

**ANALISIS PEMILIHAN PORTOFOLIO OPTIMAL
DENGAN MEAN VARIANCE, MEAN ABSOLUTE DEVIATION, DAN
DOWNSIDE DEVIATION**

**(Studi kasus: Indeks harga saham JII periode 1 Januari 2014 sampai 29
September 2016)**

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Untuk memenuhi sebagian persyaratan
Mencapai derajat Sarjana S-1

Jurusan Matematika



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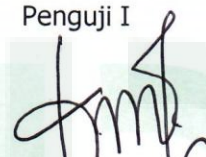
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Menyatakan dengan sesungguhnya bahwa skripsi ini merupakan hasil pekerjaan penulis sendiri dan sepanjang pengetahuan penulis tidak berisi materi yang dipublikasikan atau ditulis orang lain, dan atau telah digunakan sebagai persyaratan penyelesaian Tugas Akhir di Perguruan Tinggi lain, kecuali bagian tertentu yang penulis ambil sebagai bahan acuan. Apabila terbukti pernyataan ini tidak benar, sepenuhnya menjadi tanggung jawab penulis.

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MOTTO

*Allah senantiasa memberikan pertolongan kepada hamba-Nya
selama hamba itu memberi pertolongan kepada saudaranya*

(HR. Muslim: 38)

*Kesuksesan seorang anak tergantung pada kedekatan ia dengan
orang tuanya*

(Bacharuddin Jusuf Habibie)

*Janganlah takut untuk melangkah, karena jarak 1000 mil
dimulai dengan langkah pertama*

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ABSTRAK

ANALISIS PEMILIHAN PORTOFOLIO OPTIMAL DENGAN MODEL MEAN VARIANCE, MEAN ABSOLUTE DEVIATION, DAN DOWNSIDE DEVIATION

(Studi kasus: Indeks harga saham JII)

Oleh:

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Portofolio merupakan gabungan sekumpulan aset, baik berupa aset riil maupun aset *financial* yang dimiliki oleh investor. Masalah utama yang dihadapi oleh investor adalah tingginya nilai risiko aset, sehingga perlu dilakukan pembentukan portofolio. Portofolio dibentuk dengan rata-rata dan standard deviasi *return* saham berdasarkan adanya hubungan antara saham yang membentuk portofolio. Portofolio dikatakan efisien apabila portofolio tersebut ketika dibandingkan dengan portofolio lain memiliki ekspektasi *return* terbesar dengan nilai resiko terkecil.

Penelitian ini bertujuan untuk mengetahui, membandingkan, dan menganalisis pemilihan portofolio optimal dengan berbagai model yang dikembangkan dari model portofolio Markowitz. Perbandingan yang dianalisis antara lain nilai *return*, risiko dan kinerja portofolio dengan menggunakan indeks *Sharpe*. Model yang dipakai dalam portofolio optimal ini, antara lain *Mean Variance* (MV), *Mean Absolute Deviation* (MAD), *Downside Deviation* (DD). Data yang digunakan dalam penelitian tersebut berasal dari indeks harga saham JII periode 1 Januari 2014 sampai 29 September 2016.

Hasil penelitian menjelaskan bahwa model portofolio yang memberikan *return* tertinggi adalah *Mean Absolute Deviation* yaitu sebesar 0.025893%, resiko terkecil adalah *Downside Deviation* yaitu sebesar 0.006958%, dan kinerja terbaik adalah *Downside Deviation* yaitu sebesar 1.782.

Kata Kunci: Portofolio Optimal, Markowitz, *Mean Variance*, *Mean Absolute Deviation*, *Downside Deviation*.

BAB I

PENDAHULUAN

1.1. Latar Belakang

Salah satu bentuk kegiatan yang ada di pasar modal yaitu investasi. Investasi adalah penanaman modal untuk satu atau lebih aktiva yang dimiliki dan biasanya berjangka waktu lama dengan harapan pendapatan keuntungan di masa-masa yang akan datang (Sunariyah, 2003 :4). Menurut Salim HS dan Budi Sutrisno, investasi adalah penanaman modal yang dilakukan oleh investor, baik investor asing maupun domestik dalam berbagai bidang usaha yang terbuka untuk investasi, yang bertujuan untuk memperoleh keuntungan.

Dari beberapa pengertian tersebut dapat disimpulkan bahwa investasi pada dasarnya adalah penanaman modal pada masa sekarang untuk mendapatkan suatu keuntungan di masa yang akan datang. Orang yang melakukan investasi disebut investor. Seseorang melakukan investasi dengan tujuan untuk mengembangkan sejumlah dana yang ada saat ini untuk meningkatkan kesejahteraan moneter, baik di saat ini maupun dimasa yang akan datang dapat dijual kembali dengan nilai yang lebih tinggi.

Investasi sebagai salah satu kegiatan bermuamalah yang tidak terlepas dari hukum dasar Fiqih Islam, agama yang menyerukan umatnya untuk melakukan kegiatan tolong-menolong dalam kebaikan guna untuk memenuhi kebutuhan antar sesama umat manusia, hal ini sesuai dengan firman Allah SWT yang artinya: “... *Dan tolong menolonglah kamu dalam (mengerjakan) kebajikan dan takwa*” (QS. *Al-Maidah :05*), dan disamping itu terdapat Hadits yang menunjuk tentang tolong

menolong, yang artinya: “Allah senantiasa memberikan pertolongan kepada hamba-hamba-Nya selama hamba itu member pertolongan kepada saudaranya” (HR.Muslim:38 / 2696). Ayat dan hadits di atas jelas bahwa seruan untuk melakukan tolong menolong kepada saudaranya yaitu dengan memberikan pinjaman kepada mereka yang membutuhkan, dengan kebutuhan manusia yang tidak terbatas maka dibentuk surat berharga sebagai media untuk melakukan kegiatan keuntungan.

Perusahaan yang membutuhkan dana dapat menjual surat berharganya di pasar modal. Secara umum, jika perusahaan berkembang, kebutuhan modal tambahan sangat dirasakan. Pada situasi ini perusahaan harus menentukan untuk menambah modal dengan cara utang atau menambah jumlah dari pemilikan dengan menerbitkan saham baru, sehingga dibutuhkan adanya investor untuk menanamkan saham pada perusahaan tersebut agar dapat menambahkan modal usaha. Dalam berinvestasi tentunya seorang investor disarankan tidak menginvestasikan seluruh dana yang dimiliki untuk satu aset saja, karena jika aset tersebut gagal, maka semua dana yang telah diinvestasikan akan lenyap. Oleh karena itu diperlukan suatu portofolio yang optimal untuk memilih saham mana yang akan kita investasi.

Portofolio adalah suatu kombinasi atau gabungan dari dua atau lebih saham individu, baik berupa aset riil (*real asset*) yang berbentuk pembelian aset produktif, pendirian pabrik, pembukaan pertambangan, pembukaan perkebunan dan aset financial (*financial asset*) yang dilakukan di pasar uang baik berupa sertifikat deposito, *commercial paper*, dan surat berharga pasar uang yang dimiliki

oleh investor (Husnan, 1998: 9). Portofolio dikatakan efisien apabila portofolio tersebut ketika dibandingkan dengan portofolio lain memiliki ekspektasi *return* terbesar dengan nilai resiko terkecil. Pengertian portofolio optimal adalah portofolio yang dipilih seorang investor dari sekian banyak pilihan yang ada pada kumpulan portofolio yang efisien. Menurut (Tandelilin, 2007: 7) portofolio yang dipilih investor adalah portofolio yang sesuai dengan preferensi investor bersangkutan terhadap *return* maupun terhadap resiko yang bersedia ditanggungnya.

Pada hakekatnya konstruksi portofolio adalah proses pembentukan portofolio yang optimal dalam proses investasi saham dan menyangkut identifikasi sekuritas-sekuritas mana yang akan dipilih dan berapa proporsi dana yang akan ditanamkan pada masing-masing sekuritas tersebut. Pemilihan banyak sekuritas (pemodal melakukan diversifikasi) dimaksudkan untuk mengurangi resiko yang ditanggung. Pemilihan sekuritas ini dipengaruhi antara lain oleh preferensi risiko, pola kebutuhan kas, dan sebagainya. Diperlukan sebuah konstruksi karena dalam proses pembentukan portofolio akan sangat berpengaruh terhadap besarnya investasi dan resiko yang dihadapi.

Tujuan seorang investor menginvestasikan dana adalah untuk mendapatkan keuntungan yang sebanyak-banyaknya, namun tentu saja dengan resiko yang harus ditanggung oleh seorang investor. Oleh karena itu dalam pembentukan portofolio, seorang investor akan berusaha memaksimalkan keuntungan dengan tingkat resiko terendah. Investor dapat mengurangi resiko dengan cara melakukan diversifikasi investasi. Diversifikasi investasi akan

memberikan manfaat optimum apabila *return* antar investasi dalam satu portofolio berkorelasi negatif.

Aset dalam pembentukan portofolio memiliki kontribusi dengan pembobotan (w). Penentuan komposisi pembobotan (w) pada portofolio optimal terdapat beberapa metode yang dapat digunakan, diantaranya adalah metode *mean variance*. Metode ini didefinisikan sebagai portofolio yang memiliki variansi yang minimum di antara keseluruhan kemungkinan portofolio yang dapat dibentuk dengan mean yang sama (Markowitz, 1959: 15). Kelebihan dari metode ini adalah memberikan kemudahan kepada investor untuk membentuk portofolio dengan resiko yang minimum dan tingkat keuntungan yang tinggi. Metode ini digunakan oleh para praktisi dalam menghasilkan komposisi pembobotan pada pembentukan portofolio optimal.

Setelah teori portofolio modern milik Markowitz diperkenalkan, banyak model portofolio yang dikembangkan berdasarkan model tersebut. Hal ini dikarenakan model Markowitz masih memiliki kekurangan dalam hal model matematis non linier dan penggunaan *variance* sebagai tingkat ukuran resiko. Kekurangan dari model Markowitz ini memunculkan model *Mean Absolute Deviation* (MAD) sebagai model alternatif dalam pemecahan masalah optimalisasi portofolio dengan cara yang lebih mudah melalui pemrograman linier dan *Downside Deviation* (DD) yang menggunakan standar deviasi sebagai tingkat ukuran resiko. Kedua model alternatif di atas telah memberikan pandangan yang berbeda pula dari model Markowitz. Model MAD hanya melihat dari sisi proses pemrograman, kuadratis yang menjadi titik lemah dari MV, sedangkan model DD

hanya melihat dari sisi sebaran tingkat resiko yang menjadi celah dan bertentangan dengan asumsi para investor terhadap resiko, yang lebih menyukai untuk mengambil sebaran tingkat return dibawah rata-rata atau dibawah ukuran resiko (*below target*). Berbeda dengan model MV yang menganggap sebaran tingkat return yang terletak di luar rata-ratanya (baik atas maupun bawahnya) dianggap sebagai resiko.

1.2. Rumusan Masalah

Berdasarkan latar belakang masalah di atas, maka dirumuskan pokok permasalahan yang akan menjadi kajian skripsi ini adalah sebagai berikut:

1. Bagaimana perbandingan tingkat pengembalian (*return*) portofolio *mean variance* (MV), *mean absolute deviation* (MAD) dan *downside deviation* (DD)?
2. Bagaimana perbandingan risiko portofolio *mean variance* (MV), *mean absolute deviation* (MAD) dan *downside deviation* (DD)?
3. Bagaimana perbandingan kinerja portofolio *mean variance* (MV), *mean absolute deviation* (MAD) dan *downside deviation* (DD)?

1.3. Batasan Masalah

Masalah yang akan dibahas dalam penelitian ini hanya difokuskan pada metode *Mean variance*, *Mean Absolute Deviation*, dan *Downside Deviation* pada saham-saham di JII (*Jakarta Islamic Index*).

1.4. Tujuan Penulisan

Berdasarkan latar belakang dan rumusan masalah di atas maka penelitian dan penulisan skripsi ini dilakukan dengan tujuan:

1. Mengetahui perbandingan tingkat pengembalian (*return*) portofolio *mean variance*, *mean absolute deviation*, dan *downside deviation*.
2. Mengetahui perbandingan resiko portofolio *mean variance*, *mean absolute deviation*, dan *downside deviation*.
3. Mengetahui perbandingan kinerja portofolio *mean variance*, *mean absolute deviation*, dan *downside deviation*.

1.5. Manfaat Penulisan

Hasil penelitian ini diharapkan dapat dipergunakan sebagai:

1. Bagi Program Studi Matematika

Media pengembangan ilmu pengetahuan secara teoritis sebagaimana yang telah dipelajari dalam perkuliahan dan sebagai pengetahuan tentang metode *mean variance* dan perkembangannya.

2. Bagi Investor

Bahan pertimbangan investor dalam pengambilan keputusan investasi

3. Bagi Penulis

Menambah informasi tentang analisis portofolio dengan metode *Mean Variance*, *Mean Absolute Deviation* dan *Downside Deviation*

1.6. Tinjauan Pustaka

Pada penelitian digunakan metode studi literature yaitu studi yang dilakukan dengan mempelajari beberapa buku, jurnal, karya ilmiah, dan hasil penelitian sebelumnya yang berkaitan dengan penelitian ini. Beberapa penelitian yang digunakan sebagai rujukan dan acuan dalam penelitian ini antara lain penelitian dari Hartatun Dewi Sila Sakti (2014) yang berjudul “Pembentukan *Portofolio Mean Varian* dan Peramalan Harga Saham Menggunakan Metode *Single Moving Average*” studi kasus pada saha-saham JII, Penelitian dari Liya Fitriyani (2010) yang berjudul “Perbandingan *Mean Absolut Deviation (MAD)* dengan *Mean Variance Portofolio (MVP)*” yang berisi tentang perbandingan analisis harga saham dengan dua metode tersebut.

Dari penelitian-penelitian dan sumber-sumber yang digunakan tersebut, pada penelitian ini akan dilakukan penelitian dengan studi kasus harga saham harian syariah JII. Selanjutnya data tersebut akan diproses menggunakan metode *mean variance, mean absolute deviation* dan *downside deviation*.

Tabel 1.1:Kajian Pustaka

No	Peneliti	Judul	Model	Objek
1.	Liya Fitriyani	Perbandingan metode <i>Mean Absolute Deviation (MAD)</i> dengan <i>Mean Variance Portofolio (MVP)</i>	<i>Mean Absolute Deviation (MAD)</i> dan <i>Mean Variance (MV)</i>	Saham LQ-45

2.	Hartatun Dewi Sila Sakti	Pembentukan <i>Portfolio Mean</i> <i>Varian</i> dan Peramalan Harga Saham Menggunakan Metode Single Moving Average.	<i>Mean Variance</i> (MV)	Indeks Harga Saham JII
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Terdapat kesamaan dan perbedaan antara dua peneliti diatas dengan penelitian yang sekarang, baik dari objek yang diteliti maupun model yang digunakan. Pada penelitian yang dilakukan oleh Liya Fitriyani objek yang diteliti berbeda, model yang digunakan sama yaitu model *Mean Absolute Deviation* dan *Mean Variance*, namun peneliti menambahkan satu model lagi yaitu model *Downside Deviation*.

Pada penelitian Hartatun Dewi Sila Sakti objek yang diteliti sama, yaitu Indeks Harga Saham JII, model yang digunakan juga sama, yaitu model *Mean Variance*, namun pada penelitian ini ditambahkan dua model lagi yaitu model *Mean Absolute Deviation* dan model *Downside Deviation*.

1.7. Sistematika Penulisan

Secara garis besar skripsi ini dibagi menjadi tiga bagian, bagian isi dan bagian akhir.

1. Bagian awal terdiri dari :

Halaman judul, surat persetujuan skripsi, halaman pengesahan, surat pernyataan keaslian skripsi, kata pengantar, halaman persembahan, halaman motto, daftar isi, daftar tabel, daftar gambar, daftar lampiran, abstraksi.

2. Bagian isi terdiri dari

BAB I PENDAHULUAN

Berisi latar belakang masalah, rumusan masalah, batasan masalah, tujuan penelitian, manfaat penelitian, tinjauan pustaka, dan sistematika penulisan.

BAB II DASAR TEORI

Bab ini membahas beberapa definisi, teorema-teorema yang mendasari dan teori-teori yang mendukung.

BAB III METODE PENELITIAN

Berisi tentang jenis dan sumber data, metode pengumpulan data, variabel penelitian, metode penelitian, metode analisis data beserta *flowchart*-nya, dan alat pengolah data.

BAB IV PEMBAHASAN

PEMBENTUKAN PORTOFOLIO OPTIMAL DENGAN MODEL DAN PENGEMBANGAN MARKOWITZ (MV, MAD DAN DD)

Pada bab ini berisi penjelasan mengenai pembobotan saham menggunakan metode MV, MAD dan DD pada penutupan saham harian *Jakarta Islamic Index* (JII).

BAB V STUDI KASUS

Bab ini menjelaskan tentang aplikasi MV, MAD dan DD dalam investasi saham.

BAB VI PENUTUP

Berisi tentang kesimpulan yang diambil dari pembahasan masalah yang telah dibahas sebelumnya dan saran-saran mengenai penelitian yang akan dilakukan di masa yang akan datang.

3. Bagian akhir terdiri dari

Daftar pustaka dari penelitian serta lampiran-lampiran dari pembahasan yang telah dilakukan

BAB VI

PENUTUP

6.1. Kesimpulan

Berdasarkan hasil penelitian yang dilakukan penulis tentang portofolio optimal dengan model dan perkembangan dari portofolio Markowitz (MV, MAD dan DD) pada data yang dikemukakan dalam penelitian ini, maka dapat diambil kesimpulan sebagai berikut:

1. Perbandingan tingkat pengembalian (*return*) portofolio dari yang tertinggi *mean absolute deviation* (MAD), *downside deviation* (DD) dan *mean variance* (MV) secara berturut-turut adalah 0.025893%, 0.012401%, dan 0.011706%,
2. Perbandingan risiko portofolio dari yang terendah *Mean Variance* (MV), *Downside Deviation* (DD), dan *mean absolute Deviation* (MAD) secara berturut-turut adalah 0.006226%, 0.006958%, dan 0.024814%,
3. Perbandingan kinerja portofolio dari yang terbaik *Mean Variance* (MV), *Downside Deviation* (DD), dan *mean absolute Deviation* (MAD) secara berturut-turut adalah 1.880, 1.782 dan 1.043.

6.2. Saran

Dalam skripsi ini, penulis menjelaskan pembentukan portofolio optimal dengan menggunakan model dan pengembangan dari portofolio Markowitz (MV, MAD dan DD). Bagi pembaca yang berminat, penulis menyarankan untuk:

1. Bagi para investor yang akan melakukan investasi sebaiknya memiliki kejelian dalam memilih perusahaan sebagai tempat investasi sehingga diharapkan dapat melakukan yang terbaik bagi portofolionya agar dapat memperkecil kerugian.
2. Perluas pembahasan tentang MV, MAD dan DD pada sekuritas lain seperti obligasi, sertifikat dan deposito ataupun pada sekuritas luar negeri.



