0.005249
164	0.00592	0	0.003231	0	0	0.005063	0.005168	0.003328	0.005249
165	0.00594	0	0.003263	0	0	0.005063	0.005168	0.003339	0.005277
166	0.006001	0	0.003328	0	0	0.005089	0.005195	0.003339	0.005277
167	0.006135	0	0.00335	0	0	0.005115	0.005249	0.003339	0.005305
168	0.006231	0	0.00335	0	0	0.005141	0.005277	0.003339	0.005333
169	0.006274	0	0.003384	0	0	0.005141	0.005305	0.003339	0.005333
170	0.006309	0	0.003454	0	0	0.005168	0.005305	0.00335	0.00639
171	0.006396	0	0.003478	0	0	0.005168	0.005333	0.00335	0.006473
172	0.006431	0	0.003503	0	0	0.005168	0.005333	0.00335	0.006601
173	0.006431	0	0.003884	0	0	0.005222	0.00542	0.00335	0.006645
174	0.006431	0	0.004158	0.005479	0	0.005222	0.00545	0.003373	0.006645
175	0.006431	0.008889	0.004386	0.005764	0	0.005249	0.00551	0.003373	0.006689
176	0.006431	0.009217	0.004454	0.005831	0	0.005249	0.005571	0.003373	0.00692
177	0.006447	0.009217	0.004484	0.005865	0	0.005277	0.005571	0.00381	0.006969
178	0.006473	0.009302	0.004545	0.006154	0	0.005277	0.005602	0.003854	0.007843
179	0.006473	0.009479	0.004556	0.006231	0	0.005305	0.005634	0.003861	0.007905
180	0.006473	0.009569	0.004566	0.00627	0	0.005305	0.00597	0.003884	0.007905
181	0.006473	0.009662	0.004608	0.006309	0	0.005333	0.006431	0.003922	0.008097
182	0.006515	0.009756	0.004684	0.006349	0	0.005362	0.006431	0.003922	0.00823
183	0.006515	0.009852	0.004773	0.006349	0	0.005362	0.006473	0.004141	0.008299

184	0.006515	0.00995	0.004808	0.006349	0	0.005362	0.006473	0.004274	0.008299
185	0.006515	0.01005	0.004975	0.00639	0	0.00542	0.006473	0.004357	0.008368
186	0.006557	0.010152	0.00542	0.006431	0	0.00545	0.006515	0.004405	0.008368
187	0.006572	0.010257	0.005479	0.006431	0	0.00554	0.006515	0.004494	0.008439
188	0.006601	0.010257	0.005525	0.006431	0	0.005602	0.006557	0.004717	0.008734
189	0.006601	0.010257	0.005571	0.006473	0	0.005634	0.006601	0.004728	0.00905
190	0.006667	0.010257	0.005698	0.006473	0	0.005634	0.006601	0.004751	0.00905
191	0.006734	0.010363	0.005714	0.006473	0	0.005666	0.006645	0.005063	0.009217