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LAMPIRAN-LAMPIRAN

Lampiran 1 Data Saham JII yang terpilih dalam Portofolio

Periode 1 Januari 2014 – 29 September 2016

DATE	ITMG	AALI	PGAS	SMGR	MPPA	LSIP
29/09/2016	11250	15000	2850	10575	1525	1820
28/09/2016	10625	14925	2820	10500	1505	1880
27/09/2016	10575	15201	2870	10450	1535	1940
26/09/2016	10475	15449.38	2840	10400	1530	1935
23/09/2016	10450	15350.03	2690	10400	1530	1985
22/09/2016	10475	15523.9	2690	10100	1550	1885
21/09/2016	10500	15946.15	2680	9825	1570	1825
20/09/2016	10275	16020.66	2680	10000	1565	1770
19/09/2016	10550	15921.31	2740	10125	1570	1810
16/09/2016	10600	15548.74	2660	9900	1500	1805
15/09/2016	10500	15548.74	2730	9950	1505	1720
14/09/2016	10025	15350.03	2680	9700	1470	1655
13/09/2016	10500	15797.12	2720	9850	1490	1685
12/09/2016	11150	16244.21	2810	10050	1580	1695
09/09/2016	11150	16244.21	2810	10050	1580	1695
08/09/2016	11400	16368.4	2810	10050	1585	1780
07/09/2016	11425	16616.78	2800	10050	1600	1825
06/09/2016	11400	16467.75	2840	10200	1605	1845
05/09/2016	11400	16293.88	2840	10150	1580	1880
02/09/2016	11225	16219.37	2860	10000	1555	1840
01/09/2016	11150	16095.18	2820	9800	1550	1835
31/08/2016	11375	16293.88	3020	9900	1600	1910
30/08/2016	10600	15995.82	3100	10100	1555	1860
29/08/2016	10600	15821.96	3200	10400	1545	1975
26/08/2016	10950	16442.91	3350	10500	1610	2050
25/08/2016	11000	16691.3	3330	10425	1620	2050
24/08/2016	11075	16120.02	3200	10400	1575	2020
23/08/2016	11075	16616.78	3160	10775	1600	2080
22/08/2016	11450	16890	3170	11150	1650	2060
19/08/2016	11600	16492.59	3100	11100	1610	2040
18/08/2016	12100	16492.59	3170	11225	1585	2070
17/08/2016	12175	16492.59	2950	11050	1530	2060
16/08/2016	12175	16492.59	2950	11050	1530	2060

15/08/2016	11875	16169.69	3010	10900	1515	1945
12/08/2016	11850	15598.41	3130	11000	1465	1965
11/08/2016	12300	15697.77	3090	11075	1495	1905
10/08/2016	12400	15623.25	3180	11400	1510	1830
09/08/2016	12300	15002.3	3230	11600	1475	1810
08/08/2016	12050	14952.62	3270	10775	1480	1820
05/08/2016	12425	15027.13	3350	10350	1480	1800
04/08/2016	12800	15101.65	3300	10125	1490	1750
03/08/2016	12700	14679.4	3270	10175	1450	1760
02/08/2016	12550	14505.53	3350	9900	1425	1845
01/08/2016	12675	14753.91	3430	10000	1435	1805
29/07/2016	12575	14406.18	3290	9375	1405	1735
28/07/2016	12250	14604.88	3380	9675	1445	1820
27/07/2016	12125	14555.21	3240	9700	1425	1860
26/07/2016	12100	14803.59	3110	9500	1425	1855
25/07/2016	12000	15101.65	2970	9400	1460	1835
22/07/2016	11600	15002.3	2970	9300	1465	1775
21/07/2016	11775	15002.3	2890	9425	1465	1705
20/07/2016	12125	15449.38	2930	9500	1485	1740
19/07/2016	12000	15051.97	3000	9525	1480	1705
18/07/2016	11650	15275.52	3100	8975	1510	1655
15/07/2016	10700	14704.24	2660	9050	1435	1605
14/07/2016	10250	14306.82	2510	9275	1395	1600
13/07/2016	10650	14381.34	2520	9525	1405	1620
12/07/2016	10125	14157.8	2520	9825	1400	1600
11/07/2016	9550	14008.77	2400	9675	1350	1510
08/07/2016	9375	14356.5	2340	9250	1375	1510
07/07/2016	9375	14356.5	2340	9250	1375	1510
06/07/2016	9375	14356.5	2340	9250	1375	1510
05/07/2016	9375	14356.5	2340	9250	1375	1510
04/07/2016	9375	14356.5	2340	9250	1375	1510
01/07/2016	9375	14356.5	2340	9250	1375	1510
30/06/2016	9375	14604.88	2340	9350	1380	1550
28/06/2016	9100	14555.21	2320	8825	1355	1520
27/06/2016	8725	14505.53	2340	8800	1360	1430
24/06/2016	8650	14207.47	2380	8850	1355	1430
23/06/2016	8800	14008.77	2380	8975	1390	1475
22/06/2016	8775	14406.18	2420	8975	1405	1420
21/06/2016	8775	14406.18	2370	9050	1435	1290
20/06/2016	8600	14530.37	2400	9125	1460	1290
17/06/2016	8200	14604.88	2380	9050	1440	1285

16/06/2016	8625	14455.85	2380	8800	1435	1275
15/06/2016	8700	14406.18	2390	8900	1490	1295
14/06/2016	8650	14604.88	2370	8800	1495	1280
13/06/2016	8700	14406.18	2480	8850	1510	1265
10/06/2016	8800	14803.59	2520	8875	1545	1280
09/06/2016	8825	15449.38	2480	9000	1513	1285
08/06/2016	8800	15449.38	2520	9225	1522.76	1270
07/06/2016	8850	15896.47	2530	9325	1547.16	1315
06/06/2016	8725	15672.93	2520	9225	1488.6	1300
03/06/2016	8675	14602.6	2500	9025	1498.36	1285
02/06/2016	8600	14744.67	2400	9000	1513	1290
01/06/2016	8575	14555.31	2480	9100	1425.15	1280
31/05/2016	8750	13655.96	2480	9000	1415.39	1275
30/05/2016	8825	13395.56	2480	9125	1449.55	1300
27/05/2016	8800	14129.28	2480	9100	1464.19	1280
26/05/2016	8625	14200.32	2460	8825	1469.07	1295
25/05/2016	8225	14034.6	2420	8825	1410.51	1310
24/05/2016	8175	13892.62	2300	8700	1381.22	1330
23/05/2016	8325	13774.29	2310	8825	1444.67	1310
20/05/2016	8075	14010.95	2230	8695.09	1434.91	1255
19/05/2016	8200	13939.91	2210	8550.17	1454.43	1230
18/05/2016	8225	14081.99	2290	8791.7	1488.6	1315
17/05/2016	8250	13987.31	2310	8743.4	1527.64	1320
16/05/2016	8250	14034.6	2350	8791.7	1522.76	1320
13/05/2016	8375	13868.98	2310	8695.09	1498.36	1350
12/05/2016	8300	14058.24	2380	9033.23	1517.88	1310
11/05/2016	7925	14839.26	2390	9323.07	1537.4	1240
10/05/2016	7725	14673.64	2300	9081.54	1430.03	1240
09/05/2016	7825	14105.63	2340	8960.77	1449.55	1205
06/05/2016	7850	14555.31	2460	9492.14	1498.36	1335
05/05/2016	7850	14886.65	2460	9492.14	1498.36	1335
04/05/2016	7850	14886.65	2460	9492.14	1498.36	1335
03/05/2016	7900	14886.65	2510	9467.99	1469.07	1400
02/05/2016	7775	15336.32	2510	9226.46	1459.31	1510
29/04/2016	7800	15383.61	2620	9564.6	1498.36	1475
28/04/2016	7825	15241.64	2590	9709.52	1581.33	1540
27/04/2016	7800	15383.61	2640	9781.98	1620.37	1540
26/04/2016	7575	15241.64	2675	9975.2	1630.14	1560
25/04/2016	7675	15431	2640	10192.58	1576.45	1590
22/04/2016	7500	14910.29	2665	10168.42	1610.61	1590
21/04/2016	7550	15123.31	2570	10168.42	1639.9	1575

12/04/2016	6900	15194.34	2622.97	10144.27	1698.46	1594
08/04/2016	6875	15146.95	2594.04	10071.81	1693.58	1623.52
07/04/2016	6925	15170.6	2685.65	9951.05	1693.58	1613.68
06/04/2016	7100	15170.6	2676.01	9926.89	1713.11	1638.28
05/04/2016	6675	15951.61	2656.72	9902.74	1727.75	1657.96
04/04/2016	6614.44	16093.69	2690.48	9878.59	1717.99	1657.96
01/04/2016	6614.44	16235.66	2565.11	9854.44	1757.03	1672.72
31/03/2016	6564.89	16472.32	2537.72	9830.28	1594	1776.55
30/03/2016	6515.35	16567	2513.46	9781.98	1598.92	1693.58
29/03/2016	6515.35	17182.3	2528.01	9902.74	1589.08	1698.46
28/03/2016	6663.99	17341.9	2518.31	10240.88	1613.68	1698.46
25/03/2016	6465.8	16651.1	2537.72	10361.65	1584.16	1620.37
24/03/2016	6465.8	16579.6	2537.72	10361.65	1584.16	1620.37
23/03/2016	6515.35	16293.8	2571.68	10361.65	1584.16	1669.18
22/03/2016	6540.12	16484.3	2576.54	10289.19	1608.76	1669.18
21/03/2016	6515.35	16484.3	2576.54	10095.97	1653.04	1620.37
18/03/2016	6639.21	16865.5	2528.01	10144.27	1633.36	1659.42
17/03/2016	6886.95	17127.5	2591.09	10216.73	1653.04	1717.99
16/03/2016	6490.57	16865.5	2547.42	10240.88	1643.2	1654.54
15/03/2016	6441.03	16984.6	2537.72	10120.12	1672.72	1615.49
10/03/2016	6589.67	16960.7	2595.94	10240.88	1741.59	1625.25
09/03/2016	6961.26	16960.7	2600.8	10047.66	1761.27	1508.12
08/03/2016	6961.26	16674.9	2600.8	10047.66	1761.27	1508.12
07/03/2016	6986.04	16674.9	2566.83	10047.66	1771.11	1488.6
04/03/2016	6589.67	15055	2571.68	10071.81	1776.03	1449.55
03/03/2016	6837.4	15055	2547.42	10023.51	1785.87	1405.63
02/03/2016	6986.04	15031.2	2528.01	10047.66	1795.71	1439.79
01/03/2016	6886.95	14388.1	2508.6	9902.74	1771.11	1444.67
29/02/2016	6688.76	14197.5	2557.13	9902.74	1771.11	1395.86
26/02/2016	6416.25	14292.8	2523.16	9902.74	1766.19	1356.82
25/02/2016	5351.01	14268.9	2513.46	9854.44	1707.15	1342.18
24/02/2016	5450.1	14149.8	2513.46	9757.82	1741.59	1337.3
23/02/2016	5747.38	13482.8	2561.98	9757.82	1716.99	1337.3
22/02/2016	5549.19	14316.6	2523.16	9781.98	1756.35	1415.39
19/02/2016	5202.37	15793.5	2508.6	9830.28	1756.35	1420.27
18/02/2016	5202.37	16269.9	2620.21	10120.12	1800.63	1449.55
17/02/2016	4815.91	16984.6	2421.26	10216.73	1800.63	1454.43
16/02/2016	4815.91	16913.1	2426.12	10337.5	1844.91	1473.95
15/02/2016	4786.18	16889.3	2421.26	10385.8	1825.23	1478.84
12/02/2016	4766.36	17675.4	2397	10506.57	1815.39	1444.67
11/02/2016	4815.91	17246.6	2382.45	10603.18	1835.07	1390.98

10/02/2016	4756.45	16555.8	2367.89	10385.8	1844.91	1434.91
09/02/2016	4741.59	15865	2387.3	10337.5	1780.95	1464.19
08/02/2016	4746.54	15436.2	2353.33	10458.26	1795.71	1425.15
05/02/2016	4746.54	15745.9	2353.33	10458.26	1795.71	1425.15
04/02/2016	4751.5	15912.6	2329.07	10265.04	1741.59	1410.51
03/02/2016	4716.81	16269.9	2348.48	10120.12	1780.95	1351.94
02/02/2016	4756.45	16269.9	2324.22	10434.11	1726.83	1371.46
01/02/2016	4687.09	16222.3	2333.92	10603.18	1682.56	1351.94
29/01/2016	4766.36	15865	2333.92	10675.64	1643.2	1390.98
28/01/2016	4687.09	15722	2329.07	10337.5	1628.44	1390.98
27/01/2016	4855.54	16198.5	2319.37	10216.73	1613.68	1332.42
26/01/2016	5004.18	16269.9	2329.07	9709.52	1598.92	1273.85
25/01/2016	5326.23	16412.9	2416.41	9951.05	1608.76	1283.61
22/01/2016	5028.96	15984.1	2416.41	9999.35	1618.6	1273.85
21/01/2016	4706.9	15912.6	2290.25	9733.67	1628.44	1249.45
20/01/2016	4910.04	16007.9	2299.96	9854.44	1662.88	1273.85
19/01/2016	5053.73	15769.7	2421.26	10216.73	1712.07	1298.25
18/01/2016	5227.14	15602.9	2464.93	10095.97	1657.96	1264.09
15/01/2016	5375.78	15912.6	2571.68	10240.88	1653.04	1225.04
14/01/2016	5474.87	16460.5	2537.72	10240.88	1638.28	1239.68
13/01/2016	5598.74	16293.8	2586.24	10530.72	1692.4	1195.76
12/01/2016	5499.65	15817.3	2455.23	10458.26	1672.72	1190.88
11/01/2016	5623.51	15674.4	2406.71	10337.5	1648.12	1205.52
08/01/2016	5697.83	15602.9	2479.49	10603.18	1697.31	1220.16
07/01/2016	5747.38	15769.7	2484.34	10675.64	1731.75	1220.16
06/01/2016	5772.15	15245.6	2615.35	11062.09	1731.75	1234.8
05/01/2016	5722.61	15483.8	2605.65	10772.25	1771.11	1264.09
04/01/2016	5673.06	15626.8	2581.39	10748.1	1825.23	1220.16
01/01/2016	5673.06	15936.4	2663.88	11013.78	1795.71	1288.49
31/12/2015	5673.06	15888.8	2663.88	11013.78	1795.71	1288.49
30/12/2015	5673.06	14959.8	2663.88	11013.78	1795.71	1288.49
29/12/2015	5697.83	15102.7	2649.32	10796.4	1584.16	1278.73
28/12/2015	5772.15	15102.7	2663.88	10675.64	1549.72	1273.85
25/12/2015	5598.74	15102.7	2770.63	10820.56	1584.16	1229.92
24/12/2015	5598.74	15126.5	2770.63	10820.56	1584.16	1229.92
23/12/2015	5598.74	15269.4	2770.63	10820.56	1584.16	1229.92
22/12/2015	5598.74	14769.2	2673.58	10603.18	1608.76	1234.8
21/12/2015	5549.19	14769.2	2644.47	10530.72	1633.36	1249.45
18/12/2015	5474.87	14769.2	2625.06	10120.12	1662.88	1244.56
17/12/2015	5945.56	14983.6	2610.5	10434.11	1648.12	1283.61
16/12/2015	5796.92	15126.5	2440.67	10192.58	1623.52	1264.09

15/12/2015	5722.61	15269.4	2333.92	10047.66	1589.08	1239.68
14/12/2015	5648.29	15674.4	2246.58	10095.97	1569.4	1234.8
11/12/2015	5772.15	15436.2	2416.41	10385.8	1618.6	1254.33
10/12/2015	5871.24	15674.4	2523.16	10820.56	1697.31	1273.85
09/12/2015	6317.16	15698.2	2537.72	10603.18	1721.91	1327.54
08/12/2015	6317.16	15793.5	2537.72	10603.18	1721.91	1327.54
07/12/2015	6540.12	15793.5	2717.25	10627.33	1805.55	1376.34
04/12/2015	6589.67	16627.2	2751.22	10579.03	1830.15	1293.37
03/12/2015	6540.12	16627.2	2790.03	10699.79	1849.83	1254.33
02/12/2015	6639.21	17175.1	2765.77	10796.4	1889.19	1259.21
01/12/2015	6416.25	16770.2	2644.47	10651.49	1877.38	1220.16
30/11/2015	6688.76	16817.8	2576.54	10265.04	1838.16	1171.35
27/11/2015	6961.26	17056	2857.97	10651.49	1862.67	1234.8
26/11/2015	6986.04	17056	2848.26	10796.4	1911.69	1254.33
25/11/2015	6961.26	16150.8	2896.78	10675.64	1941.1	1264.09
24/11/2015	6961.26	17222.8	2921.04	10554.87	1901.89	1283.61
23/11/2015	7184.22	17627.7	2882.23	11013.78	1946	1288.49
20/11/2015	7357.64	17818.3	2911.34	11013.78	1965.61	1220.16
19/11/2015	7332.86	17580.1	2984.12	11013.78	1980.31	1220.16
18/11/2015	7357.64	17842.1	2824	11110.39	1985.22	1225.04
17/11/2015	7134.68	17389.5	2532.87	10723.94	1887.18	1239.68
16/11/2015	6886.95	17484.8	2498.9	10434.11	1872.48	1181.12
13/11/2015	7184.22	17270.4	2537.72	10313.34	1941.1	1186
12/11/2015	7555.82	17484.8	2600.8	9806.13	1965.61	1254.33
11/11/2015	7630.14	17222.8	2571.68	10144.27	1985.22	1249.45
10/11/2015	7976.97	17199	2620.21	9612.91	2044.04	1332.42
09/11/2015	8051.28	17675.4	2726.95	9902.74	2078.35	1332.42
06/11/2015	8521.98	17151.3	2838.56	10313.34	2191.09	1405.63
05/11/2015	8521.98	17818.3	2930.75	10289.19	2117.56	1425.15
04/11/2015	8720.16	18413.8	2911.34	10240.88	2009.73	1464.19
03/11/2015	8546.75	19080.8	2843.41	9854.44	2024.43	1390.98
02/11/2015	8472.43	19009.4	2887.08	9419.68	2112.66	1444.67
30/10/2015	8398.11	19890.8	2911.34	9467.99	2200.89	1513
29/10/2015	8348.56	18914.1	2814.3	9467.99	2254.81	1517.88
28/10/2015	8769.71	18961.7	2955.01	9975.2	2347.95	1513
27/10/2015	9289.94	18961.7	2945.31	9975.2	2382.26	1469.07
26/10/2015	9389.04	18390	2950.16	10337.5	2377.36	1459.31
23/10/2015	9314.72	18675.9	2901.64	10482.41	2519.51	1493.48
22/10/2015	9364.26	19890.8	2838.56	10361.65	2588.13	1498.36
21/10/2015	9512.9	19438.2	2872.52	10868.86	2597.94	1454.43
20/10/2015	9810.18	19771.7	2911.34	10216.73	2593.04	1327.54

19/10/2015	9760.63	20462.5	2930.75	10265.04	2553.82	1356.82
16/10/2015	10033.14	19438.2	2974.42	10047.66	2416.57	1376.34
15/10/2015	10602.92	18366.2	2906.49	9806.13	2245.01	1347.06
14/10/2015	10602.92	18008.9	2877.37	9806.13	2264.62	1351.94
13/10/2015	10602.92	18056.5	2877.37	9806.13	2264.62	1351.94
12/10/2015	10602.92	17723	3037.5	10240.88	2421.47	1351.94
09/10/2015	10404.74	17913.6	2911.34	10192.58	2426.38	1312.89
08/10/2015	9907.29	17913.6	2804.59	10095.97	2303.83	1317.77
07/10/2015	10091.61	18104.2	2862.82	10385.8	2210.7	1312.89
06/10/2015	9377.37	17746.8	2790.03	9733.67	2151.88	1381.22
05/10/2015	9216.09	17437.2	2634.76	9709.52	2009.73	1439.79
02/10/2015	8962.64	18104.2	2620.21	8791.7	1960.71	1405.63
01/10/2015	9031.76	19057	2523.16	8888.31	1946	1430.03
30/09/2015	9100.88	19366.7	2455.23	8743.4	1882.28	1351.94
29/09/2015	8755.28	18199.5	2610.5	8791.7	1857.77	1381.22
28/09/2015	8317.52	18390	2629.91	8840.01	1862.67	1366.58
25/09/2015	8432.72	17270.4	2654.17	9154	1921.49	1366.58
24/09/2015	8755.28	17246.6	2600.8	9154	2014.63	1288.49
23/09/2015	8755.28	16960.7	2600.8	9154	2014.63	1288.49
22/09/2015	8893.52	17103.7	2644.47	9154	2044.04	1229.92
21/09/2015	8847.44	17079.9	2765.77	9419.68	2127.37	1200.64
18/09/2015	8801.36	17079.9	2833.7	9443.83	2195.99	1181.12
17/09/2015	8478.8	17056	2707.55	9371.38	2186.19	1200.64
16/09/2015	8478.8	17246.6	2615.35	9371.38	2200.89	1186
15/09/2015	8755.28	17151.3	2542.57	9661.21	2245.01	1166.47
14/09/2015	8547.92	17127.5	2586.24	9854.44	2235.21	1181.12
11/09/2015	8455.76	17294.2	2605.65	9951.05	2259.72	1142.07
10/09/2015	7925.83	16984.6	2411.56	9951.05	2308.73	1112.79
09/09/2015	8248.4	17270.4	2382.45	8936.62	2328.34	1161.59
08/09/2015	7580.23	17151.3	2416.41	8501.87	2200.89	1039.58
07/09/2015	7672.39	15722	2406.71	8091.26	2186.19	1000.53
04/09/2015	7948.87	16484.3	2717.25	8743.4	2284.22	1044.46
03/09/2015	8064.07	14673.9	2804.59	8912.47	2294.03	1044.46
02/09/2015	7948.87	14507.2	2804.59	8719.24	2352.85	1039.58
01/09/2015	8409.68	15293.3	2707.55	8719.24	2367.55	1068.86
31/08/2015	8617.04	15507.7	2697.84	8936.62	2450.88	1054.22
28/08/2015	8663.12	15436.2	2673.58	9033.23	2460.69	1044.46
27/08/2015	8432.72	16103.2	2814.3	8646.78	2249.91	995.65
26/08/2015	8294.48	16317.6	2717.25	8381.1	2034.23	927.32
25/08/2015	8017.99	17222.8	2760.92	7439.13	2088.15	917.56
24/08/2015	7764.55	15817.3	2794.89	6956.07	2245.01	912.68

21/08/2015	8064.07	14316.6	3100.58	7704.82	2210.7	971.25
20/08/2015	8202.32	14102.2	3236.44	7801.43	2254.81	1000.53
19/08/2015	8432.72	14531	3217.03	7970.5	2347.95	1015.17
18/08/2015	8617.04	15769.7	3275.26	7946.35	2445.98	1039.58
17/08/2015	8755.28	16317.6	3284.96	8429.41	2588.13	1088.38
14/08/2015	8755.28	17199	3284.96	8429.41	2588.13	1088.38
13/08/2015	8801.36	17318.1	3309.22	8550.17	2588.13	1132.31
12/08/2015	8755.28	18223.3	3124.84	8356.95	2548.92	1117.67
11/08/2015	8939.6	18223.3	3275.26	8743.4	2695.97	1181.12
10/08/2015	9008.72	18723.5	3503.31	9371.38	2710.68	1225.04
07/08/2015	9492.57	17627.7	3517.87	9612.91	2740.09	1249.45
06/08/2015	9953.37	18175.6	3736.22	9540.45	2744.99	1303.13
05/08/2015	9953.37	18818.8	3876.93	9854.44	2744.99	1327.54
04/08/2015	9308.25	18842.6	3881.79	9612.91	2720.48	1288.49
03/08/2015	8962.64	19057	3881.79	9516.29	2744.99	1288.49
31/07/2015	8962.64	19295.2	3881.79	9757.82	2843.03	1322.65
30/07/2015	9193.04	18961.7	3867.23	9588.75	2720.48	1288.49
29/07/2015	9193.04	18866.5	3784.74	9926.89	2843.03	1312.89
28/07/2015	9354.33	19128.5	3818.71	9757.82	2843.03	1312.89
27/07/2015	9216.09	18747.3	3789.59	9902.74	2843.03	1386.1
24/07/2015	9239.13	19724	3978.83	10844.71	2896.95	1473.95
23/07/2015	9561.69	19509.6	4100.14	11110.39	2931.26	1527.64
22/07/2015	9354.33	20486.3	4124.4	11207.01	2818.52	1517.88
21/07/2015	10160.73	21844.1	4090.43	11182.85	2901.85	1522.76
20/07/2015	10160.73	22773.1	4090.43	11182.85	2901.85	1522.76
17/07/2015	10160.73	23201.9	4090.43	11182.85	2901.85	1522.76
16/07/2015	10160.73	23797.5	4090.43	11182.85	2901.85	1522.76
15/07/2015	10160.73	23797.5	4090.43	11182.85	2901.85	1522.76
14/07/2015	10414.18	23797.5	4114.69	11158.7	2965.57	1532.52
13/07/2015	10506.34	23797.5	3964.27	10917.17	3024.39	1517.88
10/07/2015	10598.5	23797.5	3862.38	10820.56	2990.08	1552.05
09/07/2015	10644.58	24178.6	3891.49	10917.17	2803.81	1527.64
08/07/2015	11243.62	24678.8	4051.61	11134.55	2769.5	1498.36
07/07/2015	11796.59	24369.2	4134.1	11231.16	2916.55	1581.33
06/07/2015	11888.75	24297.7	4124.4	11496.84	2985.18	1615.49
03/07/2015	12119.15	24297.7	4153.51	11834.98	3039.1	1620.37
02/07/2015	11934.83	24726.5	4032.21	11931.6	3053.8	1547.16
01/07/2015	11842.67	24607.4	4153.51	11593.45	3039.1	1527.64
30/06/2015	11842.67	24297.7	4187.48	11593.45	2892.04	1517.88
29/06/2015	12188.27	23821.3	4163.22	11593.45	3093.02	1522.76
26/06/2015	12257.39	22630.2	4197.18	11665.91	3176.35	1581.33

25/06/2015	12211.31	21867.9	4168.07	11690.07	3186.15	1581.33
24/06/2015	12142.19	21582.1	4231.15	11883.29	3254.78	1576.45
23/06/2015	12349.55	21725	4172.92	11834.98	3220.46	1542.28
22/06/2015	12165.23	22130	4168.07	11931.6	3195.95	1537.4
19/06/2015	12257.39	21867.9	4260.26	12004.06	3264.58	1537.4
18/06/2015	12165.23	20962.7	4090.43	11883.29	3264.58	1561.81
17/06/2015	12234.35	21010.4	4143.81	11979.9	3151.84	1547.16
16/06/2015	12096.11	21582.1	4051.61	11738.37	3122.43	1571.57
15/06/2015	12073.07	21558.3	4032.21	11883.29	3230.27	1571.57
12/06/2015	12073.07	21439.1	4075.88	12100.67	3333.2	1615.49
11/06/2015	11980.91	21820.3	4114.69	12221.43	3480.26	1654.54
10/06/2015	12073.07	21415.3	4075.88	12390.5	3480.26	1649.66
09/06/2015	11888.75	22106.1	4066.17	12148.97	3431.24	1669.18
08/06/2015	12119.15	22606.4	4168.07	12535.42	3480.26	1678.94
05/06/2015	11957.87	22797	4172.92	12776.95	3607.7	1698.46
04/06/2015	11819.63	22106.1	4129.25	12801.11	3573.39	1674.06
03/06/2015	12326.51	22677.9	4236	12849.41	3588.1	1717.99
02/06/2015	12372.59	23440.1	4187.48	13018.48	3632.21	1669.18
01/06/2015	12372.59	23868.9	4187.48	13018.48	3632.21	1669.18
29/05/2015	12441.71	24440.6	4168.07	12994.33	3578.29	1625.25
28/05/2015	13225.08	23892.7	4172.92	12897.72	3710.64	1698.46
27/05/2015	13340.28	23892.7	4172.92	12728.65	3774.36	1688.7
26/05/2015	13501.56	23630.7	4231.15	12801.11	3764.56	1713.11
25/05/2015	13570.69	24988.5	4061.32	12704.49	3725.35	1669.18
22/05/2015	13639.81	25560.2	4075.88	12680.34	3705.74	1630.14
21/05/2015	13639.81	25917.5	4075.88	12752.8	3694.95	1600.85
20/05/2015	13731.97	25250.6	4085.58	12704.49	3733.8	1635.02
19/05/2015	13731.97	24869.4	4075.88	12873.56	3787.21	1659.42
18/05/2015	13824.13	24726.5	4100.14	12921.87	3879.46	1595.97
15/05/2015	14008.45	26108.1	4100.14	12849.41	3898.88	1678.94
14/05/2015	13824.13	25941.4	4153.51	12583.73	3816.34	1688.7
13/05/2015	13824.13	25036.2	4153.51	12583.73	3816.34	1688.7
12/05/2015	14146.69	25155.3	4051.61	12776.95	3874.6	1544.24
11/05/2015	13824.13	24774.1	3954.57	12825.26	3816.34	1383.67
08/05/2015	12971.64	24774.1	3925.46	12873.56	3738.65	1350.62
07/05/2015	12280.43	23011.4	3862.38	12438.81	3733.8	1327
06/05/2015	12188.27	21177.1	3881.79	12656.19	3792.06	1378.95
05/05/2015	12395.63	20200.4	3799.3	12559.57	3966.86	1327
04/05/2015	11888.75	19485.8	3833.26	12293.89	3932.87	1303.39
01/05/2015	11612.27	19986.1	3978.83	12076.51	3845.47	1345.89
30/04/2015	11612.27	19438.2	3978.83	12076.51	3845.47	1345.89

29/04/2015	12372.59	19295.2	4138.95	12535.42	3646.4	1336.45
28/04/2015	12695.16	19390.5	4269.96	12776.95	3685.24	1360.06
27/04/2015	12649.08	19390.5	4284.52	12873.56	3641.54	1331.73
24/04/2015	13570.69	18985.6	4502.87	13066.79	3694.95	1435.62
23/04/2015	13432.44	19342.9	4561.1	12728.32	3646.4	1445.06
22/04/2015	14192.77	19080.8	4536.84	12869.22	3641.54	1445.06
21/04/2015	13962.37	20962.7	4561.1	12986.64	3690.1	1515.9
20/04/2015	13801.09	22010.9	4352.45	12916.19	3656.11	1426.18
17/04/2015	13870.21	21987	4420.38	12963.16	3694.95	1454.51
16/04/2015	13939.33	21777.1	4211.74	12869.22	3782.35	1407.29
15/04/2015	14238.85	21287.41	4279.67	12329.09	3656.11	1463.95
14/04/2015	13824.13	21543.95	4464.05	12070.77	3738.65	1482.84
13/04/2015	13870.21	21217.53	4503.03	12211.67	3879.46	1548.96
10/04/2015	14584.45	21357.4	4540.67	12610.9	3913.45	1567.85
09/04/2015	14976.14	21730.41	4517.14	12728.32	3981.42	1591.46
08/04/2015	14888.59	22150.11	4498.32	12657.87	4049.4	1605.63
07/04/2015	15021.52	22499.84	4578.31	12845.74	4029.98	1615.07
06/04/2015	14955.05	22453.25	4545.38	12798.77	4049.4	1605.63
03/04/2015	14888.59	22546.52	4512.44	12775.28	4029.98	1582.02
02/04/2015	14888.59	22383.26	4512.44	12775.28	4029.98	1582.02
01/04/2015	14755.65	21940.26	4517.14	12822.25	3947.43	1615.07
31/03/2015	14977.21	22289.98	4517.14	12822.25	3845.47	1633.96
30/03/2015	15553.25	22289.98	4521.85	12728.32	3947.43	1629.24
27/03/2015	15198.76	22383.26	4441.86	12634.38	3889.17	1624.52
26/03/2015	15176.61	22663.1	4375.98	12211.67	3884.31	1558.4
25/03/2015	15331.7	22196.8	4380.69	12094.25	3971.71	1586.74
24/03/2015	15641.88	22056.84	4611.25	12610.9	3932.87	1681.19
23/03/2015	15553.25	21637.13	4775.94	12704.83	3889.17	1690.63
20/03/2015	15641.88	21916.97	4846.52	12963.16	3762.93	1733.13
19/03/2015	15087.99	22896.24	4799.47	13526.77	4107.66	1737.86
18/03/2015	14711.34	23059.41	4752.41	13385.87	4267.89	1742.58
17/03/2015	14667.03	24015.39	4893.57	13620.71	4301.88	1794.53
16/03/2015	14888.59	23898.81	4917.1	13526.77	4306.73	1813.41
13/03/2015	15331.7	23898.81	4893.57	13362.38	4204.77	1737.86
12/03/2015	15021.52	24481.68	4893.57	13503.29	4078.53	1742.58
11/03/2015	14511.94	24271.83	4893.57	13573.74	4029.98	1742.58
10/03/2015	14844.27	23898.81	4917.1	13808.58	3962	1770.91
09/03/2015	14888.59	24388.5	5034.73	13855.55	3898.88	1785.08
06/03/2015	15154.45	24341.81	5034.73	14043.42	3991.13	1770.91
05/03/2015	14977.21	24318.52	4964.15	13996.45	3947.43	1803.97
04/03/2015	15065.83	24318.52	4940.63	13972.97	4102.81	1789.8

03/03/2015	15508.94	24388.5	5034.73	13926	4311.59	1813.41
02/03/2015	15531.1	24528.37	4987.68	13996.45	4180.49	1808.69
27/02/2015	14977.21	24225.24	4893.57	13972.97	4059.11	1775.64
26/02/2015	14733.5	23898.81	4987.68	14184.32	4059.11	1733.13
25/02/2015	14799.96	23828.83	5058.26	14231.29	4180.49	1714.24
24/02/2015	14799.96	22989.52	5152.37	14019.94	4272.75	1704.8
23/02/2015	15730.5	23269.26	5105.31	13902.52	4340.72	1723.69
20/02/2015	16129.3	22849.56	5058.26	13855.55	4340.72	1770.91
19/02/2015	16328.7	22569.82	5058.26	13879.03	4292.17	1789.8
18/02/2015	16328.7	22872.95	5058.26	13879.03	4292.17	1789.8
17/02/2015	16328.7	23292.65	5058.26	13785.1	4175.64	1794.53
16/02/2015	15664.03	23525.8	4987.68	13620.71	4078.53	1794.53
13/02/2015	15575.41	23525.8	4987.68	13573.74	3928.01	1803.97
12/02/2015	15420.32	23502.41	4987.68	13526.77	3733.8	1794.53
11/02/2015	15154.45	23315.95	4987.68	13832.06	3816.34	1789.8
10/02/2015	14888.59	23875.52	4940.63	13832.06	3816.34	1780.36
09/02/2015	14578.41	23712.26	4964.15	13996.45	3777.5	1794.53
06/02/2015	14711.34	23409.22	4940.63	13879.03	3690.1	1841.75
05/02/2015	14467.63	23059.41	4940.63	13738.13	3767.78	1761.47
04/02/2015	14755.65	23502.41	5058.26	13879.03	3660.97	1685.91
03/02/2015	14755.65	24621.65	4893.57	13785.1	3660.97	1685.91
02/02/2015	14578.41	22802.96	4752.41	13620.71	3486.17	1714.24
30/01/2015	14844.27	22033.54	4752.41	13691.16	3690.1	1737.86
29/01/2015	13869.43	21823.69	4775.94	13526.77	3495.88	1723.69
28/01/2015	13647.87	21870.38	4917.1	13597.22	3457.04	1742.58
27/01/2015	13581.4	21683.82	4964.15	13644.19	3471.61	1737.86
26/01/2015	13315.54	21637.13	4940.63	13597.22	3330.8	1714.24
23/01/2015	13448.47	22080.13	5058.26	13597.22	3311.38	1761.47
22/01/2015	13581.4	22639.8	5058.26	13526.77	3194.85	1775.64
21/01/2015	13448.47	21940.26	5034.73	13244.96	2961.79	1799.25
20/01/2015	13404.16	22383.26	4964.15	13315.42	2864.68	1808.69
19/01/2015	13204.76	22383.26	4893.57	13244.96	2845.26	1789.8
16/01/2015	13204.76	22546.52	5152.37	14090.39	2820.98	1808.69
15/01/2015	13448.47	22849.56	5175.89	15217.62	2869.54	1860.64
14/01/2015	13271.22	22849.56	5128.84	14959.3	2922.95	1832.3
13/01/2015	12916.73	23059.41	5293.53	15170.65	2990.92	1903.14
12/01/2015	12961.05	23269.26	5458.22	14982.78	2913.24	1893.7
09/01/2015	13603.56	23222.67	5458.22	14794.91	2825.84	1907.86
08/01/2015	12828.11	24155.26	5458.22	14912.33	2787	1907.86
07/01/2015	12805.96	24062.07	5458.22	15006.26	2879.25	1808.69
06/01/2015	12916.73	24225.24	5458.22	14959.3	2947.22	1794.53