Lampiran 7

Sintak Program MATLAB

```
disp('============================================================');
disp('    OPTIMISASI PORTOFOLIO ROBUST MEAN VARIANCE              ');
disp('     DENGAN MENGGUNAKAN MODEL TRIMMED MEAN                  ');
disp('      Pada Saham Syariah Jakarta Islam Indeks               ');
disp('                                                            ');
disp('                    Anita Rohmah                            ');
disp('                      08610006                              ');
disp('============================================================');
disp('          uji Normalitas MV Klasik                          ');
disp('============================================================');
data=input('masukkan data= ');
meansahamklasik=mean(data)     %nilai rata-rata keseluruhan saham
klasik
var_sahamklasik=var(data) %varian keseluruhan saham klasik
[Normal_ASII,PValue,JBSTAT]=jbtest(datacla(1:635,1),0.05)
[Normal_ASRI,PValue,JBSTAT]=jbtest(datacla(1:635,2),0.05)
[Normal_INTP,PValue,JBSTAT]=jbtest(datacla(1:635,3),0.05)
[Normal_KLBF,PValue,JBSTAT]=jbtest(datacla(1:635,4),0.05)
[Normal_LPKR,PValue,JBSTAT]=jbtest(datacla(1:635,5),0.05)
[Normal_SMGR,PValue,JBSTAT]=jbtest(datacla(1:635,6),0.05)
[Normal_TLKM,PValue,JBSTAT]=jbtest(datacla(1:635,7),0.05)
[Normal_UNVR,PValue,JBSTAT]=jbtest(datacla(1:635,8),0.05)
[Normal_CPIN,PValue,JBSTAT]=jbtest(datacla(1:635,9),0.05)
disp('============================================================');
disp('              uji Normalitas Robust                         ');
disp('============================================================');
data=input('masukkan data= ');
[Normal_ASII,PValue,JBSTAT]=jbtest(dataper35(1:191,1),0.05)
[Normal_ASRI,PValue,JBSTAT]=jbtest(dataper35(1:191,2),0.05)
[Normal_INTP,PValue,JBSTAT]=jbtest(dataper35(1:191,3),0.05)
[Normal_KLBF,PValue,JBSTAT]=jbtest(dataper35(1:191,4),0.05)
[Normal_LPKR,PValue,JBSTAT]=jbtest(dataper35(1:191,5),0.05)
[Normal_SMGR,PValue,JBSTAT]=jbtest(dataper35(1:191,6),0.05)
[Normal_TLKM,PValue,JBSTAT]=jbtest(dataper35(1:191,7),0.05)
[Normal_UNVR,PValue,JBSTAT]=jbtest(dataper35(1:191,8),0.05)
[Normal_CPIN,PValue,JBSTAT]=jbtest(dataper35(1:191,9),0.05)
disp('============================================================');
disp('               PORTOFOLIO PERTAMA                           ');
disp('============================================================');
meansaham=mean(dataper35pro1) %nilai rata-rata keseluruhan saham
terpangkas
var_saham=var(dataper35pro1)   %varian keseluruhan saham terpangkas
meanTr=transpose(meansaham)
VarCov_saham=cov(dataper35pro1)  %matriks varian kovarian saham
terpangkas
inv_matriks=inv(VarCov_saham)   %invers matriks varian kovarian
saham terpangkas
```

```
e=[1;1;1;1;1];                  %elemen satu sebanyak 1xN
et=[1 1 1 1 1];
k=inv_matriks*e;
l=et*inv_matriks*e;
w1=k/l
w2=transpose(w1)
disp('============================================================');
disp('            Proporsi 2 portofolio pertama                   ');
disp('============================================================');
meansaham2=mean(dataper35pro2)
var_saham2=var(dataper35pro2)
meanTr2=transpose(meansaham2)
VarCov_saham2=cov(dataper35pro2)
inv_matriks2=inv(VarCov_saham2)
e2=[1;1;1];
et2=[1 1 1];
k2=inv_matriks2*e2;
l2=et2*inv_matriks2*e2;
w12=k2/l2
w22=transpose(w12)
disp('============================================================');
disp('            Proporsi 3 portofolio pertama                   ');
disp('============================================================');
meansaham3=mean(dataper35pro3)
var_saham3=var(dataper35pro3)
meanTr3=transpose(meansaham3)
VarCov_saham3=cov(dataper35pro3)
inv_matriks3=inv(VarCov_saham3)
e3=[1;1];
et3=[1 1];
k3=inv_matriks3*e3;
l3=et3*inv_matriks3*e3;
w13=k3/l3
w23=transpose(w13)
disp('============================================================');
disp('    prosentase mean dan resiko portofolio pertama           ');
disp('============================================================');
ResikoPort= sqrt(w23*VarCov_saham3*w13)   %resiko portofolio
returnport=(w23*meanTr3) %mean return portofolio
resikoport=ResikoPort*100   %prosentase resiko portofolio
returnportofolio=returnport*100  %prosentase mean return portofolio
disp('============================================================');
disp('           shape ratio portofolio pertama                   ');
disp('============================================================');
Sr=returnportofolio/resikoport
disp('============================================================');
disp('                   PORTOFOLIO KEDUA                         ');
disp('============================================================');
meansaham_por2=mean(dataper35por2pro1) %nilai rata-rata keseluruhan
saham terpangkas
var_saham_por2=var(dataper35por2pro1)   %varian keseluruhan saham
terpangkas
```

```
meanTr_por2=transpose(meansaham_por2)
VarCov_saham_por2=cov(dataper35por2pro1)  %matriks varian kovarian
saham terpangkas
inv_matriks_por2=inv(VarCov_saham_por2)   %invers matriks varian
kovarian saham terpangkas
e_por2=[1;1;1;1;1];                  %elemen satu sebanyak 1xN
et_por2=[1 1 1 1 1];
k_por2=inv_matriks_por2*e_por2;
l_por2=et_por2*inv_matriks_por2*e_por2;
w1_por2=k_por2/l_por2
w2_por2=transpose(w1_por2)
disp('============================================================');
disp('            proporsi kedua Portofolio kedua                 ');
disp('============================================================');
meansaham2_por2=mean(dataper35por2pro2) %nilai rata-rata keseluruhan
saham terpangkas
var_saha2m_por2=var(dataper35por2pro2)   %varian keseluruhan saham
terpangkas
meanTr2_por2=transpose(meansaham2_por2)
VarCov_saham2_por2=cov(dataper35por2pro2)  %matriks varian kovarian
saham terpangkas
inv_matriks2_por2=inv(VarCov_saham2_por2)   %invers matriks varian
kovarian saham terpangkas
e2_por2=[1;1];                  %elemen satu sebanyak 1xN
et2_por2=[1 1];
k2_por2=inv_matriks2_por2*e2_por2;
l2_por2=et2_por2*inv_matriks2_por2*e2_por2;
w12_por2=k2_por2/l2_por2
w22_por2=transpose(w12_por2)
disp('============================================================');
disp('      prosentase mean dan resiko portofolio kedua           ');
disp('============================================================');
ResikoPort_por2= sqrt(w22_por2*VarCov_saham2_por2*w12_por2)
%resiko portofolio
returnport_por2=(w22_por2*meanTr2_por2) %mean return portofolio
resikoport_por2=ResikoPort_por2*100   %prosentase resiko portofolio
returnportofolio_por2=returnport_por2*100  %prosentase mean return
portofolio
disp('============================================================');
disp('            shape ratio Portofolio kedua                    ');
disp('============================================================');
Sr_por2=returnportofolio_por2/resikoport_por2
```