05/01/2015	13736.49	23525.8	5552.32	15241.1	2966.65	1822.86
02/01/2015	14090.98	23036.11	5622.9	15217.62	3010.34	1799.25
01/01/2015	13625.71	22663.1	5646.43	15217.62	2961.79	1785.08
31/12/2014	13625.71	23012.82	5646.43	15217.62	2961.79	1785.08
30/12/2014	13625.71	22919.54	5646.43	15217.62	2961.79	1785.08
29/12/2014	13692.18	22616.41	5622.9	15194.13	2986.07	1803.97
26/12/2014	13825.12	22616.41	5646.43	15123.68	2986.07	1770.91
25/12/2014	13825.12	22616.41	5646.43	15123.68	2986.07	1770.91
24/12/2014	13825.12	22150.11	5646.43	15123.68	2986.07	1770.91
23/12/2014	13802.96	21730.41	5575.85	15100.2	3024.91	1789.8
22/12/2014	13869.43	21730.41	5505.27	15029.75	3078.32	1794.53
19/12/2014	13913.74	21730.41	5481.74	15006.26	3058.9	1818.14
18/12/2014	13559.25	21707.12	5505.27	14841.88	3102.6	1818.14
17/12/2014	13514.94	21403.99	5458.22	14419.16	3146.29	1780.36
16/12/2014	13559.25	21357.4	5505.27	14560.07	3223.98	1756.75
15/12/2014	14179.61	21730.41	5575.85	15170.65	3398.78	1803.97
12/12/2014	14445.47	20891.1	5646.43	15522.91	3495.88	1837.03
11/12/2014	14268.23	20984.28	5622.9	15382.01	3486.17	1865.36
10/12/2014	14799.96	21567.25	5622.9	15546.39	3481.32	1846.47
09/12/2014	15686.19	22080.13	5505.27	15475.94	3476.46	1846.47
08/12/2014	15929.9	22383.26	5622.9	15616.85	3350.22	1865.36
05/12/2014	15952.06	22289.98	5646.43	15546.39	3350.22	1912.59
04/12/2014	16240.08	22266.69	5622.9	15499.43	3350.22	1893.7
03/12/2014	15907.74	22289.98	5646.43	15569.88	3374.5	1822.86
02/12/2014	16062.83	22756.37	5693.48	15499.43	3277.39	1803.97
01/12/2014	16306.55	21846.99	5599.38	15663.81	3175.43	1803.97
28/11/2014	16860.44	21567.25	5599.38	15029.75	3170.57	1874.81
27/11/2014	16838.28	21637.13	5646.43	15076.71	3107.45	1912.59
26/11/2014	16572.41	21473.97	5717.01	15029.75	3189.99	1888.97
25/11/2014	16395.17	22383.26	5693.48	15100.2	3233.69	1879.53
24/11/2014	16373.01	22802.96	5764.06	15311.55	3180.28	1922.03
21/11/2014	16062.83	22546.52	5787.59	15123.68	3136.58	1922.03
20/11/2014	16040.68	22406.56	5811.12	15029.75	3020.05	1870.08
19/11/2014	16262.24	23292.65	5811.12	15100.2	3088.03	1822.86
18/11/2014	16328.7	23409.22	5787.59	14982.78	2981.21	1808.69
17/11/2014	16262.24	23106.1	5717.01	14888.84	3024.91	1794.53
14/11/2014	15641.88	22359.97	5693.48	15006.26	2952.08	1789.8
13/11/2014	16129.3	22150.11	5646.43	14654	3010.34	1837.03
12/11/2014	17214.93	21963.56	5646.43	14536.58	2913.24	1832.3
11/11/2014	17790.97	21683.82	5646.43	14372.2	2995.78	1822.86
10/11/2014	17458.64	22056.84	5481.74	14278.26	3039.48	1780.36

07/11/2014	17635.88	22523.23	5552.32	14372.2	3122.02	1785.08
06/11/2014	17480.79	22010.25	5552.32	14442.65	3088.03	1832.3
05/11/2014	17613.73	21380.69	5575.85	14654	2990.92	1808.69
04/11/2014	17502.95	21380.69	5528.8	14747.94	2986.07	1851.19
03/11/2014	17857.44	21473.97	5599.38	14818.39	3068.61	1884.25
31/10/2014	18765.82	21450.67	5599.38	14912.33	3054.04	1837.03
30/10/2014	18522.11	21637.13	5528.8	14747.94	3107.45	1846.47
29/10/2014	18389.18	22243.39	5575.85	15053.23	3136.58	1775.64
28/10/2014	17842.13	21916.97	5505.27	14630.52	3199.7	1704.8
27/10/2014	18262.93	21450.67	5481.74	14841.88	3156.01	1723.69
24/10/2014	18220.85	19655.29	5458.22	14935.81	3024.91	1742.58
23/10/2014	18094.61	18629.42	5458.22	15123.68	3049.19	1704.8
22/10/2014	17736.93	18932.55	5387.63	15123.68	3092.89	1681.19
21/10/2014	16895.32	18932.55	5340.58	14747.94	2913.24	1652.85
20/10/2014	16832.2	18349.59	5387.63	15029.75	2995.78	1681.19
17/10/2014	16411.39	18303	5434.69	15029.75	2869.54	1761.47
16/10/2014	16937.4	18116.44	5458.22	14560.07	2820.98	1652.85
15/10/2014	16579.71	18279.7	5458.22	14677.49	2932.66	1676.46
14/10/2014	18767.9	18606.13	5458.22	14184.32	2913.24	1752.02
13/10/2014	19314.95	18746	5364.11	14184.32	2646.19	1766.19
10/10/2014	20724.64	19422.14	5411.16	13949.48	2573.36	1761.47
09/10/2014	21461.05	20331.53	5434.69	13926	2723.88	1794.53
08/10/2014	22176.42	20424.71	5387.63	13855.55	2714.16	1780.36
07/10/2014	22302.66	20424.71	5458.22	14466.13	2796.71	1794.53
06/10/2014	22407.86	20582.3	5481.74	14137.36	2850.12	1780.36
03/10/2014	22765.55	20374.85	5505.27	13738.13	2820.98	1747.3
02/10/2014	22218.5	20720.56	5411.16	13808.58	2966.65	1756.75
01/10/2014	21923.94	20374.85	5552.32	14231.29	3058.9	1832.3
30/09/2014	21860.82	20305.67	5646.43	14489.62	3058.9	1794.53
29/09/2014	21797.7	20835.8	5669.96	14325.23	3122.02	1747.3
26/09/2014	21166.49	21296.84	5646.43	14207.81	3233.69	1766.19
25/09/2014	22428.9	21204.63	5669.96	14982.78	3204.56	1789.8
24/09/2014	22134.34	21204.63	5646.43	15006.26	3054.04	1780.36
23/09/2014	22302.66	21388.95	5693.48	15147.17	3024.91	1761.47
22/09/2014	23144.27	21665.58	5693.48	15288.07	3151.15	1766.19
19/09/2014	22807.63	21365.92	5575.85	15335.04	3156.01	1794.53
18/09/2014	22534.1	21342.9	5669.96	15428.97	3156.01	1799.25
17/09/2014	22996.99	21757.78	5599.38	15382.01	3204.56	1770.91
16/09/2014	22870.75	22011.29	5599.38	15194.13	3204.56	1714.24
15/09/2014	21902.9	21988.26	5646.43	15194.13	3156.01	1714.24
12/09/2014	22470.98	21273.71	5599.38	14818.39	3102.6	1709.52

11/09/2014	21923.94	21204.63	5599.38	14747.94	3102.6	1652.85
10/09/2014	22092.26	21481.16	5599.38	14865.36	3102.6	1676.46
09/09/2014	23270.51	21527.31	5575.85	14959.3	3102.6	1752.02
08/09/2014	24322.53	21711.63	5599.38	15311.55	3107.45	1799.25
05/09/2014	24238.36	22518.38	5622.9	15382.01	3068.61	1775.64
04/09/2014	24575.01	23325.04	5599.38	15264.59	3015.2	1785.08
03/09/2014	24638.13	23762.95	5575.85	15428.97	3068.61	1808.69
02/09/2014	24196.28	23786.08	5505.27	15288.07	3029.77	1766.19
01/09/2014	24217.32	23509.45	5481.74	15264.59	2990.92	1733.13
29/08/2014	23712.36	23832.13	5458.22	15241.1	2990.92	1766.19
28/08/2014	24112.12	23624.69	5599.38	15405.49	2976.36	1799.25
27/08/2014	23985.88	23555.51	5599.38	15264.59	2884.1	1803.97
26/08/2014	23480.92	23509.45	5599.38	15452.46	2922.95	1799.25
25/08/2014	23733.4	23970.4	5622.9	15757.75	3005.49	1851.19
22/08/2014	23354.67	23878.19	5622.9	15781.23	3010.34	1917.31
21/08/2014	23985.88	23832.13	5599.38	15640.33	3000.63	1936.2
20/08/2014	24617.09	23878.19	5552.32	15593.36	3010.34	1931.48
19/08/2014	24553.97	24108.76	5505.27	15663.81	3015.2	1945.64
18/08/2014	24638.13	24131.79	5505.27	15640.33	2961.79	1903.14
15/08/2014	24596.05	24293.08	5528.8	15475.94	2869.54	1907.86
14/08/2014	24196.28	24477.49	5505.27	15452.46	2864.68	1931.48
13/08/2014	23565.08	24039.58	5599.38	15710.78	2864.68	1926.75
12/08/2014	23060.11	24016.55	5575.85	15640.33	2748.15	1931.48
11/08/2014	23060.11	24223.99	5505.27	15569.88	2709.31	1978.7
08/08/2014	23102.19	24223.99	5387.63	15264.59	2631.62	2007.03
07/08/2014	23565.08	24200.87	5387.63	15358.52	2592.78	2002.31
06/08/2014	23480.92	24431.44	5434.69	15405.49	2675.32	2025.92
05/08/2014	22975.95	24177.84	5646.43	15499.43	2743.3	2007.03
04/08/2014	23607.16	24385.29	5740.54	15710.78	2811.27	1997.59
01/08/2014	22008.1	24569.7	5552.32	15569.88	2859.83	1983.42
31/07/2014	22008.1	24223.99	5552.32	15569.88	2859.83	1983.42
30/07/2014	22008.1	24200.87	5552.32	15569.88	2859.83	1983.42
29/07/2014	22008.1	24615.76	5552.32	15569.88	2859.83	1983.42
28/07/2014	22008.1	24615.76	5552.32	15569.88	2859.83	1983.42
25/07/2014	22008.1	24615.76	5552.32	15569.88	2859.83	1983.42
24/07/2014	22239.54	24615.76	5646.43	15640.33	2845.26	1959.81
23/07/2014	21250.65	24615.76	5740.54	15851.69	2835.55	1898.42
22/07/2014	21061.29	24615.76	5717.01	15616.85	2850.12	1888.97
21/07/2014	21545.21	24500.52	5669.96	15945.62	2888.96	1973.98
18/07/2014	21313.77	23970.4	5552.32	15687.3	2811.27	1983.42
17/07/2014	21124.41	23970.4	5528.8	15546.39	2597.64	1969.26

16/07/2014	21334.81	24200.87	5552.32	16016.07	2908.38	2011.76
15/07/2014	21082.33	24108.76	5387.63	15898.65	2850.12	2007.03
14/07/2014	21250.65	23878.19	5364.11	15640.33	2850.12	2068.43
11/07/2014	21881.86	24039.58	5317.05	15640.33	2859.83	2125.1
10/07/2014	22218.5	23924.34	5364.11	15710.78	2888.96	2153.43
09/07/2014	22513.06	24408.31	5199.42	15217.62	2893.81	2101.48
08/07/2014	22513.06	24431.44	5199.42	15217.62	2893.81	2101.48
07/07/2014	22933.87	25030.65	5199.42	14959.3	2927.8	2129.82
04/07/2014	22807.63	24892.38	5105.31	14207.81	2918.09	2125.1
03/07/2014	22681.39	24892.38	5128.84	14113.87	2966.65	2134.54
02/07/2014	22555.15	25606.83	5199.42	14160.84	3034.62	2125.1
01/07/2014	22323.7	25353.33	5175.89	14160.84	3034.62	2153.43
30/06/2014	22723.47	25099.83	5246.47	14160.84	3034.62	2186.49
27/06/2014	22849.71	25445.54	5128.84	14066.9	2825.84	2233.71
26/06/2014	23060.11	25168.91	5175.89	14184.32	2874.39	2266.77
25/06/2014	22975.95	25975.66	5081.79	14090.39	2830.69	2210.1
24/06/2014	22975.95	26459.64	5081.79	14090.39	2913.24	2172.32
23/06/2014	22555.15	27012.79	5128.84	14090.39	2961.79	2153.43
20/06/2014	22702.43	26736.26	5128.84	14019.94	3112.31	2167.6
19/06/2014	22891.79	26183.11	5175.89	14090.39	3233.69	2148.71
18/06/2014	23628.2	25261.12	5175.89	14278.26	3248.26	2172.32
17/06/2014	23165.31	25261.12	5128.84	14489.62	3219.13	2134.54
16/06/2014	22870.75	24892.38	4987.68	14442.65	3262.82	2105.26
13/06/2014	23312.59	25030.65	5105.31	14489.62	3194.85	2072.87
12/06/2014	23396.76	24915.41	5175.89	14466.13	3170.57	2054.36
11/06/2014	23480.92	24523.55	5175.89	14419.16	3160.86	2058.99
10/06/2014	23985.88	24408.31	5152.37	14325.23	3175.43	2049.74
09/06/2014	23985.88	24339.23	5105.31	14090.39	3185.14	2026.6
06/06/2014	24911.65	24569.7	5081.79	14395.68	3199.7	2100.63
05/06/2014	24911.65	24569.7	5011.21	14278.26	3170.57	2123.77
04/06/2014	24911.65	24200.87	4917.1	14184.32	3141.44	2119.14
03/06/2014	25248.3	24754.12	4917.1	14137.36	3102.6	2160.78
02/06/2014	25037.89	24777.15	4940.63	13949.48	3010.34	2137.65
30/05/2014	24112.12	24707.97	5105.31	13832.06	3010.34	2137.65
29/05/2014	24806.45	24754.12	5387.63	14301.74	2782.14	2193.17
28/05/2014	24806.45	24777.15	5387.63	14301.74	2782.14	2193.17
27/05/2014	24785.41	25192.04	5364.11	14090.39	2757.86	2091.38
26/05/2014	24785.41	25629.96	5364.11	14090.39	2757.86	2091.38
23/05/2014	24974.77	25629.96	5411.16	14113.87	2879.25	2128.4
22/05/2014	24406.69	24754.12	5387.63	14043.42	2835.55	2119.14
21/05/2014	23565.08	24754.12	5270	14066.9	2806.42	2063.62

20/05/2014	22828.67	24892.38	5152.37	13949.48	2762.72	2049.74
19/05/2014	23018.03	24800.18	5246.47	14348.71	2728.73	2128.4
16/05/2014	22702.43	24707.97	5199.42	14982.78	2714.16	2183.92
15/05/2014	22470.98	25353.33	5152.37	14982.78	2709.31	2170.04
14/05/2014	22470.98	26851.5	5152.37	14982.78	2709.31	2170.04
13/05/2014	22702.43	26713.23	5128.84	14654	2665.61	2183.92
12/05/2014	21944.98	26528.82	5152.37	14654	2602.49	2248.7
09/05/2014	20977.13	26528.82	4964.15	13902.52	2553.94	2244.07
08/05/2014	21040.25	26275.32	4964.15	13808.58	2563.65	2239.44
07/05/2014	21040.25	26736.26	5034.73	13409.35	2519.95	2234.82
06/05/2014	21187.53	26600.22	4964.15	13644.19	2519.95	2197.8
05/05/2014	21103.37	26418.16	4964.15	13785.1	2494.7	2230.19
02/05/2014	21040.25	26600.22	4987.68	13714.64	2494.7	2202.43
01/05/2014	21440.01	26486.45	5011.21	13949.48	2508.28	2267.2
30/04/2014	21440.01	27009.82	5011.21	13949.48	2508.28	2267.2
29/04/2014	20935.05	26782.19	4789.68	14066.9	2503.76	2267.2
28/04/2014	21650.41	26759.46	4947.83	14489.62	2503.76	2244.07
25/04/2014	22071.22	26759.46	4993.01	14747.94	2530.92	2230.19
24/04/2014	22113.3	26395.42	4947.83	14583.55	2530.92	2216.31
23/04/2014	22428.9	25940.35	4902.64	14747.94	2490.17	2239.44
22/04/2014	21860.82	25758.29	4880.05	14747.94	2444.9	2183.92
21/04/2014	21355.85	26395.42	4880.05	14818.39	2431.31	2170.04
18/04/2014	21313.77	26486.45	4834.86	14865.36	2390.57	2202.43
17/04/2014	21313.77	25735.55	4834.86	14865.36	2390.57	2202.43
16/04/2014	21292.73	25485.19	4744.49	14982.78	2458.48	2207.05
15/04/2014	20956.09	25803.76	4880.05	14959.3	2526.39	2137.65
14/04/2014	21313.77	25803.76	4812.27	14959.3	2571.67	2082.13
11/04/2014	21376.89	24666.08	4767.09	14395.68	2635.06	2040.48
10/04/2014	20556.32	24779.85	4699.31	14724.46	2675.8	2003.47
09/04/2014	20472.16	25257.65	4767.09	15781.23	2648.64	2058.99
08/04/2014	20472.16	25212.19	4767.09	15781.23	2648.64	2058.99
07/04/2014	20451.12	23937.92	4812.27	15828.2	2662.22	2058.99
04/04/2014	20345.92	23892.35	4631.53	15616.85	2662.22	2077.5
03/04/2014	20745.68	23892.35	4654.12	15969.11	2517.34	2058.99
02/04/2014	20914.01	23391.82	4631.53	15593.36	2508.28	2082.13
01/04/2014	20829.84	23073.25	4744.49	15499.43	2490.17	2045.11
31/03/2014	20493.2	23073.25	4631.53	14841.88	2431.31	2045.11
28/03/2014	20493.2	23482.85	4631.53	14841.88	2431.31	2045.11
27/03/2014	19546.39	23824.15	4631.53	14747.94	2435.84	2026.6
26/03/2014	19263.69	23664.82	4541.16	14747.94	2472.06	2040.48
25/03/2014	19081.96	23664.82	4473.38	14794.91	2440.37	1998.84

24/03/2014	19304.08	23118.72	4514.05	14794.91	2435.84	2096.01
21/03/2014	19384.85	23118.72	4676.71	14466.13	2386.04	2109.89
20/03/2014	18193.49	22686.38	4410.12	14372.2	2349.82	2119.14
19/03/2014	19081.96	23960.65	4586.34	15029.75	2354.35	2183.92
18/03/2014	19142.54	23755.85	4676.71	15100.2	2263.79	2096.01
17/03/2014	19546.39	23573.79	4789.68	15499.43	2263.79	2128.4
14/03/2014	19627.16	24051.68	4767.09	15029.75	2168.71	2077.5
13/03/2014	20111.78	23710.38	4676.71	14184.32	2087.22	2008.1
12/03/2014	19869.47	23801.41	4505.01	14207.81	2041.94	2035.86
11/03/2014	20434.86	23733.12	4441.75	14513.1	2014.78	2156.16
10/03/2014	20374.28	23937.92	4482.42	14372.2	1983.08	2179.29
07/03/2014	20455.05	24984.65	4482.42	14372.2	1969.5	2137.65
06/03/2014	20576.21	25325.95	4518.56	14184.32	1969.5	2068.25
05/03/2014	20818.52	25394.16	4518.56	13972.97	1960.45	1984.96
04/03/2014	20899.29	25098.42	4468.86	13808.58	1942.34	1873.91
03/03/2014	20515.63	25121.15	4464.34	13808.58	1942.34	1897.05
28/02/2014	21000.25	24666.08	4428.19	14090.39	1960.45	1915.56
27/02/2014	20677.17	23073.25	4428.19	13573.74	1838.2	1915.56
26/02/2014	20293.51	23118.72	4396.56	13503.29	1842.73	1841.53
25/02/2014	20495.44	23209.75	4473.38	13761.61	1897.06	1804.51
24/02/2014	20959.87	22913.92	4518.56	13996.45	1919.7	1827.64
21/02/2014	21525.26	21685.21	4518.56	14160.84	1955.92	1823.02
20/02/2014	21787.76	21616.91	4563.75	14184.32	1974.03	1841.53
19/02/2014	21565.64	21662.48	4563.75	14090.39	1969.5	1869.29
18/02/2014	21727.18	21389.38	4486.93	14090.39	1951.39	1836.9
17/02/2014	21848.34	21616.91	4477.9	14301.74	1955.92	1762.87
14/02/2014	21969.49	21707.95	4455.3	13949.48	1942.34	1739.73
13/02/2014	22211.81	21116.28	4328.78	14184.32	1946.86	1693.46
12/02/2014	22050.26	20843.28	4342.34	14184.32	1924.22	1698.09
11/02/2014	22009.88	21116.28	4337.82	14184.32	1874.42	1651.82
10/02/2014	22615.66	21070.81	4360.41	14160.84	1869.89	1619.43
07/02/2014	22696.43	21389.38	4364.93	14043.42	1969.5	1591.67
06/02/2014	22211.81	21048.08	4364.93	13667.68	1910.64	1577.79
05/02/2014	21626.22	20365.38	4355.9	13550.26	1865.37	1508.39
04/02/2014	20899.29	20160.67	4288.12	13033.61	1842.73	1508.39
03/02/2014	21282.95	20024.08	4328.78	13151.03	1842.73	1554.65
31/01/2014	21646.41	19477.98	4310.71	13338.9	1815.56	1531.52
30/01/2014	21646.41	19432.51	4310.71	13338.9	1815.56	1531.52
29/01/2014	21202.18	19705.51	4301.67	13526.77	1806.51	1545.4
28/01/2014	20798.33	19546.27	4157.08	13151.03	1788.4	1513.01
27/01/2014	20717.56	19546.27	4120.93	13127.54	1752.18	1573.16

24/01/2014	21706.99	19637.31	4247.45	13667.68	1815.56	1628.69
23/01/2014	22252.19	19500.71	4233.89	13996.45	1806.51	1651.82
22/01/2014	21686.8	19341.47	4270.04	13785.1	1738.59	1550.03
21/01/2014	20838.71	20706.78	4247.45	14066.9	1738.59	1568.54
20/01/2014	20576.21	20888.75	4242.93	14160.84	1702.37	1540.77
17/01/2014	20293.51	20069.64	3962.78	14278.26	1702.37	1457.49
16/01/2014	20192.55	19933.04	3849.82	14278.26	1702.37	1425.1
15/01/2014	20273.32	19751.07	3949.22	14724.46	1697.85	1406.59
14/01/2014	20717.56	19000.17	3994.41	14583.55	1620.88	1378.83
13/01/2014	20717.56	19068.37	3994.41	14583.55	1620.88	1378.83
10/01/2014	20757.94	18954.61	4007.97	13996.45	1584.66	1420.47
09/01/2014	20757.94	19273.17	3867.89	13244.96	1598.24	1503.76
08/01/2014	21161.79	19273.17	3840.78	13268.45	1566.55	1573.16
07/01/2014	20636.79	19432.51	3858.85	13409.35	1584.66	1540.77
06/01/2014	21444.49	20479.15	3976.34	13432.84	1666.15	1651.82
03/01/2014	21929.11	20752.24	4111.89	13479.8	1738.59	1702.72
02/01/2014	22696.43	19569.01	4157.08	13620.71	1765.76	1758.24
01/01/2014	23019.51	20046.81	4044.11	13291.93	1756.7	1786



Lampiran 2 Data *return* Saham JII yang terpilih dalam Portofolio

Periode 1 Januari 2014 – 29 September 2016

DATE	ITMG	AALI	PGAS	SMGR	MPPA	LSIP
29/09/2016	0	0	0	0	0	0
28/09/2016	-0.05556	-0.005	-0.01053	-0.00709	-0.01311	0.032967
27/09/2016	-0.00471	0.018492	0.01773	-0.00476	0.019934	0.031915
26/09/2016	-0.00946	0.01634	-0.01045	-0.00478	-0.00326	-0.00258
23/09/2016	-0.00239	-0.00643	-0.05282	0	0	0.02584
22/09/2016	0.002392	0.011327	0	-0.02885	0.013072	-0.05038
21/09/2016	0.002387	0.0272	-0.00372	-0.02723	0.012903	-0.03183
20/09/2016	-0.02143	0.004673	0	0.017812	-0.00318	-0.03014
19/09/2016	0.026764	-0.0062	0.022388	0.0125	0.003195	0.022599
16/09/2016	0.004739	-0.0234	-0.0292	-0.02222	-0.04459	-0.00276
15/09/2016	-0.00943	0	0.026316	0.005051	0.003333	-0.04709
14/09/2016	-0.04524	-0.01278	-0.01832	-0.02513	-0.02326	-0.03779
13/09/2016	0.047382	0.029126	0.014925	0.015464	0.013605	0.018127
12/09/2016	0.061905	0.028302	0.033088	0.020305	0.060403	0.005935
09/09/2016	0	0	0	0	0	0
08/09/2016	0.022422	0.007645	0	0	0.003165	0.050147
07/09/2016	0.002193	0.015174	-0.00356	0	0.009464	0.025281
06/09/2016	-0.00219	-0.00897	0.014286	0.014925	0.003125	0.010959
05/09/2016	0	-0.01056	0	-0.0049	-0.01558	0.01897
02/09/2016	-0.01535	-0.00457	0.007042	-0.01478	-0.01582	-0.02128
01/09/2016	-0.00668	-0.00766	-0.01399	-0.02	-0.00322	-0.00272
31/08/2016	0.020179	0.012346	0.070922	0.010204	0.032258	0.040872
30/08/2016	-0.06813	-0.01829	0.02649	0.020202	-0.02813	-0.02618
29/08/2016	0	-0.01087	0.032258	0.029703	-0.00643	0.061828
26/08/2016	0.033019	0.039246	0.046875	0.009615	0.042071	0.037975
25/08/2016	0.004566	0.015106	-0.00597	-0.00714	0.006211	0
24/08/2016	0.006818	-0.03423	-0.03904	-0.0024	-0.02778	-0.01463
23/08/2016	0	0.030817	-0.0125	0.036058	0.015873	0.029703
22/08/2016	0.03386	0.016442	0.003165	0.034803	0.03125	-0.00962
19/08/2016	0.0131	-0.02353	-0.02208	-0.00448	-0.02424	-0.00971
18/08/2016	0.043103	0	0.022581	0.011261	-0.01553	0.014706
17/08/2016	0.006198	0	-0.0694	-0.01559	-0.0347	-0.00483
16/08/2016	0	0	0	0	0	0
15/08/2016	-0.02464	-0.01958	0.020339	-0.01357	-0.0098	-0.05583
12/08/2016	-0.00211	-0.03533	0.039867	0.009174	-0.033	0.010283
11/08/2016	0.037975	0.006369	-0.01278	0.006818	0.020478	-0.03053
10/08/2016	0.00813	-0.00475	0.029126	0.029345	0.010033	-0.03937

09/08/2016	-0.00806	-0.03975	0.015723	0.017544	-0.02318	-0.01093
08/08/2016	-0.02033	-0.00331	0.012384	-0.07112	0.00339	0.005525
05/08/2016	0.03112	0.004983	0.024465	-0.03944	0	-0.01099
04/08/2016	0.030181	0.004959	-0.01493	-0.02174	0.006757	-0.02778
03/08/2016	-0.00781	-0.02796	-0.00909	0.004938	-0.02685	0.005714
02/08/2016	-0.01181	-0.01184	0.024465	-0.02703	-0.01724	0.048295
01/08/2016	0.00996	0.017123	0.023881	0.010101	0.007018	-0.02168
29/07/2016	-0.00789	-0.02357	-0.04082	-0.0625	-0.02091	-0.03878
28/07/2016	-0.02584	0.013793	0.027356	0.032	0.02847	0.048991
27/07/2016	-0.0102	-0.0034	-0.04142	0.002584	-0.01384	0.021978
26/07/2016	-0.00206	0.017065	-0.04012	-0.02062	0	-0.00269
25/07/2016	-0.00826	0.020134	-0.04502	-0.01053	0.024561	-0.01078
22/07/2016	-0.03333	-0.00658	0	-0.01064	0.003425	-0.0327
21/07/2016	0.015086	0	-0.02694	0.013441	0	-0.03944
20/07/2016	0.029724	0.029801	0.013841	0.007958	0.013652	0.020528
19/07/2016	-0.01031	-0.02572	0.023891	0.002632	-0.00337	-0.02011
18/07/2016	-0.02917	0.014851	0.033333	-0.05774	0.02027	-0.02933
15/07/2016	-0.08155	-0.0374	-0.14194	0.008357	-0.04967	-0.03021
14/07/2016	-0.04206	-0.02703	-0.05639	0.024862	-0.02787	-0.00312
13/07/2016	0.039024	0.005208	0.003984	0.026954	0.007168	0.0125
12/07/2016	-0.0493	-0.01554	0	0.031496	-0.00356	-0.01235
11/07/2016	-0.05679	-0.01053	-0.04762	-0.01527	-0.03571	-0.05625
08/07/2016	-0.01832	0.024823	-0.025	-0.04393	0.018519	0
07/07/2016	0	0	0	0	0	0
06/07/2016	0	0	0	0	0	0
05/07/2016	0	0	0	0	0	0
04/07/2016	0	0	0	0	0	0
01/07/2016	0	0	0	0	0	0
30/06/2016	0	0.017301	0	0.010811	0.003636	0.02649
28/06/2016	-0.02933	-0.0034	-0.00855	-0.05615	-0.01812	-0.01935
27/06/2016	-0.04121	-0.00341	0.008621	-0.00283	0.00369	-0.05921
24/06/2016	-0.0086	-0.02055	0.017094	0.005682	-0.00368	0
23/06/2016	0.017341	-0.01399	0	0.014124	0.02583	0.031469
22/06/2016	-0.00284	0.028369	0.016807	0	0.010791	-0.03729
21/06/2016	0	0	-0.02066	0.008357	0.021352	-0.09155
20/06/2016	-0.01994	0.008621	0.012658	0.008287	0.017422	0
17/06/2016	-0.04651	0.005128	-0.00833	-0.00822	-0.0137	-0.00388
16/06/2016	0.051829	-0.0102	0	-0.02762	-0.00347	-0.00778
15/06/2016	0.008696	-0.00344	0.004202	0.011364	0.038328	0.015686
14/06/2016	-0.00575	0.013793	-0.00837	-0.01124	0.003356	-0.01158
13/06/2016	0.00578	-0.01361	0.046414	0.005682	0.010033	-0.01172

10/06/2016	0.011494	0.027586	0.016129	0.002825	0.023179	0.011858
09/06/2016	0.002841	0.043624	-0.01587	0.014085	-0.02071	0.003906
08/06/2016	-0.00283	0	0.016129	0.025	0.006451	-0.01167
07/06/2016	0.005682	0.028939	0.003968	0.01084	0.016024	0.035433
06/06/2016	-0.01412	-0.01406	-0.00395	-0.01072	-0.03785	-0.01141
03/06/2016	-0.00573	-0.06829	-0.00794	-0.02168	0.006556	-0.01154
02/06/2016	-0.00865	0.009729	-0.04	-0.00277	0.009771	0.003891
01/06/2016	-0.00291	-0.01284	0.033333	0.011111	-0.05806	-0.00775
31/05/2016	0.020408	-0.06179	0	-0.01099	-0.00685	-0.00391
30/05/2016	0.008571	-0.01907	0	0.013889	0.024135	0.019608
27/05/2016	-0.00283	0.054773	0	-0.00274	0.0101	-0.01538
26/05/2016	-0.01989	0.005028	-0.00806	-0.03022	0.003333	0.011719
25/05/2016	-0.04638	-0.01167	-0.01626	0	-0.03986	0.011583
24/05/2016	-0.00608	-0.01012	-0.04959	-0.01416	-0.02077	0.015267
23/05/2016	0.018349	-0.00852	0.004348	0.014368	0.045938	-0.01504
20/05/2016	-0.03003	0.017181	-0.03463	-0.01472	-0.00676	-0.04198
19/05/2016	0.01548	-0.00507	-0.00897	-0.01667	0.013604	-0.01992
18/05/2016	0.003049	0.010192	0.036199	0.028249	0.023494	0.069106
17/05/2016	0.00304	-0.00672	0.008734	-0.00549	0.026226	0.003802
16/05/2016	0	0.003381	0.017316	0.005524	-0.00319	0
13/05/2016	0.015152	-0.0118	-0.01702	-0.01099	-0.01602	0.022727
12/05/2016	-0.00896	0.013647	0.030303	0.038889	0.013028	-0.02963
11/05/2016	-0.04518	0.055556	0.004202	0.032086	0.01286	-0.05344
10/05/2016	-0.02524	-0.01116	-0.03766	-0.02591	-0.06984	0
09/05/2016	0.012945	-0.03871	0.017391	-0.0133	0.01365	-0.02823
06/05/2016	0.003195	0.031879	0.051282	0.0593	0.033673	0.107884
05/05/2016	0	0.022764	0	0	0	0
04/05/2016	0	0	0	0	0	0
03/05/2016	0.006369	0	0.020325	-0.00254	-0.01955	0.048689
02/05/2016	-0.01582	0.030206	0	-0.02551	-0.00664	0.078571
29/04/2016	0.003215	0.003084	0.043825	0.036649	0.026759	-0.02318
28/04/2016	0.003205	-0.00923	-0.01145	0.015152	0.055374	0.044068
27/04/2016	-0.00319	0.009315	0.019305	0.007463	0.024688	0
26/04/2016	-0.02885	-0.00923	0.013258	0.019753	0.006029	0.012987
25/04/2016	0.013201	0.012424	-0.01308	0.021792	-0.03294	0.019231
22/04/2016	-0.0228	-0.03374	0.00947	-0.00237	0.021669	0
21/04/2016	0.006667	0.014286	-0.03565	0	0.018186	-0.00943
12/04/2016	-0.08609	0.004697	0.020611	-0.00238	0.035709	0.012063
08/04/2016	-0.00362	-0.00312	-0.01103	-0.00714	-0.00287	0.018519
07/04/2016	0.007273	0.001561	0.035316	-0.01199	0	-0.00606
06/04/2016	0.025271	0	-0.00359	-0.00243	0.011532	0.015245

05/04/2016	-0.05986	0.051482	-0.00721	-0.00243	0.008546	0.012013
04/04/2016	-0.00907	0.008907	0.012707	-0.00244	-0.00565	0
01/04/2016	0	0.008822	-0.0466	-0.00244	0.022724	0.008903
31/03/2016	-0.00749	0.014576	-0.01068	-0.00245	-0.09279	0.062073
30/03/2016	-0.00755	0.005748	-0.00956	-0.00491	0.003087	-0.0467
29/03/2016	0	0.03714	0.005789	0.012345	-0.00615	0.002881
28/03/2016	0.022814	0.009289	-0.00384	0.034146	0.015481	0
25/03/2016	-0.02974	-0.03983	0.007708	0.011793	-0.01829	-0.04598
24/03/2016	0	-0.00429	0	0	0	0
23/03/2016	0.007663	-0.01724	0.013382	0	0	0.030123
22/03/2016	0.003802	0.011692	0.00189	-0.00699	0.015529	0
21/03/2016	-0.00379	0	0	-0.01878	0.027524	-0.02924
18/03/2016	0.01901	0.023125	-0.01884	0.004784	-0.01191	0.024099
17/03/2016	0.037315	0.015535	0.024952	0.007143	0.012049	0.035295
16/03/2016	-0.05756	-0.0153	-0.01685	0.002364	-0.00595	-0.03693
15/03/2016	-0.00763	0.007062	-0.00381	-0.01179	0.017965	-0.0236
10/03/2016	0.023077	-0.00141	0.022942	0.011933	0.041172	0.006042
09/03/2016	0.05639	0	0.001872	-0.01887	0.0113	-0.07207
08/03/2016	0	-0.01685	0	0	0	0
07/03/2016	0.00356	0	-0.01306	0	0.005587	-0.01294
04/03/2016	-0.05674	-0.09715	0.001889	0.002404	0.002778	-0.02623
03/03/2016	0.037594	0	-0.00943	-0.0048	0.00554	-0.0303
02/03/2016	0.021739	-0.00158	-0.00762	0.002409	0.00551	0.024302
01/03/2016	-0.01418	-0.04278	-0.00768	-0.01442	-0.0137	0.003389
29/02/2016	-0.02878	-0.01325	0.019345	0	0	-0.03379
26/02/2016	-0.04074	0.006712	-0.01328	0	-0.00278	-0.02797
25/02/2016	-0.16602	-0.00167	-0.00384	-0.00488	-0.03343	-0.01079
24/02/2016	0.018518	-0.00835	0	-0.0098	0.020174	-0.00364
23/02/2016	0.054546	-0.04714	0.019304	0	-0.01413	0
22/02/2016	-0.03448	0.061842	-0.01515	0.002476	0.022924	0.058394
19/02/2016	-0.0625	0.10316	-0.00577	0.004938	0	0.003448
18/02/2016	0	0.030164	0.044491	0.029484	0.025211	0.020616
17/02/2016	-0.07429	0.043928	-0.07593	0.009546	0	0.003367
16/02/2016	0	-0.00421	0.002007	0.011821	0.024591	0.013421
15/02/2016	-0.00617	-0.00141	-0.002	0.004672	-0.01067	0.003318
12/02/2016	-0.00414	0.046544	-0.01002	0.011628	-0.00539	-0.02311
11/02/2016	0.010396	-0.02426	-0.00607	0.009195	0.010841	-0.03716
10/02/2016	-0.01235	-0.04005	-0.00611	-0.0205	0.005362	0.031582
09/02/2016	-0.00312	-0.04173	0.008197	-0.00465	-0.03467	0.020405
08/02/2016	0.001044	-0.02703	-0.01423	0.011682	0.008288	-0.02666
05/02/2016	0	0.020063	0	0	0	0