Lampiran 8

Output Portofolio Pertama

```
==========================================================================

        OPTIMISASI PORTOFOLIO ROBUST MEAN VARIANCE
        DENGAN MENGGUNAKAN MODEL TRIMMED MEAN
        Pada Saham Syariah Jakarta Islam Indeks

              Anita Rohmah
              08610006

==========================================================================
                    uji Normalitas MV Klasik
==========================================================================
masukkan data= datacla

meansahamklasik =
   0.0004   0.0014   0.0007   0.0012   0.0012   0.0009   0.0005   0.0010   0.0017

var_sahamklasik =
  1.0e-003 *
   0.4071   0.7553   0.5504   0.4954   0.4982   0.4477   0.3378   0.4856   0.7866

Normal_ASII =
    1
PValue =
    0
JBSTAT =
  125.3220

Normal_ASRI =
    1
PValue =
    0
JBSTAT =
   92.1913
```

```
Normal_INTP =
    1
PValue =
    0
JBSTAT =
  992.1185

Normal_KLBF =
    1
PValue =
    0
JBSTAT =
  2.8222e+00

Normal_LPKR =
    1
PValue =
    0
JBSTAT =
  333.5168

Normal_SMGR =
    1
PValue =
    0
JBSTAT =
  114.2549

Normal_TLKM =
    1
PValue =
    0
JBSTAT =
  131.8333

Normal_UNVR =
    1
PValue =
    0
JBSTAT =
  1.1010e+003
```

```
Normal_CPIN =
    1
PValue =
    0
JBSTAT =
  870.7108
================================================================================
                                Uji Normalitas Robust
================================================================================
masukkan data= dataper35

Normal_ASII =
    0
PValue =
   0.3231
JBSTAT =
   2.2594

Normal_ASRI =
    1
PValue =
    0
JBSTAT =
  595.9679

Normal_INTP =
    1
PValue =
   0.0165
JBSTAT =
   8.2086

Normal_KLBF =
    1
PValue =
    0
JBSTAT =
  515.4633

Warning: Divide by zero.
> In jbtest at 100
  In ujinordataku1per35 at 9
```

```
Normal_LPKR =
     0
PValue =
   NaN
JBSTAT =
   NaN

Normal_SMGR =
     0
PValue =
    0.0589
JBSTAT =
    5.6632

Normal_TLKM =
     0
PValue =
    0.0660
JBSTAT =
    5.4375

Normal_UNVR =
     1
PValue =
    0.0165
JBSTAT =
    8.2132

Normal_CPIN =
     0
PValue =
    0.1968
JBSTAT =
    3.2515
==========================================================================
                                PORTOFOLIO PERTAMA
==========================================================================
meansaham =
    0.0011    0.0009    0.0006    0.0006    0.0005

var_saham =
  1.0e-004 *
    0.0767    0.0783    0.0825    0.0333    0.1454
```

```
meanTr =
   0.0011
   0.0009
   0.0006
   0.0006
   0.0005

VarCov_saham =
  1.0e-004 *
   0.0767   0.0379   0.0682   0.0255   0.0920
   0.0379   0.0783   0.0497   0.0499   0.0674
   0.0682   0.0497   0.0825   0.0332   0.1021
   0.0255   0.0499   0.0332   0.0333   0.0449
   0.0920   0.0674   0.1021   0.0449   0.1454

inv_matriks =
  1.0e+006 *
   0.6013   0.0443  -0.2139   0.0436  -0.2644
   0.0443   2.6936   0.0186  -4.0160  -0.0499
  -0.2139   0.0186   1.0189  -0.1494  -0.5429
   0.0436  -4.0160  -0.1494   6.5285  -0.0767
  -0.2644  -0.0499  -0.5429  -0.0767   0.6643

w1 =
   0.1929
  -1.1972
   0.1202
   2.1306
  -0.2465

w2 =
   0.1929  -1.1972   0.1202   2.1306  -0.2465
================================================================================
                          proporsi kedua portofolio pertama
================================================================================
meansaham2 =
   0.0011   0.0006   0.0006

var_saha2m =
  1.0e-005 *
   0.7671   0.8250   0.3333

meanTr2 =
   0.0011
```

```
   0.0006
   0.0006

VarCov_saham2 =
  1.0e-005 *
   0.7671   0.6818   0.2547
   0.6818   0.8250   0.3323
   0.2547   0.3323   0.3333

inv_matriks2 =
  1.0e+005 *
   4.9585  -4.2980   0.4969
  -4.2980   5.7514  -2.4508
   0.4969  -2.4508   5.0647

w12 =
   0.3539
  -0.3050
   0.9511

w22 =
   0.3539  -0.3050   0.9511
==========================================================================
                        Proporsi ketiga portofolio pertama
==========================================================================

meansaham3 =
   0.0011   0.0006

var_saham3 =
  1.0e-005 *
   0.7671   0.3333

meanTr3 =
   0.0011
   0.0006

VarCov_saham3 =
  1.0e-005 *
   0.7671   0.2547
   0.2547   0.3333

inv_matriks3 =
  1.0e+005 *
```

```
    1.7466   -1.3346
   -1.3346    4.0203

w13 =
    0.1330
    0.8670

w23 =
    0.1330    0.8670
==========================================================================
                    prosentase mean dan  resiko portofolio pertama
==========================================================================
ResikoPort =
    0.0018

returnport =
  6.5351e-004

resikoport =
    0.1797

returnportofolio =
    0.0654
==========================================================================
                          shape ratio portofolio pertama
==========================================================================
Sr =
    0.3637
```