04/02/2016	0.001045	0.010587	-0.01031	-0.01848	-0.03014	-0.01027
03/02/2016	-0.0073	0.022454	0.008334	-0.01412	0.0226	-0.04152
02/02/2016	0.008404	0	-0.01033	0.031026	-0.03039	0.014439
01/02/2016	-0.01458	-0.00293	0.004173	0.016204	-0.02564	-0.01423
29/01/2016	0.016912	-0.02203	0	0.006834	-0.02339	0.028877
28/01/2016	-0.01663	-0.00901	-0.00208	-0.03167	-0.00898	0
27/01/2016	0.035939	0.030308	-0.00416	-0.01168	-0.00906	-0.0421
26/01/2016	0.030612	0.004408	0.004182	-0.04965	-0.00915	-0.04396
25/01/2016	0.064356	0.008789	0.0375	0.024876	0.006154	0.007662
22/01/2016	-0.05581	-0.02613	0	0.004854	0.006117	-0.0076
21/01/2016	-0.06404	-0.00447	-0.05221	-0.02657	0.006079	-0.01915
20/01/2016	0.043158	0.005989	0.00424	0.012407	0.021149	0.019529
19/01/2016	0.029265	-0.01488	0.05274	0.036764	0.029581	0.019155
18/01/2016	0.034313	-0.01058	0.018036	-0.01182	-0.03161	-0.02631
15/01/2016	0.028436	0.019849	0.043308	0.014353	-0.00297	-0.03089
14/01/2016	0.018433	0.034432	-0.01321	0	-0.00893	0.011951
13/01/2016	0.022625	-0.01013	0.01912	0.028302	0.033035	-0.03543
12/01/2016	-0.0177	-0.02924	-0.05066	-0.00688	-0.01163	-0.00408
11/01/2016	0.022521	-0.00903	-0.01976	-0.01155	-0.01471	0.012293
08/01/2016	0.013216	-0.00456	0.03024	0.025701	0.029846	0.012144
07/01/2016	0.008696	0.01069	0.001956	0.006834	0.020291	0
06/01/2016	0.00431	-0.03323	0.052734	0.036199	0	0.011998
05/01/2016	-0.00858	0.015624	-0.00371	-0.0262	0.022728	0.02372
04/01/2016	-0.00866	0.009235	-0.00931	-0.00224	0.030557	-0.03475
01/01/2016	0	0.019812	0.031956	0.024719	-0.01617	0.056001
31/12/2015	0	-0.00299	0	0	0	0
30/12/2015	0	-0.05847	0	0	0	0
29/12/2015	0.004366	0.009552	-0.00547	-0.01974	-0.11781	-0.00757
28/12/2015	0.013044	0	0.005496	-0.01119	-0.02174	-0.00382
25/12/2015	-0.03004	0	0.040073	0.013575	0.022223	-0.03449
24/12/2015	0	0.001576	0	0	0	0
23/12/2015	0	0.009447	0	0	0	0
22/12/2015	0	-0.03276	-0.03503	-0.02009	0.015529	0.003968
21/12/2015	-0.00885	0	-0.01089	-0.00683	0.015291	0.011864
18/12/2015	-0.01339	0	-0.00734	-0.03899	0.018073	-0.00391
17/12/2015	0.085973	0.014517	-0.00555	0.031026	-0.00888	0.031377
16/12/2015	-0.025	0.009537	-0.06506	-0.02315	-0.01493	-0.01521
15/12/2015	-0.01282	0.009447	-0.04374	-0.01422	-0.02121	-0.01931
14/12/2015	-0.01299	0.026524	-0.03742	0.004808	-0.01238	-0.00394
11/12/2015	0.021929	-0.0152	0.075595	0.028707	0.03135	0.015816
10/12/2015	0.017167	0.015431	0.044177	0.041861	0.048628	0.015562

09/12/2015	0.07595	0.001518	0.005771	-0.02009	0.014494	0.042148
08/12/2015	0	0.006071	0	0	0	0
07/12/2015	0.035294	0	0.070745	0.002278	0.048574	0.03676
04/12/2015	0.007576	0.052787	0.012502	-0.00454	0.013625	-0.06028
03/12/2015	-0.00752	0	0.014106	0.011415	0.010753	-0.03018
02/12/2015	0.015151	0.032952	-0.0087	0.009029	0.021278	0.003891
01/12/2015	-0.03358	-0.02357	-0.04386	-0.01342	-0.00625	-0.03101
30/11/2015	0.042472	0.002838	-0.02569	-0.03628	-0.02089	-0.04
27/11/2015	0.04074	0.014164	0.109228	0.037647	0.013334	0.054168
26/11/2015	0.00356	0	-0.0034	0.013605	0.026317	0.015816
25/11/2015	-0.00355	-0.05307	0.017035	-0.01119	0.015384	0.007781
24/11/2015	0	0.066374	0.008375	-0.01131	-0.0202	0.015442
23/11/2015	0.032029	0.023509	-0.01329	0.043479	0.023193	0.003802
20/11/2015	0.024139	0.010813	0.0101	0	0.010077	-0.05303
19/11/2015	-0.00337	-0.01337	0.024999	0	0.007479	0
18/11/2015	0.003379	0.014903	-0.05366	0.008772	0.002479	0.003999
17/11/2015	-0.0303	-0.02537	-0.10309	-0.03478	-0.04938	0.011951
16/11/2015	-0.03472	0.00548	-0.01341	-0.02703	-0.00779	-0.04724
13/11/2015	0.043164	-0.01226	0.015535	-0.01157	0.036647	0.004132
12/11/2015	0.051724	0.012414	0.024857	-0.04918	0.012627	0.057614
11/11/2015	0.009836	-0.01498	-0.0112	0.034483	0.009977	-0.00389
10/11/2015	0.045455	-0.00138	0.018871	-0.05238	0.029629	0.066405
09/11/2015	0.009316	0.027699	0.040737	0.03015	0.016785	0
06/11/2015	0.058463	-0.02965	0.040929	0.041463	0.054245	0.054945
05/11/2015	0	0.038889	0.032478	-0.00234	-0.03356	0.013887
04/11/2015	0.023255	0.033421	-0.00662	-0.0047	-0.05092	0.027394
03/11/2015	-0.01989	0.036223	-0.02333	-0.03774	0.007314	-0.05
02/11/2015	-0.0087	-0.00374	0.015358	-0.04412	0.043583	0.038599
30/10/2015	-0.00877	0.046367	0.008403	0.005129	0.041763	0.047298
29/10/2015	-0.0059	-0.0491	-0.03333	0	0.024499	0.003225
28/10/2015	0.050446	0.002517	0.049998	0.053571	0.041307	-0.00322
27/10/2015	0.059321	0	-0.00328	0	0.014613	-0.02904
26/10/2015	0.010667	-0.03015	0.001647	0.03632	-0.00206	-0.00664
23/10/2015	-0.00792	0.015546	-0.01645	0.014018	0.059793	0.023415
22/10/2015	0.005318	0.065052	-0.02174	-0.01152	0.027235	0.003268
21/10/2015	0.015873	-0.02275	0.011964	0.048951	0.00379	-0.02932
20/10/2015	0.03125	0.017157	0.013514	-0.06	-0.00189	-0.08724
19/10/2015	-0.00505	0.034939	0.006667	0.004729	-0.01513	0.022056
16/10/2015	0.027919	-0.05006	0.014901	-0.02118	-0.05374	0.014387
15/10/2015	0.05679	-0.05515	-0.02284	-0.02404	-0.07099	-0.02127
14/10/2015	0	-0.01945	-0.01002	0	0.008735	0.003623

13/10/2015	0	0.002643	0	0	0	0
12/10/2015	0	-0.01847	0.055652	0.044335	0.069261	0
09/10/2015	-0.01869	0.010754	-0.04153	-0.00472	0.002028	-0.02888
08/10/2015	-0.04781	0	-0.03667	-0.00948	-0.05051	0.003717
07/10/2015	0.018604	0.01064	0.020762	0.028707	-0.04042	-0.0037
06/10/2015	-0.07078	-0.01974	-0.02543	-0.06279	-0.02661	0.052045
05/10/2015	-0.0172	-0.01745	-0.05565	-0.00248	-0.06606	0.042405
02/10/2015	-0.0275	0.038252	-0.00552	-0.09453	-0.02439	-0.02373
01/10/2015	0.007712	0.052629	-0.03704	0.010989	-0.0075	0.017359
30/09/2015	0.007653	0.016251	-0.02692	-0.0163	-0.03274	-0.05461
29/09/2015	-0.03797	-0.06027	0.063241	0.005524	-0.01302	0.021658
28/09/2015	-0.05	0.010467	0.007435	0.005495	0.002638	-0.0106
25/09/2015	0.01385	-0.06088	0.009225	0.035519	0.031578	0
24/09/2015	0.038251	-0.00138	-0.02011	0	0.048473	-0.05714
23/09/2015	0	-0.01658	0	0	0	0
22/09/2015	0.015789	0.008431	0.016791	0	0.014598	-0.04546
21/09/2015	-0.00518	-0.00139	0.045869	0.029023	0.040767	-0.02381
18/09/2015	-0.00521	0	0.024561	0.002564	0.032256	-0.01626
17/09/2015	-0.03665	-0.0014	-0.04452	-0.00767	-0.00446	0.016527
16/09/2015	0	0.011175	-0.03405	0	0.006724	-0.01219
15/09/2015	0.032608	-0.00553	-0.02783	0.030927	0.020046	-0.01647
14/09/2015	-0.02368	-0.00139	0.017176	0.020001	-0.00437	0.012559
11/09/2015	-0.01078	0.009733	0.007505	0.009804	0.010965	-0.03306
10/09/2015	-0.06267	-0.0179	-0.07449	0	0.021689	-0.02564
09/09/2015	0.040699	0.016827	-0.01207	-0.10194	0.008494	0.043854
08/09/2015	-0.08101	-0.0069	0.014254	-0.04865	-0.05474	-0.10504
07/09/2015	0.012158	-0.08333	-0.00401	-0.0483	-0.00668	-0.03756
04/09/2015	0.036036	0.048486	0.129031	0.080598	0.044841	0.043907
03/09/2015	0.014493	-0.10983	0.032143	0.019337	0.004295	0
02/09/2015	-0.01429	-0.01136	0	-0.02168	0.02564	-0.00467
01/09/2015	0.057972	0.054187	-0.0346	0	0.006248	0.028165
31/08/2015	0.024657	0.014019	-0.00359	0.024931	0.035197	-0.0137
28/08/2015	0.005348	-0.00461	-0.00899	0.010811	0.004003	-0.00926
27/08/2015	-0.0266	0.04321	0.052634	-0.04278	-0.08566	-0.04673
26/08/2015	-0.01639	0.013314	-0.03448	-0.03073	-0.09586	-0.06863
25/08/2015	-0.03333	0.055474	0.016071	-0.11239	0.026506	-0.01052
24/08/2015	-0.03161	-0.08161	0.012304	-0.06494	0.075119	-0.00532
21/08/2015	0.038575	-0.09488	0.109375	0.10764	-0.01528	0.064174
20/08/2015	0.017144	-0.01498	0.043818	0.012539	0.019953	0.030147
19/08/2015	0.02809	0.030407	-0.006	0.021672	0.041307	0.014632
18/08/2015	0.021858	0.085245	0.018101	-0.00303	0.041751	0.024045

17/08/2015	0.016043	0.034744	0.002962	0.06079	0.058116	0.046942
14/08/2015	0	0.054015	0	0	0	0
13/08/2015	0.005263	0.006925	0.007385	0.014326	0	0.040363
12/08/2015	-0.00524	0.052269	-0.05572	-0.0226	-0.01515	-0.01293
11/08/2015	0.021052	0	0.048137	0.046243	0.057691	0.05677
10/08/2015	0.007732	0.027448	0.069628	0.071823	0.005456	0.037185
07/08/2015	0.053709	-0.05853	0.004156	0.025773	0.01085	0.019926
06/08/2015	0.048543	0.031082	0.062069	-0.00754	0.001788	0.042963
05/08/2015	0	0.035388	0.037661	0.032911	0	0.018732
04/08/2015	-0.06481	0.001265	0.001254	-0.02451	-0.00893	-0.02942
03/08/2015	-0.03713	0.011378	0	-0.01005	0.009009	0
31/07/2015	0	0.012499	0	0.025381	0.035716	0.026512
30/07/2015	0.025707	-0.01728	-0.00375	-0.01733	-0.04311	-0.02583
29/07/2015	0	-0.00502	-0.02133	0.035264	0.045047	0.018937
28/07/2015	0.017545	0.013887	0.008976	-0.01703	0	0
27/07/2015	-0.01478	-0.01993	-0.00763	0.014852	0	0.055762
24/07/2015	0.0025	0.052098	0.049937	0.095122	0.018966	0.063379
23/07/2015	0.034912	-0.01087	0.030489	0.024499	0.011843	0.036426
22/07/2015	-0.02169	0.050063	0.005917	0.008696	-0.03846	-0.00639
21/07/2015	0.086206	0.066278	-0.00824	-0.00216	0.029565	0.003215
20/07/2015	0	0.042529	0	0	0	0
17/07/2015	0	0.018829	0	0	0	0
16/07/2015	0	0.02567	0	0	0	0
15/07/2015	0	0	0	0	0	0
14/07/2015	0.024944	0	0.005931	-0.00216	0.021958	0.006409
13/07/2015	0.008849	0	-0.03656	-0.02164	0.019834	-0.00955
10/07/2015	0.008772	0	-0.0257	-0.00885	-0.01134	0.022512
09/07/2015	0.004348	0.016014	0.007537	0.008928	-0.0623	-0.01573
08/07/2015	0.056277	0.020688	0.041146	0.019912	-0.01224	-0.01917
07/07/2015	0.049181	-0.01255	0.02036	0.008677	0.053096	0.055374
06/07/2015	0.007812	-0.00293	-0.00235	0.023656	0.023531	0.021602
03/07/2015	0.01938	0	0.007058	0.029412	0.018063	0.003021
02/07/2015	-0.01521	0.017648	-0.0292	0.008164	0.004837	-0.04518
01/07/2015	-0.00772	-0.00482	0.030083	-0.02834	-0.00481	-0.01262
30/06/2015	0	-0.01259	0.008179	0	-0.04839	-0.00639
29/06/2015	0.029183	-0.01961	-0.00579	0	0.069494	0.003215
26/06/2015	0.005671	-0.05	0.008157	0.00625	0.026941	0.038463
25/06/2015	-0.00376	-0.03369	-0.00694	0.002071	0.003085	0
24/06/2015	-0.00566	-0.01307	0.015134	0.016529	0.02154	-0.00309
23/06/2015	0.017078	0.006621	-0.01376	-0.00407	-0.01054	-0.02168
22/06/2015	-0.01493	0.018642	-0.00116	0.008164	-0.00761	-0.00316

19/06/2015	0.007576	-0.01184	0.022118	0.006073	0.021474	0
18/06/2015	-0.00752	-0.04139	-0.03986	-0.01006	0	0.015877
17/06/2015	0.005682	0.002276	0.01305	0.00813	-0.03453	-0.00938
16/06/2015	-0.0113	0.02721	-0.02225	-0.02016	-0.00933	0.015777
15/06/2015	-0.0019	-0.0011	-0.00479	0.012346	0.034537	0
12/06/2015	0	-0.00553	0.01083	0.018293	0.031864	0.027947
11/06/2015	-0.00763	0.017781	0.009522	0.00998	0.04412	0.024172
10/06/2015	0.007692	-0.01856	-0.00943	0.013834	0	-0.00295
09/06/2015	-0.01527	0.032257	-0.00238	-0.01949	-0.01409	0.011833
08/06/2015	0.01938	0.022632	0.02506	0.031809	0.014286	0.005847
05/06/2015	-0.01331	0.008431	0.001164	0.019268	0.036618	0.011626
04/06/2015	-0.01156	-0.03031	-0.01047	0.001891	-0.00951	-0.01437
03/06/2015	0.042885	0.025866	0.025852	0.003773	0.004117	0.026242
02/06/2015	0.003738	0.03361	-0.01145	0.013158	0.012293	-0.02841
01/06/2015	0	0.018293	0	0	0	0
29/05/2015	0.005587	0.023952	-0.00464	-0.00186	-0.01484	-0.02632
28/05/2015	0.062963	-0.02242	0.001164	-0.00743	0.036987	0.045045
27/05/2015	0.008711	0	0	-0.01311	0.017172	-0.00575
26/05/2015	0.01209	-0.01097	0.013954	0.005693	-0.0026	0.014455
25/05/2015	0.00512	0.057459	-0.04014	-0.00755	-0.01042	-0.02564
22/05/2015	0.005093	0.022878	0.003585	-0.0019	-0.00526	-0.02339
21/05/2015	0	0.013979	0	0.005714	-0.00291	-0.01797
20/05/2015	0.006757	-0.02573	0.00238	-0.00379	0.010514	0.021345
19/05/2015	0	-0.0151	-0.00237	0.013308	0.014304	0.014923
18/05/2015	0.006711	-0.00575	0.005952	0.003753	0.024358	-0.03824
15/05/2015	0.013333	0.055875	0	-0.00561	0.005006	0.051987
14/05/2015	-0.01316	-0.00638	0.013017	-0.02068	-0.02117	0.005813
13/05/2015	0	-0.03489	0	0	0	0
12/05/2015	0.023333	0.004757	-0.02453	0.015355	0.015266	-0.08555
11/05/2015	-0.0228	-0.01515	-0.02395	0.003781	-0.01504	-0.10398
08/05/2015	-0.06167	0	-0.00736	0.003766	-0.02036	-0.02389
07/05/2015	-0.05329	-0.07115	-0.01607	-0.03377	-0.0013	-0.01749
06/05/2015	-0.0075	-0.07971	0.005025	0.017476	0.015603	0.039148
05/05/2015	0.017013	-0.04612	-0.02125	-0.00763	0.046096	-0.03767
04/05/2015	-0.04089	-0.03538	0.008938	-0.02115	-0.00857	-0.01779
01/05/2015	-0.02326	0.025675	0.037976	-0.01768	-0.02222	0.032607
30/04/2015	0	-0.02741	0	0	0	0
29/04/2015	0.065476	-0.00736	0.040243	0.038	-0.05177	-0.00701
28/04/2015	0.026071	0.004939	0.031653	0.019268	0.010652	0.017666
27/04/2015	-0.00363	0	0.00341	0.007561	-0.01186	-0.02083
24/04/2015	0.07286	-0.02088	0.050963	0.01501	0.014667	0.078011

23/04/2015	-0.01019	0.01882	0.012932	-0.0259	-0.01314	0.006576
22/04/2015	0.056604	-0.01355	-0.00532	0.01107	-0.00133	0
21/04/2015	-0.01623	0.098628	0.005347	0.009124	0.013335	0.049022
20/04/2015	-0.01155	0.050003	-0.04575	-0.00542	-0.00921	-0.05919
17/04/2015	0.005008	-0.00109	0.015607	0.003637	0.010623	0.019864
16/04/2015	0.004983	-0.00955	-0.0472	-0.00725	0.023654	-0.03246
15/04/2015	0.021487	-0.02249	0.016129	-0.04197	-0.03338	0.040262
14/04/2015	-0.02913	0.012051	0.043083	-0.02095	0.022576	0.012903
13/04/2015	0.003333	-0.01515	0.008732	0.011673	0.037663	0.04459
10/04/2015	0.051495	0.006592	0.008359	0.032692	0.008762	0.012195
09/04/2015	0.026857	0.017465	-0.00518	0.009311	0.017368	0.015059
08/04/2015	-0.00585	0.019314	-0.00417	-0.00553	0.017074	0.008904
07/04/2015	0.008928	0.015789	0.017782	0.014842	-0.0048	0.005879
06/04/2015	-0.00442	-0.00207	-0.00719	-0.00366	0.004819	-0.00584
03/04/2015	-0.00444	0.004154	-0.00725	-0.00184	-0.0048	-0.0147
02/04/2015	0	-0.00724	0	0	0	0
01/04/2015	-0.00893	-0.01979	0.001042	0.003677	-0.02048	0.020891
31/03/2015	0.015015	0.01594	0	0	-0.02583	0.011696
30/03/2015	0.038461	0	0.001043	-0.00733	0.026514	-0.00289
27/03/2015	-0.02279	0.004185	-0.01769	-0.00738	-0.01476	-0.0029
26/03/2015	-0.00146	0.012502	-0.01483	-0.03346	-0.00125	-0.0407
25/03/2015	0.010219	-0.02058	0.001076	-0.00962	0.022501	0.018185
24/03/2015	0.020231	-0.00631	0.052631	0.042719	-0.00978	0.059525
23/03/2015	-0.00567	-0.01903	0.035715	0.007448	-0.01111	0.005615
20/03/2015	0.005698	0.012933	0.014778	0.020333	-0.03246	0.025139
19/03/2015	-0.03541	0.044681	-0.00971	0.043478	0.091612	0.002729
18/03/2015	-0.02496	0.007126	-0.00981	-0.01042	0.039008	0.002716
17/03/2015	-0.00301	0.041457	0.029703	0.017544	0.007964	0.029812
16/03/2015	0.015106	-0.00485	0.004808	-0.0069	0.001127	0.010521
13/03/2015	0.029762	0	-0.00479	-0.01215	-0.02367	-0.04166
12/03/2015	-0.02023	0.024389	0	0.010545	-0.03002	0.002716
11/03/2015	-0.03392	-0.00857	0	0.005217	-0.0119	0
10/03/2015	0.0229	-0.01537	0.004808	0.017301	-0.01687	0.016258
09/03/2015	0.002986	0.02049	0.023923	0.003402	-0.01593	0.008002
06/03/2015	0.017857	-0.00191	0	0.013559	0.023661	-0.00794
05/03/2015	-0.0117	-0.00096	-0.01402	-0.00334	-0.01095	0.018668
04/03/2015	0.005917	0	-0.00474	-0.00168	0.039362	-0.00785
03/03/2015	0.029412	0.002878	0.019046	-0.00336	0.050887	0.013191
02/03/2015	0.001429	0.005735	-0.00935	0.005059	-0.03041	-0.0026
27/02/2015	-0.03566	-0.01236	-0.01887	-0.00168	-0.02903	-0.01827
26/02/2015	-0.01627	-0.01347	0.019231	0.015126	0	-0.02394

25/02/2015	0.004511	-0.00293	0.014151	0.003311	0.029903	-0.0109
24/02/2015	0	-0.03522	0.018605	-0.01485	0.022069	-0.00551
23/02/2015	0.062874	0.012168	-0.00913	-0.00838	0.015908	0.01108
20/02/2015	0.025352	-0.01804	-0.00922	-0.00338	0	0.027395
19/02/2015	0.012363	-0.01224	0	0.001695	-0.01118	0.010667
18/02/2015	0	0.013431	0	0	0	0
17/02/2015	0	0.018349	0	-0.00677	-0.02715	0.002643
16/02/2015	-0.04071	0.010009	-0.01395	-0.01193	-0.02326	0
13/02/2015	-0.00566	0	0	-0.00345	-0.03691	0.00526
12/02/2015	-0.00996	-0.00099	0	-0.00346	-0.04944	-0.00523
11/02/2015	-0.01724	-0.00793	0	0.022569	0.022106	-0.00264
10/02/2015	-0.01754	0.023999	-0.00943	0	0	-0.00527
09/02/2015	-0.02083	-0.00684	0.004761	0.011885	-0.01018	0.007959
06/02/2015	0.009118	-0.01278	-0.00474	-0.00839	-0.02314	0.026313
05/02/2015	-0.01657	-0.01494	0	-0.01015	0.021051	-0.04359
04/02/2015	0.019908	0.019211	0.023809	0.010256	-0.02835	-0.0429
03/02/2015	0	0.047622	-0.03256	-0.00677	0	0
02/02/2015	-0.01201	-0.07387	-0.02885	-0.01193	-0.04775	0.016804
30/01/2015	0.018237	-0.03374	0	0.005172	0.058497	0.013779
29/01/2015	-0.06567	-0.00952	0.004951	-0.01201	-0.05263	-0.00815
28/01/2015	-0.01597	0.002139	0.029556	0.005208	-0.01111	0.010959
27/01/2015	-0.00487	-0.00853	0.009569	0.003454	0.004215	-0.00271
26/01/2015	-0.01958	-0.00215	-0.00474	-0.00344	-0.04056	-0.01359
23/01/2015	0.009983	0.020474	0.023809	0	-0.00583	0.027552
22/01/2015	0.009884	0.025347	0	-0.00518	-0.03519	0.008044
21/01/2015	-0.00979	-0.0309	-0.00465	-0.02083	-0.07295	0.013297
20/01/2015	-0.00329	0.020191	-0.01402	0.00532	-0.03279	0.005247
19/01/2015	-0.01488	0	-0.01422	-0.00529	-0.00678	-0.01044
16/01/2015	0	0.007294	0.052886	0.06383	-0.00853	0.010554
15/01/2015	0.018456	0.01344	0.004565	0.08	0.017214	0.028722
14/01/2015	-0.01318	0	-0.00909	-0.01698	0.018613	-0.01523
13/01/2015	-0.02671	0.009184	0.032111	0.014128	0.023254	0.038662
12/01/2015	0.003431	0.0091	0.031112	-0.01238	-0.02597	-0.00496
09/01/2015	0.049572	-0.002	0	-0.01254	-0.03	0.007477
08/01/2015	-0.057	0.040159	0	0.007937	-0.01374	0
07/01/2015	-0.00173	-0.00386	0	0.006299	0.0331	-0.05198
06/01/2015	0.00865	0.006781	0	-0.00313	0.023607	-0.00783
05/01/2015	0.063465	-0.02887	0.01724	0.018838	0.006593	0.015787
02/01/2015	0.025806	-0.02081	0.012712	-0.00154	0.014727	-0.01295
01/01/2015	-0.03302	-0.01619	0.004185	0	-0.01613	-0.00788
31/12/2014	0	0.015431	0	0	0	0

30/12/2014	0	-0.00405	0	0	0	0
29/12/2014	0.004878	-0.01323	-0.00417	-0.00154	0.008198	0.010582
26/12/2014	0.009709	0	0.004185	-0.00464	0	-0.01833
25/12/2014	0	0	0	0	0	0
24/12/2014	0	-0.02062	0	0	0	0
23/12/2014	-0.0016	-0.01895	-0.0125	-0.00155	0.013007	0.010667
22/12/2014	0.004816	0	-0.01266	-0.00467	0.017657	0.002643
19/12/2014	0.003195	0	-0.00427	-0.00156	-0.00631	0.013157
18/12/2014	-0.02548	-0.00107	0.004292	-0.01095	0.014286	0
17/12/2014	-0.00327	-0.01396	-0.00855	-0.02848	0.014082	-0.02078
16/12/2014	0.003279	-0.00218	0.00862	0.009772	0.024693	-0.01326
15/12/2014	0.045752	0.017465	0.01282	0.041935	0.054219	0.026879
12/12/2014	0.018749	-0.03862	0.012658	0.02322	0.028569	0.018326
11/12/2014	-0.01227	0.00446	-0.00417	-0.00908	-0.00278	0.015422
10/12/2014	0.037267	0.027781	0	0.010687	-0.00139	-0.01013
09/12/2014	0.059881	0.023781	-0.02092	-0.00453	-0.0014	0
08/12/2014	0.015537	0.013729	0.021367	0.009105	-0.03631	0.01023
05/12/2014	0.001391	-0.00417	0.004185	-0.00451	0	0.02532
04/12/2014	0.018055	-0.00105	-0.00417	-0.00302	0	-0.00988
03/12/2014	-0.02046	0.001046	0.004185	0.004545	0.007247	-0.03741
02/12/2014	0.009749	0.020924	0.008333	-0.00452	-0.02878	-0.01036
01/12/2014	0.015173	-0.03996	-0.01653	0.010606	-0.03111	0
28/11/2014	0.033967	-0.0128	0	-0.04048	-0.00153	0.039269
27/11/2014	-0.00131	0.00324	0.008403	0.003124	-0.01991	0.020151
26/11/2014	-0.01579	-0.00754	0.0125	-0.00311	0.026562	-0.01235
25/11/2014	-0.01069	0.042344	-0.00412	0.004687	0.013699	-0.005
24/11/2014	-0.00135	0.018751	0.012397	0.013997	-0.01652	0.022612
21/11/2014	-0.01894	-0.01125	0.004082	-0.01227	-0.01374	0
20/11/2014	-0.00138	-0.00621	0.004066	-0.00621	-0.03715	-0.02703
19/11/2014	0.013812	0.039546	0	0.004687	0.02251	-0.02525
18/11/2014	0.004087	0.005005	-0.00405	-0.00778	-0.03459	-0.00777
17/11/2014	-0.00407	-0.01295	-0.0122	-0.00627	0.014658	-0.00783
14/11/2014	-0.03815	-0.03229	-0.00412	0.007886	-0.02408	-0.00264
13/11/2014	0.031161	-0.00939	-0.00826	-0.02347	0.019735	0.026388
12/11/2014	0.067308	-0.00842	0	-0.00801	-0.03226	-0.00257
11/11/2014	0.033462	-0.01274	0	-0.01131	0.028333	-0.00515
10/11/2014	-0.01868	0.017202	-0.02917	-0.00654	0.014587	-0.02332
07/11/2014	0.010152	0.021145	0.012875	0.006579	0.027156	0.002651
06/11/2014	-0.00879	-0.02278	0	0.004902	-0.01089	0.026453
05/11/2014	0.007605	-0.0286	0.004238	0.014634	-0.03145	-0.01289
04/11/2014	-0.00629	0	-0.00844	0.006411	-0.00162	0.023498

03/11/2014	0.020253	0.004363	0.012766	0.004777	0.027642	0.017859
31/10/2014	0.050868	-0.00108	0	0.006339	-0.00475	-0.02506
30/10/2014	-0.01299	0.008692	-0.0126	-0.01102	0.017488	0.005139
29/10/2014	-0.00718	0.028019	0.00851	0.020701	0.009374	-0.03836
28/10/2014	-0.02975	-0.01468	-0.01266	-0.02808	0.020124	-0.0399
27/10/2014	0.023585	-0.02128	-0.00427	0.014447	-0.01365	0.01108
24/10/2014	-0.0023	-0.0837	-0.00429	0.006329	-0.04154	0.010959
23/10/2014	-0.00693	-0.05219	0	0.012578	0.008027	-0.02168
22/10/2014	-0.01977	0.016272	-0.01293	0	0.014332	-0.01385
21/10/2014	-0.04745	0	-0.00873	-0.02484	-0.05808	-0.01686
20/10/2014	-0.00374	-0.03079	0.00881	0.019108	0.028333	0.017146
17/10/2014	-0.025	-0.00254	0.008735	0	-0.04214	0.047752
16/10/2014	0.032052	-0.01019	0.00433	-0.03125	-0.01692	-0.06166
15/10/2014	-0.02112	0.009012	0	0.008065	0.039589	0.014284
14/10/2014	0.13198	0.017857	0	-0.0336	-0.00662	0.045071
13/10/2014	0.029148	0.007517	-0.01724	0	-0.09167	0.008088
10/10/2014	0.072984	0.036069	0.008771	-0.01656	-0.02752	-0.00267
09/10/2014	0.035533	0.046822	0.004348	-0.00168	0.058492	0.018768
08/10/2014	0.033333	0.004583	-0.00866	-0.00506	-0.00357	-0.0079
07/10/2014	0.005693	0	0.013102	0.044068	0.030415	0.007959
06/10/2014	0.004717	0.007715	0.004309	-0.02273	0.019097	-0.0079
03/10/2014	0.015963	-0.01008	0.004292	-0.02824	-0.01022	-0.01857
02/10/2014	-0.02403	0.016967	-0.01709	0.005128	0.051638	0.005408
01/10/2014	-0.01326	-0.01668	0.026087	0.030612	0.031096	0.043006
30/09/2014	-0.00288	-0.0034	0.01695	0.018152	0	-0.02061
29/09/2014	-0.00289	0.026107	0.004167	-0.01135	0.020635	-0.02632
26/09/2014	-0.02896	0.022127	-0.00415	-0.0082	0.035769	0.010811
25/09/2014	0.059642	-0.00433	0.004167	0.054545	-0.00901	0.013368
24/09/2014	-0.01313	0	-0.00415	0.001567	-0.04697	-0.00527
23/09/2014	0.007604	0.008692	0.008333	0.00939	-0.00954	-0.01061
22/09/2014	0.037736	0.012933	0	0.009302	0.041733	0.00268
19/09/2014	-0.01455	-0.01383	-0.02066	0.003072	0.001542	0.016046
18/09/2014	-0.01199	-0.00108	0.016878	0.006125	0	0.00263
17/09/2014	0.020542	0.019439	-0.01245	-0.00304	0.015383	-0.01575
16/09/2014	-0.00549	0.011651	0	-0.01221	0	-0.032
15/09/2014	-0.04232	-0.00105	0.008403	0	-0.01515	0
12/09/2014	0.025936	-0.0325	-0.00833	-0.02473	-0.01692	-0.00275
11/09/2014	-0.02434	-0.00325	0	-0.00475	0	-0.03315
10/09/2014	0.007677	0.013041	0	0.007962	0	0.014284
09/09/2014	0.053333	0.002148	-0.0042	0.006319	0	0.045071
08/09/2014	0.045208	0.008562	0.00422	0.023547	0.001563	0.026957

05/09/2014	-0.00346	0.037158	0.0042	0.004602	-0.0125	-0.01312
04/09/2014	0.013889	0.035822	-0.00418	-0.00763	-0.01741	0.005316
03/09/2014	0.002568	0.018775	-0.0042	0.010769	0.017714	0.013226
02/09/2014	-0.01793	0.000973	-0.01266	-0.00913	-0.01266	-0.0235
01/09/2014	0.00087	-0.01163	-0.00427	-0.00154	-0.01282	-0.01872
29/08/2014	-0.02085	0.013726	-0.00429	-0.00154	0	0.019075
28/08/2014	0.016859	-0.0087	0.025862	0.010786	-0.00487	0.018718
27/08/2014	-0.00524	-0.00293	0	-0.00915	-0.031	0.002623
26/08/2014	-0.02105	-0.00196	0	0.012308	0.01347	-0.00262
25/08/2014	0.010753	0.019607	0.0042	0.019757	0.028239	0.028868
22/08/2014	-0.01596	-0.00385	0	0.00149	0.001614	0.035718
21/08/2014	0.027027	-0.00193	-0.00418	-0.00893	-0.00323	0.009852
20/08/2014	0.026316	0.001933	-0.0084	-0.003	0.003236	-0.00244
19/08/2014	-0.00256	0.009656	-0.00847	0.004518	0.001614	0.007331
18/08/2014	0.003428	0.000955	0	-0.0015	-0.01771	-0.02184
15/08/2014	-0.00171	0.006684	0.004274	-0.01051	-0.03115	0.00248
14/08/2014	-0.01625	0.007591	-0.00426	-0.00152	-0.00169	0.01238
13/08/2014	-0.02609	-0.01789	0.017095	0.016717	0	-0.00245
12/08/2014	-0.02143	-0.00096	-0.0042	-0.00448	-0.04068	0.002455
11/08/2014	0	0.008638	-0.01266	-0.0045	-0.01413	0.024448
08/08/2014	0.001825	0	-0.02137	-0.01961	-0.02868	0.014317
07/08/2014	0.020037	-0.00095	0	0.006153	-0.01476	-0.00235
06/08/2014	-0.00357	0.009527	0.008735	0.003058	0.031835	0.011791
05/08/2014	-0.02151	-0.01038	0.038961	0.006098	0.02541	-0.00932
04/08/2014	0.027473	0.00858	0.016667	0.013636	0.024777	-0.0047
01/08/2014	-0.06774	0.007563	-0.03279	-0.00897	0.017273	-0.00709
31/07/2014	0	-0.01407	0	0	0	0
30/07/2014	0	-0.00095	0	0	0	0
29/07/2014	0	0.017144	0	0	0	0
28/07/2014	0	0	0	0	0	0
25/07/2014	0	0	0	0	0	0
24/07/2014	0.010516	0	0.01695	0.004525	-0.00509	-0.0119
23/07/2014	-0.04447	0	0.016667	0.013514	-0.00341	-0.03132
22/07/2014	-0.00891	0	-0.0041	-0.01481	0.005138	-0.00498
21/07/2014	0.022977	-0.00468	-0.00823	0.021052	0.013627	0.045003
18/07/2014	-0.01074	-0.02164	-0.02075	-0.0162	-0.02689	0.004782
17/07/2014	-0.00888	0	-0.00424	-0.00898	-0.07599	-0.00714
16/07/2014	0.00996	0.009615	0.004254	0.030212	0.119624	0.021582
15/07/2014	-0.01183	-0.00381	-0.02966	-0.00733	-0.02003	-0.00235
14/07/2014	0.007984	-0.00956	-0.00437	-0.01625	0	0.030592
11/07/2014	0.029703	0.006759	-0.00877	0	0.003407	0.027398