Lampiran 9

Output Portofolio Kedua

```
==========================================================================

        OPTIMISASI PORTOFOLIO ROBUST MEAN VARIANCE
        DENGAN MENGGUNAKAN MODEL TRIMMED MEAN
        Pada Saham Syariah Jakarta Islam Indeks

                Anita Rohmah
                08610006

==========================================================================
                        PORTOFOLIO KEDUA
==========================================================================
meansaham =
   0.0006    0.0004    0.0004    0.0011    0.0009

var_saham =
  1.0e-005 *
   0.3333    0.5545    0.7194    0.7671    0.7835

meanTr =
   0.0006
   0.0004
   0.0004
   0.0011
   0.0009

VarCov_saham =
  1.0e-005 *
   0.3333    0.2230    0.2699    0.2547    0.4987
   0.2230    0.5545    0.6172    0.6083    0.3353
   0.2699    0.6172    0.7194    0.6712    0.4051
   0.2547    0.6083    0.6712    0.7671    0.3794
   0.4987    0.3353    0.4051    0.3794    0.7835

inv_matriks =
  1.0e+006 *
   6.4941    0.5222   -0.4127   -0.2097   -4.0423
```

```
   0.5222    5.8481   -3.8392   -1.3558   -0.1933
  -0.4127   -3.8392    3.3324    0.2306    0.0709
  -0.2097   -1.3558    0.2306    1.0246    0.0983
  -4.0423   -0.1933    0.0709    0.0983    2.6992

w1 =
   2.0696
   0.8642
  -0.5440
  -0.1866
  -1.2033

w2 =
   2.0696    0.8642   -0.5440   -0.1866   -1.2033
==========================================================================
                          proporsi kedua portofolio kedua
==========================================================================
meansaham2 =
  1.0e-003 *
   0.5866    0.3658

var_saha2m =
  1.0e-005 *
   0.3333    0.5545

meanTr2 =
  1.0e-003 *
   0.5866
   0.3658

VarCov_saham2 =
  1.0e-005 *
   0.3333    0.2230
   0.2230    0.5545

inv_matriks2 =
  1.0e+005 *
   4.1049   -1.6508
  -1.6508    2.4674

w12 =
   0.7503
   0.2497
```

```
w22 =
   0.7503    0.2497
==========================================================================
                    Prosentase mean dan  Resiko Portofolio portofolio kedua
==========================================================================
ResikoPort =
   0.0017


returnport =
 5.3151e-004

resikoport =
   0.1749

returnportofolio =
   0.0532
==========================================================================
                                shape ratio portofolio kedua
==========================================================================
Sr =
   0.3040
```