10/07/2014	0.015384	-0.00479	0.008851	0.004504	0.010186	0.013331
09/07/2014	0.013257	0.020229	-0.0307	-0.03139	0.001679	-0.02412
08/07/2014	0	0.000947	0	0	0	0
07/07/2014	0.018692	0.024526	0	-0.01698	0.011746	0.013486
04/07/2014	-0.0055	-0.00552	-0.0181	-0.05024	-0.00332	-0.00222
03/07/2014	-0.00553	0	0.004609	-0.00661	0.016641	0.004442
02/07/2014	-0.00557	0.028701	0.013761	0.003328	0.022911	-0.00442
01/07/2014	-0.01026	-0.0099	-0.00453	0	0	0.013331
30/06/2014	0.017908	-0.01	0.013636	0	0	0.015352
27/06/2014	0.005555	0.013773	-0.02242	-0.00663	-0.0688	0.021596
26/06/2014	0.009208	-0.01087	0.009174	0.008347	0.017181	0.0148
25/06/2014	-0.00365	0.032053	-0.01818	-0.00662	-0.0152	-0.025
24/06/2014	0	0.018632	0	0	0.029163	-0.01709
23/06/2014	-0.01831	0.020906	0.009259	0	0.016665	-0.0087
20/06/2014	0.00653	-0.01024	0	-0.005	0.050821	0.00658
19/06/2014	0.008341	-0.02069	0.009174	0.005025	0.039	-0.00871
18/06/2014	0.032169	-0.03521	0	0.013333	0.004506	0.010988
17/06/2014	-0.01959	0	-0.00909	0.014803	-0.00897	-0.01739
16/06/2014	-0.01272	-0.0146	-0.02752	-0.00324	0.013572	-0.01372
13/06/2014	0.019319	0.005554	0.023584	0.003252	-0.02083	-0.01539
12/06/2014	0.00361	-0.0046	0.013825	-0.00162	-0.0076	-0.00893
11/06/2014	0.003597	-0.01573	0	-0.00325	-0.00306	0.002254
10/06/2014	0.021505	-0.0047	-0.00454	-0.00651	0.00461	-0.00449
09/06/2014	0	-0.00283	-0.00913	-0.01639	0.003058	-0.01129
06/06/2014	0.038596	0.009469	-0.00461	0.021667	0.004571	0.036529
05/06/2014	0	0	-0.01389	-0.00816	-0.0091	0.011016
04/06/2014	0	-0.01501	-0.01878	-0.00658	-0.00919	-0.00218
03/06/2014	0.013514	0.022861	0	-0.00331	-0.01236	0.019649
02/06/2014	-0.00833	0.00093	0.004785	-0.01329	-0.02974	-0.0107
30/05/2014	-0.03697	-0.00279	0.033332	-0.00842	0	0
29/05/2014	0.028796	0.001868	0.055299	0.033956	-0.07581	0.025972
28/05/2014	0	0.00093	0	0	0	0
27/05/2014	-0.00085	0.016745	-0.00437	-0.01478	-0.00873	-0.04641
26/05/2014	0	0.017383	0	0	0	0
23/05/2014	0.00764	0	0.008771	0.001666	0.044016	0.017701
22/05/2014	-0.02275	-0.03417	-0.00435	-0.00499	-0.01518	-0.00435
21/05/2014	-0.03448	0	-0.02183	0.001672	-0.01027	-0.0262
20/05/2014	-0.03125	0.005586	-0.02232	-0.00835	-0.01557	-0.00673
19/05/2014	0.008295	-0.0037	0.018263	0.02862	-0.0123	0.038376
16/05/2014	-0.01371	-0.00372	-0.00897	0.04419	-0.00534	0.026085
15/05/2014	-0.01019	0.02612	-0.00905	0	-0.00179	-0.00636

14/05/2014	0	0.059092	0	0	0	0
13/05/2014	0.0103	-0.00515	-0.00457	-0.02194	-0.01613	0.006396
12/05/2014	-0.03336	-0.0069	0.004588	0	-0.02368	0.029662
09/05/2014	-0.0441	0	-0.03653	-0.05128	-0.01866	-0.00206
08/05/2014	0.003009	-0.00956	0	-0.00676	0.003802	-0.00206
07/05/2014	0	0.017543	0.014218	-0.02891	-0.01705	-0.00206
06/05/2014	0.007	-0.00509	-0.01402	0.017513	0	-0.01657
05/05/2014	-0.00397	-0.00684	0	0.010327	-0.01002	0.014737
02/05/2014	-0.00299	0.006892	0.00474	-0.00511	0	-0.01245
01/05/2014	0.019	-0.00428	0.004718	0.017123	0.005444	0.029408
30/04/2014	0	0.01976	0	0	0	0
29/04/2014	-0.02355	-0.00843	-0.04421	0.008418	-0.0018	0
28/04/2014	0.03417	-0.00085	0.033019	0.030051	0	-0.0102
25/04/2014	0.019437	0	0.009131	0.017828	0.010848	-0.00619
24/04/2014	0.001907	-0.0136	-0.00905	-0.01115	0	-0.00622
23/04/2014	0.014272	-0.01724	-0.00913	0.011272	-0.0161	0.010436
22/04/2014	-0.02533	-0.00702	-0.00461	0	-0.01818	-0.02479
21/04/2014	-0.0231	0.024735	0	0.004777	-0.00556	-0.00636
18/04/2014	-0.00197	0.003449	-0.00926	0.00317	-0.01676	0.014926
17/04/2014	0	-0.02835	0	0	0	0
16/04/2014	-0.00099	-0.00973	-0.01869	0.007899	0.028407	0.002098
15/04/2014	-0.01581	0.0125	0.028572	-0.00157	0.027623	-0.03144
14/04/2014	0.017068	0	-0.01389	0	0.017923	-0.02597
11/04/2014	0.002961	-0.04409	-0.00939	-0.03768	0.024649	-0.02
10/04/2014	-0.03839	0.004612	-0.01422	0.022839	0.015461	-0.01814
09/04/2014	-0.00409	0.019282	0.014423	0.07177	-0.01015	0.027712
08/04/2014	0	-0.0018	0	0	0	0
07/04/2014	-0.00103	-0.05054	0.009477	0.002976	0.005127	0
04/04/2014	-0.00514	-0.0019	-0.03756	-0.01335	0	0.00899
03/04/2014	0.019648	0	0.004877	0.022556	-0.05442	-0.00891
02/04/2014	0.008114	-0.02095	-0.00485	-0.02353	-0.0036	0.011239
01/04/2014	-0.00402	-0.01362	0.024389	-0.00602	-0.00722	-0.01778
31/03/2014	-0.01616	0	-0.02381	-0.04242	-0.02364	0
28/03/2014	0	0.017752	0	0	0	0
27/03/2014	-0.0462	0.014534	0	-0.00633	0.001863	-0.00905
26/03/2014	-0.01446	-0.00669	-0.01951	0	0.01487	0.006849
25/03/2014	-0.00943	0	-0.01493	0.003185	-0.01282	-0.02041
24/03/2014	0.01164	-0.02308	0.009092	0	-0.00186	0.048613
21/03/2014	0.004184	0	0.036034	-0.02222	-0.02044	0.006622
20/03/2014	-0.06146	-0.0187	-0.057	-0.00649	-0.01518	0.004384
19/03/2014	0.048835	0.056169	0.039958	0.045752	0.001928	0.030569

18/03/2014	0.003175	-0.00855	0.019704	0.004687	-0.03846	-0.04025
17/03/2014	0.021097	-0.00766	0.024156	0.026439	0	0.015453
14/03/2014	0.004132	0.020272	-0.00472	-0.0303	-0.042	-0.02391
13/03/2014	0.024691	-0.01419	-0.01896	-0.05625	-0.03758	-0.03341
12/03/2014	-0.01205	0.003839	-0.03671	0.001656	-0.02169	0.013824
11/03/2014	0.028455	-0.00287	-0.01404	0.021487	-0.0133	0.059091
10/03/2014	-0.00296	0.008629	0.009156	-0.00971	-0.01573	0.010727
07/03/2014	0.003964	0.043727	0	0	-0.00685	-0.01911
06/03/2014	0.005923	0.01366	0.008063	-0.01307	0	-0.03247
05/03/2014	0.011776	0.002693	0	-0.0149	-0.0046	-0.04027
04/03/2014	0.00388	-0.01165	-0.011	-0.01176	-0.00924	-0.05595
03/03/2014	-0.01836	0.000906	-0.00101	0	0	0.012349
28/02/2014	0.023622	-0.01811	-0.0081	0.020408	0.009324	0.009757
27/02/2014	-0.01538	-0.06458	0	-0.03667	-0.06236	0
26/02/2014	-0.01855	0.001971	-0.00714	-0.00519	0.002464	-0.03865
25/02/2014	0.00995	0.003938	0.017473	0.01913	0.029483	-0.0201
24/02/2014	0.02266	-0.01275	0.0101	0.017065	0.011934	0.012818
21/02/2014	0.026975	-0.05362	0	0.011745	0.018868	-0.00253
20/02/2014	0.012195	-0.00315	0.010001	0.001658	0.009259	0.010153
19/02/2014	-0.01019	0.002108	0	-0.00662	-0.00229	0.015074
18/02/2014	0.007491	-0.01261	-0.01683	0	-0.0092	-0.01733
17/02/2014	0.005576	0.010638	-0.00201	0.015	0.002321	-0.0403
14/02/2014	0.005545	0.004211	-0.00505	-0.02463	-0.00694	-0.01313
13/02/2014	0.01103	-0.02726	-0.0284	0.016835	0.002327	-0.0266
12/02/2014	-0.00727	-0.01293	0.003133	0	-0.01163	0.002734
11/02/2014	-0.00183	0.013098	-0.00104	0	-0.02588	-0.02725
10/02/2014	0.027523	-0.00215	0.005208	-0.00166	-0.00242	-0.01961
07/02/2014	0.003571	0.015119	0.001037	-0.00829	0.053271	-0.01714
06/02/2014	-0.02135	-0.01596	0	-0.02676	-0.02989	-0.00872
05/02/2014	-0.02636	-0.03244	-0.00207	-0.00859	-0.02369	-0.04399
04/02/2014	-0.03361	-0.01005	-0.01556	-0.03813	-0.01214	0
03/02/2014	0.018358	-0.00678	0.009482	0.009009	0	0.030668
31/01/2014	0.017078	-0.02727	-0.00417	0.014286	-0.01474	-0.01488
30/01/2014	0	-0.00233	0	0	0	0
29/01/2014	-0.02052	0.014049	-0.0021	0.014084	-0.00498	0.009063
28/01/2014	-0.01905	-0.00808	-0.03361	-0.02778	-0.01002	-0.02096
27/01/2014	-0.00388	0	-0.0087	-0.00179	-0.02025	0.039755
24/01/2014	0.047758	0.004657	0.030702	0.041146	0.036172	0.035298
23/01/2014	0.025116	-0.00696	-0.00319	0.024055	-0.00498	0.014202
22/01/2014	-0.02541	-0.00817	0.008538	-0.0151	-0.0376	-0.06162
21/01/2014	-0.03911	0.070589	-0.00529	0.020442	0	0.011942

20/01/2014	-0.0126	0.008788	-0.00106	0.006678	-0.02083	-0.0177
17/01/2014	-0.01374	-0.03921	-0.06603	0.008292	0	-0.05405
16/01/2014	-0.00497	-0.00681	-0.02851	0	0	-0.02222
15/01/2014	0.004	-0.00913	0.025819	0.03125	-0.00266	-0.01299
14/01/2014	0.021913	-0.03802	0.011443	-0.00957	-0.04533	-0.01974
13/01/2014	0	0.00359	0	0	0	0
10/01/2014	0.001949	-0.00597	0.003395	-0.04026	-0.02235	0.0302
09/01/2014	0	0.016807	-0.03495	-0.05369	0.00857	0.058636
08/01/2014	0.019455	0	-0.00701	0.001774	-0.01983	0.046151
07/01/2014	-0.02481	0.008267	0.004705	0.010619	0.01156	-0.02059
06/01/2014	0.039139	0.05386	0.030447	0.001752	0.051424	0.072074
03/01/2014	0.022599	0.013335	0.034089	0.003496	0.043477	0.030814
02/01/2014	0.034991	-0.05702	0.01099	0.010453	0.015628	0.032607
01/01/2014	0.014235	0.024416	-0.02718	-0.02414	-0.00513	0.015789



Lampiran 3. Pembentukan Portofolio MAD menggunakan WinQSB

Langkah-langkah menggunakan winQSB

1. Pada LP WinQSB klik File, kemudian pilih New Problem
2. Setelah muncul Problem Spesification, pada Number of Variables diisi dengan banyaknya variabel, pada Number of Constraints diisi dengan banyaknya kendala, kemudian pada Objective Criterion pilih Minimization untuk meminimalkan, lalu klik Ok.

3. Isi lembar kerja, lalu klik Run hingga iterasi terakhir (optimal)

Input

Variable -->	X1	X2	X3	X4	X5	X6	Direction	R. H. S.
Minimize	0.000000071	0.00000029	0.00000021	0.00000028	0.00000024	0.00000047		
C1	0.02641	0.024624	0.023341	0.021536	0.025467	0.026177	>=	3000
C2	1	1	1	1	1	1	<=	100000
C3	1	0	0	0	0	0	<=	40000
C4	0	1	0	0	0	0	<=	40000
C5	0	0	1	0	0	0	<=	40000
C6	0	0	0	1	0	0	<=	40000
C7	0	0	0	0	1	0	<=	40000
C8	0	0	0	0	0	1	<=	40000
LowerBound	0	0	0	0	0	0		
UpperBound	M	M	M	M	M	M		
VariableType	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous		

Output

Iterasi 1

Basis	C(i)	X1	X2	X3	X4	X5	X6	Surplus_C1	Slack_C2	Slack_C3	Slack_C4	Slack_C5	Slack_C6	Slack_C7	Slack_C8	Artif
Basis	C(i)	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0	0	0	0	0	0	0	0	0
Artificial_C1	M	0,0264	0,0246	0,0233	0,0215	0,0255	0,0262	-1,0000	0	0	0	0	0	0	0	0
Slack_C2	0	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000	0	1,0000	0	0	0	0	0	0	0
Slack_C3	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	0	0	0
Slack_C4	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	0	0
Slack_C5	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	0
Slack_C6	0	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0
Slack_C7	0	0	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0
Slack_C8	0	0	0	0	0	0	1,0000	0	0	0	0	0	0	0	0	1,0000
C(j)-Z(j)		0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0	0	0	0	0	0	0	0	0
* Big M		-0,0264	-0,0246	-0,0233	-0,0215	-0,0255	-0,0262	1,0000	0	0	0	0	0	0	0	0

Artificial_C1	0	R. H. S.	Ratio
	1,0000	3.000,0000	113.593,3000
	0	100.000,0000	100.000,0000
	0	40.000,0000	40.000,0000
	0	40.000,0000	M
	0	40.000,0000	M
	0	40.000,0000	M
	0	40.000,0000	M
	0	0	
	0	0	

Iterasi 2

Basis	C(j)	X1	X2	X3	X4	X5	X6	Surplus_C1	Slack_C2	Slack_C3	Slack_C4	Slack_C5	Slack_C6	Slack_C7	Slack_C8	Artificial
Artificial_C1	M	0	0,0246	0,0233	0,0215	0,0255	0,0262	-1,0000	0	-0,0264	0	0	0	0	0	1,0
Slack_C2	0	0	1,0000	1,0000	1,0000	1,0000	1,0000	0	1,0000	-1,0000	0	0	0	0	0	0
X1	0,0000	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	0	0	0
Slack_C4	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	0	0
Slack_C5	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	0
Slack_C6	0	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0
Slack_C7	0	0	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0
Slack_C8	0	0	0	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0
	C(j)-Z(j)	0	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0	0	0	0	0	0	0	0
	* Big M	0	-0,0246	-0,0233	-0,0215	-0,0255	-0,0262	1,0000	0	0,0264	0	0	0	0	0	0

Artificial_C1		
0	R. H. S.	Ratio
1,0000	1.943,6000	74.248,3800
0	60.000,0000	60.000,0000
0	40.000,0000	M
0	40.000,0000	M
0	40.000,0000	M
0	40.000,0000	M
0	40.000,0000	M
0	40.000,0000	40.000,0000
0	0,0028	
0	0	

Iterasi 3

Basis	C(j)	X1	X2	X3	X4	X5	X6	Surplus_C1	Slack_C2	Slack_C3	Slack_C4	Slack_C5	Slack_C6	Slack_C7	Slack_C8	Artificial_C1
Artificial_C1	M	0	0,0246	0,0233	0,0215	0,0255	0	-1,0000	0	-0,0264	0	0	0	0	-0,0262	1,0000
Slack_C2	0	0	1,0000	1,0000	1,0000	1,0000	1,0000	0	1,0000	-1,0000	0	0	0	0	-1,0000	0
X1	0,0000	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	0	0	0
Slack_C4	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	0	0
Slack_C5	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	0
Slack_C6	0	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0
Slack_C7	0	0	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0
X6	0,0000	0	0	0	0	0	1,0000	0	0	0	0	0	0	0	0	1,0000
	C(j)-Z(j)	0	0,0000	0,0000	0,0000	0,0000	0,0000	0	0	0	0	0	0	0	0	0
	* Big M	0	-0,0246	-0,0233	-0,0215	-0,0255	0	1,0000	0	0,0264	0	0	0	0	0,0262	0

Artificial_C1		
0	R. H. S.	Ratio
1,0000	896,5200	35.203,2000
0	20.000,0000	20.000,0000
0	40.000,0000	M
0	40.000,0000	M
0	40.000,0000	M
0	40.000,0000	M
0	40.000,0000	40.000,0000
0	40.000,0000	M
0	0,0216	
0	0	

Iterasi 4

Basis	C(j)	X1	X2	X3	X4	X5	X6	Surplus_C1	Slack_C2	Slack_C3	Slack_C4	Slack_C5	Slack_C6	Slack_C7	Slack_C8	Artificial
Artificial_C1	M	0	-0,0008	-0,0021	-0,0039	0	0	-1,0000	-0,0255	-0,0009	0	0	0	0	-0,0007	1,00
X5	0,0000	0	1,0000	1,0000	1,0000	1,0000	0	0	1,0000	-1,0000	0	0	0	0	-1,0000	
X1	0,0000	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	0	0	
Slack_C4	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	0	
Slack_C5	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	0	
Slack_C6	0	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	0	0	
Slack_C7	0	0	-1,0000	-1,0000	-1,0000	0	0	0	-1,0000	1,0000	0	0	0	1,0000	1,0000	
X6	0,0000	0	0	0	0	0	1,0000	0	0	0	0	0	0	0	1,0000	
C(j)-Z(j)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
* Big M		0	0,0008	0,0021	0,0039	0	0	1,0000	0,0255	0,0009	0	0	0	0	0,0007	

Artificial_C1		
0	R. H. S.	Ratio
1,0000	387,1800	
0	20.000,0000	
0	40.000,0000	
0	40.000,0000	
0	40.000,0000	
0	40.000,0000	
0	20.000,0000	
0	40.000,0000	
0	0,0264	
0	0	

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